

## ***Phenomenal Concepts: Neither Circular Nor Opaque***

**E. Díaz-León**

*Abstract:* In this paper I focus on an influential account of phenomenal concepts, namely, the recognitional account, and defend it from some recent challenges. According to this account, phenomenal concepts are recognitional concepts that we use when we recognize some experiences as “another one of those”. Michael Tye has argued that this account is viciously circular, because the relevant recognitional abilities involve descriptions of the form “another experience of the same type”, which is also a phenomenal concept. Tye argues that we could avoid the circularity worry if we explain the reference-fixing of phenomenal concepts in terms of dispositions to re-identify tokens of the same type, without appealing to any further phenomenal concept. However, he argues, this account is incompatible with the intuitive claim that phenomenal concepts seem to involve rich modes of presentation of their referents. Philip Goff and others have similarly argued that a recognitional account of phenomenal concepts would make phenomenal concepts opaque, that is, they cannot reveal anything about the referents, which seems problematic. In this paper I present a new version of the recognitional account so that it can avoid the circularity worry without entailing that phenomenal concepts are opaque.

### *0. Introduction*

Our phenomenally conscious states seem to be something that we know very intimately. But there is an aspect of their nature that seems very difficult to ascertain: are they physical or not? There is a family of influential arguments in philosophy of mind, known as *epistemic* or *conceivability arguments* against physicalism, which try to show that phenomenal consciousness is not physical (see Chalmers 1996 and 2003, among many others). In a nutshell, these arguments have it that we can conceive of the phenomenal as being distinct from the physical, and therefore it is possible that the physical and the phenomenal are distinct, which entails that they are indeed distinct. One of the most influential responses to arguments of this kind is the so-called *phenomenal concept strategy* (or PCS), which claims that reflecting on our phenomenal concepts will help to show what is wrong with conceivability arguments. In particular, they argue, we can explain why we can conceive of the phenomenal as being distinct from the physical purely in virtue of different features of our phenomenal and physical concepts, in a way that is compatible with our phenomenal properties being identical to physical properties. Many philosophers find this strategy compelling, but they offer different views regarding which

features of phenomenal concepts are responsible for our being able to conceive of the phenomenal as being distinct from the physical (in a way that does not entail that they are indeed distinct). These accounts of phenomenal concepts should satisfy certain desiderata in order to be satisfactory. On the one hand, we want an account of phenomenal concepts that explains how they can refer to specific phenomenal properties in a way that is not circular (as Block 2007 and Tye 2009 have asked). On the other hand, we want an account of phenomenal concepts that is compatible with our intuitions about what phenomenal concepts reveal a priori, if anything (as Goff 2011, Levine 2007 and others have asked). In this paper I aim to provide an account of phenomenal concepts that can satisfy both desiderata at the same time. The plan is as follows: in section 1 I briefly explain the main anti-physicalist arguments and how the phenomenal concept strategy is supposed to refute them. In section 2 I briefly review (following Tye 2009) the different kinds of accounts of phenomenal concepts that the PCS might appeal to, and the main challenges that they face, and I set aside the options that seem like non-starters, in order to focus on the options that seem more promising. I then focus on two objections, namely, the circularity and the indeterminacy worries, and I argue that they can both be solved by the so-called *recognitional* account of phenomenal concepts. In section 3 I focus on a different kind of objection, namely, the opaqueness worry, and I suggest that those accounts that seem more suitable to solve the indeterminacy and the circularity worries could actually be less suitable to solve the opaqueness worry (and vice versa). In section 4 I pose this challenge in terms of a new dilemma for the phenomenal concept strategy, and I offer a new solution, in terms of a more sophisticated version of the recognitional account of phenomenal concepts that distinguishes between the reference-fixing mechanism and the inferential role of phenomenal concepts.

### *1. The Phenomenal Concept Strategy*

Recently, many advocates of physicalism in philosophy of mind have turned their attention to phenomenal concepts, in the hope that reflection on phenomenal concepts will help to refute several anti-physicalist arguments, such as the following:

- a. Conceivability argument (Chalmers 1996): we can conceive of possible worlds that are physically identical to the actual world, but where no one has any conscious experiences at all (zombie-worlds). If zombie worlds are conceivable, then they are metaphysically possible, and therefore physicalism is false.
- b. Knowledge argument (Jackson 1982): Mary, who has spent all her life in a black-and-white room, is an expert about color vision, but has never had the experience of seeing red. One day she is released from her room and sees a red rose for the first time, and in this way learns what it is like to see red. Mary knew all the physical facts before her release but there is a fact that she didn't know (i.e. what it is like to see red), so there is at least a non-physical fact and physicalism is false.
- c. Explanatory gap (Levine 2001): when we are presented with a full physical description of the world, and in particular with a full description of our brains and their neurological and functional properties, it still makes sense to ask: why should those physical states give rise to phenomenal states that feel like this? So it is not possible to give a reductive explanation of consciousness in physical terms.

All these anti-physicalist arguments proceed in a similar way: they first posit an epistemic gap between physical truths and phenomenal truths (e.g. that zombie-worlds are conceivable, or that Mary could not know what it is like to see red, even if she knew all the physical truths, or that there is an explanatory gap between physical and phenomenal truths), and from this they infer an

ontological gap between the physical and the phenomenal, which entails that physicalism is false.

As I suggested, many physicalists have recently argued that reflection on phenomenal concepts can help us see what is wrong with these anti-physicalist arguments.<sup>1</sup> How could phenomenal concepts help in this regard? In order to answer this question, we first need to know what phenomenal concepts are. Phenomenal concepts (PCs) are concepts that refer to phenomenal states, and which we typically exercise when we introspect the phenomenal character of our experiences and feelings (although this is not the only context in which we can deploy them). Phenomenal concepts characterize phenomenal states in virtue of what they are like, that is, in virtue of their phenomenal properties. However, according to physicalists, PCs are not the only way of conceptualizing phenomenal properties, since these can also be picked out by certain physical concepts.

It will be useful to present some general remarks on the notion of *concepts* that advocates of phenomenal concepts typically endorse. According to Michael Tye, concepts are taken to be constituents of thoughts, which are individuated in a fine-grained way. For example, *coriander* and *cilantro* are different concepts, although they have the same referent (Tye 2009: 39). Derek Ball agrees: “phenomenal concept theorists are committed to individuating concepts and contents in a fine-grained (Fregean) way” (Ball 2009: 936). According to Katalin Balog, “most of the recent discussion of phenomenal concepts presupposes the representational theory of mind (RTM) . . . . The RTM says that concepts are constituents of thoughts” (Balog 2009: 296). Likewise, Tye claims that concepts are mental representations, which may or may not correspond to linguistic terms in a public language. According to him, we cannot make a

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<sup>1</sup> See for instance Balog (2009), Hill & McLaughlin (1999), Loar (1997), Papineau (2002), and Tye (2000).

judgement about something without conceptualizing it in some way, that is, without bringing it under a concept (Tye 2009: 40-41). Regarding the possession conditions of concepts, someone possesses a concept C when she is able to exercise C in her thoughts. This allows us to distinguish between partial and full understanding of the concept. In general, the ability to exercise a concept in thought does not require full mastery of the concept.

We are now in a position to explain how reflection on phenomenal concepts can provide some insights into the debate about physicalism. In particular, advocates of the so-called *phenomenal concept strategy* (PCS) employ phenomenal concepts in their attempts to refute the three anti-physicalist arguments above. More in particular, according to the PCS we can explain the epistemic gaps posited by the arguments above (i.e. the conceivability of zombies, the fact that Mary learns something new, and, more controversially, the explanatory gap) in terms of some special features of phenomenal concepts, in a way that is perfectly compatible with physicalism (and therefore does not entail an ontological gap). Roughly, these explanations go as follows:<sup>2</sup>

Regarding the explanation of the conceivability of zombies, the PCS claims that phenomenal concepts are *not a priori connected* with physical concepts, and therefore truths involving phenomenal concepts cannot be *a priori* inferred from truths involving physical concepts only. Then, descriptions of zombie-worlds are not a priori false, and this in turn explains why we can conceive of zombie-worlds, in a way that is compatible with physicalism.<sup>3</sup>

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<sup>2</sup> See Tye (2009: 42-4) for a very useful survey, which I have followed here.

<sup>3</sup> In my view, this explanation can also be applied in order to explain the explanatory gap, where this is understood in terms of the claim that given a complete physical description of the world, we can still wonder why, say, seeing red feels like this, or why we are conscious at all. Here I understand the explanatory gap as basically the same as the epistemic gap, that is, as the lack of a priori entailment from physical truths to phenomenal truths. According to the phenomenal concept strategy, this is due to the fact that phenomenal concepts are not a priori connected with physical concepts, so that phenomenal truths are not derivable a priori from physical truths. The conceivability of

Regarding the explanation of Mary's new knowledge, the PCS claims that (most) phenomenal concepts are *perspectival*, that is, in order to possess a phenomenal concept, we need to have had the corresponding experience.<sup>4</sup> In this way, we can explain why Mary gains new knowledge when she sees red for the first time: she acquires a phenomenal concept of red experience that she didn't possess before, and she can thereby entertain new thoughts involving that concept that she couldn't entertain before. Her new knowledge amounts to new thoughts about the very same old facts she already knew (so this explanation is also compatible with physicalism).<sup>5</sup>

## 2. *Accounts of Phenomenal Concepts and their Challenges*

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zombies and the epistemic gap are two sides of the same coin: if physical truths do not entail phenomenal truths a priori, then we can conceive of physical truths holding without phenomenal truths holding (i.e. zombie-worlds); and given a complete physical description of reality, we can always wonder why it gives rise to consciousness rather than not (i.e. the explanatory gap). However, not everybody understands the explanatory gap just in terms of the epistemic gap. For instance, Levine (2007) argues that the explanatory gap cannot be reduced to the epistemic gap when the latter is understood as the mere lack of derivability of phenomenal truths from microphysical truths (as I am assuming here), since there are other macro-physical truths such as truths about water that do not follow a priori from micro-physical truths either, but in his view there is no interesting explanatory gap here. Because of this, he argues, explaining the epistemic gap does not amount to explaining the explanatory gap. This is an important challenge, but for the sake of simplicity I will put this worry aside and I will focus on the conceivability argument and the knowledge argument against physicalism.

<sup>4</sup> See Veillet (2012) for an interesting defence of the perspectivalty of phenomenal concepts (and the claim that the PCS is committed to it).

<sup>5</sup> As Nida-Rümelin (1995) and Stoljar (2005) have argued, the thesis of the perspectivalty of phenomenal concepts is not sufficient to refute the knowledge argument, since we can imagine a modified version in which Mary has seen some patches of red paint before her release but she doesn't know that those patches are called 'red'. In this case, "experienced" Mary does possess the phenomenal concept of red experience, but she is still not able to know that seeing a red rose feels like *this*, before her release. Ball (2009) argues that this is not a successful version of the knowledge argument because in this case Mary doesn't have a complete physical description of the world, and if she did, she would be able to know that the patches of paint in her room are red, and therefore seeing red feels like *this*. However, it is not clear to me that Mary would be able to infer a priori, from a microphysical description of the world, that the patches of paint in her room are red. Therefore, the best response to the knowledge argument, in my view, is a combination of the perspectivalty of phenomenal concepts, in order to explain why Mary doesn't possess the phenomenal concept of red experience before her release, plus the lack of a priori derivability of phenomenal truths from physical truths, in order to explain that even "experienced" Mary, who does possess the relevant phenomenal concepts, is also unable to find out what seeing a red rose feels like before her release.

Different versions of the phenomenal concept strategy provide different accounts of phenomenal concepts and their special features, which they use to explain the epistemic gap between physical and phenomenal truths (and consequently, to explain the conceivability of zombies, Mary's new knowledge, and the explanatory gap). Tye (2009) has offered a very useful taxonomy of the different accounts of PCs. According to him, there are four different approaches an advocate of the PCS might take, but none of them can do the work required to explain the epistemic gap. In this section I will examine these different approaches and Tye's objections to them, and I will argue that there is at least one account of phenomenal concepts, namely, the recognitional account, that can avoid his objections.

According to the first approach, phenomenal concepts might be concepts that utilize *non-physical descriptions*, either as definitions, reference-fixing material, or sortals (that is, the kind of sortal information typically associated with indexical concepts, such as 'an experience like this'<sup>6</sup>). According to Tye, the main problem with this approach is that it "entails that physicalism about consciousness is false" (2009: 44). I agree that this consequence seems to follow, but only if we understand physical descriptions (or sortals) as those that refer to *non-physical* properties. On the other hand, if what is meant by 'physical description' is that those non-physical descriptions (or sortals) are not couched in physical vocabulary, or are not *a priori deducible* from microphysical truths (i.e. those posited by physics), then this does not necessarily entail that physicalism about consciousness is false. For all we know, those non-physical descriptions (or sortals) associated with phenomenal concepts might refer to physical properties after all, and therefore phenomenal truths might be necessitated by physical truths, even if phenomenal truths

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<sup>6</sup> See Dickie (2014) for a defence of the view the demonstrative reference requires sortals.

are not *a priori* deducible from microphysical truths. (In any case, this option will probably collapse into the third option below, so I will examine it then in more detail.)

According to the second approach, phenomenal concepts might be concepts that utilize *physical descriptions*, either as definitions, reference-fixing material, or sortals (for the corresponding indexicals).<sup>7</sup> The main problem with this option is the following: If PCs fix their referents by means of physical descriptions, then it is not clear why Mary couldn't acquire PCs inside her black-and-white room (Tye 2009: 42-3). Also, this characterization of PCs could not explain why zombies are conceivable, because on this view, phenomenal truths are *a priori* deducible from physical truths, and therefore zombie-worlds could be ruled out *a priori*.

Therefore, phenomenal concepts cannot employ either physical descriptions or non-physical descriptions (understood as those that refer to non-physical properties). According to Tye, there are two options left: according to the third option, phenomenal concepts employ either *phenomenal descriptions* or *phenomenal sortals*; and according to the fourth option (his own earlier view), phenomenal concepts employ neither descriptions nor sortals of any kind whatsoever. Let's examine each of these two last approaches in turn.

According to the third approach, then, either phenomenal concepts pick up their referents by means of phenomenal descriptions, or they are demonstrative concepts that employ phenomenal sortals. Tye argues that any view according to which PCs are supposed to fix their referents by means of phenomenal descriptions (either meaning-giving or merely reference-fixing) will face the following worry: the corresponding account of reference-fixing will be

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<sup>7</sup> Here, 'physical descriptions' should be understood in terms of those concepts that are couched in physical vocabulary, or that are *a priori* deducible from physical truths (i.e. those posited by physics), not just as those descriptions and truths that are necessitated by physical truths, because this latter option could again collapse into option 3 below, according to which phenomenal concepts are not associated with physical descriptions but rather with phenomenal descriptions, which might after all supervene on the physical. See Tye (2009: 205-6, fn. 14) for further discussion.

circular. For in order for a phenomenal concept to refer to something on this account, a further phenomenal concept (i.e. the associated phenomenal description) must have its referent fixed, which will in turn require that yet another phenomenal concept has its referent fixed, and so on and so forth (Tye 2009: 44).

Given the problems for all these views, the approach that most advocates of the PCS tend to endorse is one according to which phenomenal concepts are *demonstrative* concepts utilizing phenomenal sortals (e.g. ‘this experience’, or ‘an experience that feels like this’). There are two possible versions of this view, namely, the quotational account and the recognitional account, which I will examine in what follows.

The most straightforward version of this approach is the *quotational* (or *constitutional*) account of PCs, which is endorsed by philosophers such as Katalin Balog (2009), Ned Block (2007) and David Papineau (2002). The main idea can be put like this: “Phenomenal concepts paradigmatically have the form *that phenomenal property*, where the indexical or demonstrative *that* refers to the phenomenal property exemplified in an associated mental sample (presumably an image or quasi-image)” (Tye 2009: 44). Tye raises two important objections against this account. According to the first objection, if introspective or imaginative thoughts about pain involve a token of pain, then the thought that I am in pain itself has a part that hurts, but according to Tye, nothing in the thought itself is hurting (2009: 47).<sup>8</sup> But putting this aside, a second, more worrying problem with the quotational/constitutional account is that the mental

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<sup>8</sup> Tye (2009) does not say much about why the thought that I am in pain (or any other thought involving phenomenal concepts) cannot be such that it itself is hurting. In a more recent paper, Tye & Wright (2011) argue that thoughts are such that they cannot have any distinctive, proprietary phenomenology. Clearly, if they are right, it will follow that no thought can hurt, because no thought can have any distinctive phenomenology whatsoever. See Jorba (2015) for a very interesting critique of Tye & Wright’s argument. However, even if Tye & Wright’s arguments against thoughts having distinctive phenomenal properties fail, there could be additional arguments for the more specific claim that thoughts cannot hurt. However, Tye hasn’t provided such argument, as far as I am aware.

token or sample that is supposed to be associated with each phenomenal concept will instantiate *not one but many* phenomenal properties. For instance, a token of an experience of seeing red will not only exemplify the phenomenal property *experience of seeing something red* but also the properties *experience of seeing something dark red* and *experience of seeing a color*. Therefore, a mental sample alone cannot determine which phenomenal property is picked out by the corresponding phenomenal concept (Tye 2009: 45; see also Loar 2003 and Levin 2007 for similar worries).

Ned Block has suggested a possible response to this worry: “What makes it the case that a token phenomenal property in a phenomenal concept serves as a token of one phenomenal type rather than another? ... One answer is to appeal to dispositions ... . The answer on the dispositionalist view is that it depends on the subject’s disposition to, for example, treat another experience as falling under the same concept” (Block 2007: 283, fn. 32). That is, according to this response, a mere token of a phenomenal type cannot determine by itself which phenomenal property the corresponding phenomenal concept picks out: we need to supplement the phenomenal token with a disposition to treat other phenomenal tokens as falling under the same phenomenal concept.<sup>9</sup> However, Tye argues that Block’s dispositional solution to what we can call the ‘indeterminacy of reference’ objection to the quotational/constitutional account does not work either, because it is circular again (in the same way that accounts that appeal to explicit phenomenal descriptions are, as we saw above). More precisely: According to the dispositional account, in order for a phenomenal concept C to refer to phenomenal property E, subjects must

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<sup>9</sup> In my view, and also according to Janet Levin (2007), this kind of “dispositional” solution to the “indeterminacy of reference” worry is typical of the recognitional account (as defended by Loar 1997), which has it that phenomenal concepts are recognitional concepts that are individuated by our recognitional abilities to treat other phenomenal tokens as “another one of those”. However, Tye does not say whether the recognitional account is subject to the same worries as the dispositional account or not, although it does face other worries according to him, which I discuss below.

have the disposition to judge some experiences as falling under the concept ‘being the same experience as this’, but this is another phenomenal concept. Hence, this account assumes that some phenomenal concept has its referent already fixed, in order to explain how phenomenal concepts get their referents fixed, which would be viciously circular (Tye 2009: 46).<sup>10</sup>

In my view, in order to respond to Tye’s circularity worry, an advocate of a dispositionalist account of phenomenal concepts would have to make clear that the relevant dispositions at issue here are dispositions to identify some phenomenal tokens as being tokens of the same phenomenal type, *without* having to previously apply a further phenomenal concept of the form ‘being a token of the same phenomenal type’. As Tye points out, Block seems to be aware of this worry, and suggests a similar solution: “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” (Block 2007: 283, fn. 32). However, Tye argues that “it is hard to see what he might have in mind” (2009: 205, fn. 7). In my view, there are at least two possible ways of developing this dispositional response: first, along the lines of Loar’s *recognitional* account (which Tye does not accuse of circularity directly), and secondly, along the lines of Tye’s earlier view (i.e. a *causal-teleological* account of content, which can solve the problem of circularity according to Tye). I will explain each account in turn in what follows, and how they can solve the circularity worry.

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<sup>10</sup> For this reason, Tye believes that none of the first three approaches can succeed, that is, the only account of phenomenal concepts that could avoid all the objections so far is one according to which phenomenal concepts employ neither physical descriptions nor non-physical descriptions, nor phenomenal descriptions, nor phenomenal sortals. This corresponds to Tye’s own earlier view, namely, the causal account of phenomenal concepts, which he now argues does not work either. We will examine this account and Tye’s new objections against it below.

According to the *recognitional* account of phenomenal concept, PCs are type-demonstrative concepts of the sort we use when we recognize things are being “one of those”, and we do so without using any theoretical knowledge. According to this account, phenomenal concepts are individuated by our recognitional dispositions to apply the same phenomenal concept to phenomenal tokens of the same type. Brian Loar (1997) develops a view along these lines: he claims that phenomenal concepts refer to the phenomenal property shared by those phenomenal tokens that *trigger* the application of the concept. This suggests that phenomenal concepts can be applied in a direct manner, without involving the application of any other concept. In my view, this can provide a solution to the circularity worry voiced by Tye, because on this account, phenomenal concepts can fix their referents by means of phenomenal sortals such as ‘another token of the same kind as this’, without the need to previously apply a further phenomenal concept. Rather, the application of the phenomenal concept is triggered (in an automatic manner, so to speak) by all and only those phenomenal tokens that instantiate the corresponding phenomenal property.

Let’s now turn to Tye’s own earlier view of phenomenal concepts (first developed in his (2003), and which he now rejects). According to this view, known as the *causal* account of PCs, “phenomenal concepts are non-demonstrative, general concepts that refer directly without the assistance of any associated reference-fixers” (Tye 2009: 51).<sup>11</sup> A bit more precisely: A

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<sup>11</sup> As I have suggested, in my view this account is very similar to Loar’s recognitional account, and indeed to any dispositional account of phenomenal concepts, although Tye does not seem to agree. In his view, dispositional and recognitional accounts seem to posit a reference-fixing mechanism that involves phenomenal sortals, but according to Tye’s causal account, PCs are non-demonstrative, and refer without the assistance of any associated reference-fixers, as we have seen. I am not sure there is a deep, non-terminological disagreement here. One reason for thinking that phenomenal concepts are not demonstrative is that they do not seem to refer to different things in different contexts, but this is something that advocates of recognitional and dispositional accounts are aware of, and they still understand their accounts as claiming that PCs are demonstrative. In my view, the crucial idea behind this claim is that PCs fix their referents by means of internal “pointings” during introspection, and clearly both the recognitional

phenomenal concept C refers directly to phenomenal quality Q iff, under normal conditions, C is tokened in an act of thought just in case Q is tokened and because Q is tokened (2009: 52). Tye argues that the causal account clearly does not lead to a vicious regress (unlike Block's dispositional account, in his view), because on this account phenomenal concepts refer directly: "It is not the case that in order for a given phenomenal concept to refer successfully, other phenomenal concepts must do the same, where these concepts refer successfully and so on without end" (2009: 54). However, Tye thinks that the causal account faces two other serious problems. First, if phenomenal concepts refer directly, then it follows that they do not have fine-grained individuation conditions in the way that concepts are supposed to have: "Thus, if having fine-grained individuation conditions is partly definitive of what it is for a mental representation to be a concept, then phenomenal concepts are not really concepts at all" (2009: 54). In response: it is not clear to me that the notion of direct reference that is relevant here, namely, concepts that fix their referents by means of a causal or dispositional mechanism without relying on any theoretical knowledge, entails that the corresponding concepts do not have fine-grained individuation conditions. In particular, it could be argued that phenomenal concepts play a different functional or inferential role from that of co-referential physical concepts, and in this way they have fine-grained individuation conditions.<sup>12</sup> As Tye himself suggests, "phenomenal thought types play a different role in rationalizing explanations than non-phenomenal thought

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and the dispositional view can endorse that. Finally, the crucial idea behind the recognitional and dispositional accounts, as I have suggested above, is that they maintain that PCs fix their referents by means of our dispositions to apply the concept to certain phenomenal tokens, or what is the same, by the disposition of certain phenomenal tokens to trigger the application of a certain fine-grained phenomenal concept. In my view, Tye's causal account also endorses this crucial idea. See Levin (2007) for further discussion of the causal-demonstrative account.

<sup>12</sup> I return to this point in sect. 4 below.

types ... . Phenomenal thoughts exercise different concepts—*phenomenal* concepts (whose difference from non-phenomenal concepts ... is given by their functional role)” (2009: 55).

However, Tye argues that even if we accept that phenomenal concepts have a different functional role than the corresponding co-referential non-phenomenal concepts (and therefore this could account for their fine-grained individuation conditions), this still cannot account for the new knowledge that Mary gains after leaving her black-and-white room. He says:

*What* Mary thinks is not new when she leaves her room. What is new is the *way* in which she is thinking what she is thinking. That isn't enough. What Mary knows before time *t* (the time of her release) is exactly the same as what she knows after time *t*. But if what she knows before and after her release is the same, she does not make a discovery in any robust sense. This is counter-intuitive. (2009: 55)

In response: According to the *a posteriori* (or type-B) physicalist strategy that we are examining here, Mary's new knowledge can be explained in terms of her acquiring new thoughts about the very same old facts. So, there is a sense in which it is true that what is new is not *what* she is thinking but rather the *way* she is thinking about it. But this is just another way of stating the view, so merely asserting this cannot constitute an objection against the view. Perhaps the underlying worry here amounts to the claim that it is very intuitive that Mary learns something *substantive*, whereas the claim that Mary acquires a new thought by virtue of acquiring a new concept that is co-referential with other concepts she already possessed (but plays a different functional role) couldn't possibly capture the sense in which what she learns is substantive. But in my view, this way of putting the worry begs the question against the *a posteriori* physicalist,

or at least needs further motivation. (In what follows, I will discuss several ways of developing the idea that phenomenal knowledge is substantive.)<sup>13</sup>

To recap: we have seen that in order to avoid the circularity worry, phenomenal concepts had better not fix their referents in terms of explicit phenomenal descriptions or sortals, because otherwise this would lead to an infinite regress. Instead, we should appeal to purely recognitional dispositions or causal-teleological reference-fixing mechanisms. But this gives rise to the following question: can accounts along these lines explain the sense in which Mary's new knowledge is substantive? This question will be the focus of the next section.

### *3. Phenomenal Concepts and Revelation*

Joseph Levine has provided a useful elaboration of the idea that accounts of phenomenal concepts should explain the sense in which phenomenal knowledge is substantive. He says: "The first-person access we have to the properties of experience seems quite rich; we are afforded a very substantive and determinate conception of a reddish experience merely by having it" (2007: 163). In addition, he argues that accounts of phenomenal concepts that appeal to the notion of *acquaintance* or *cognitive presence* (such as quotational or constitutional accounts) cannot really explain the sense in which the knowledge provided by phenomenal concepts is substantive. He argues that according to those accounts, "the physical presence of an instance of the phenomenal

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<sup>13</sup> See Veillet (2015) for an excellent survey of different ways of understanding the claim that phenomenal knowledge is substantive. She makes a similar point, namely, that understanding the substantivity of Mary's new phenomenal knowledge in terms of grasping new properties begs the question against the physicalist, since that would require the existence of non-physical properties. My point here is a bit different but closely related: I am claiming that since the a posteriori physicalist argues that the sense in which Mary learns something new is due to the fact that she entertains new thoughts about old facts, the opponent cannot just assert that Mary's new knowledge doesn't consist in the *way* in which she knows something but rather in *what* she knows. This claim would require independent motivation, as Veillet argues.

property is supposed to explain this especially immediate and intimate cognitive relation between phenomenal concepts and their objects ... . Yet ... is not clear why, or how, physical presence translates into cognitive presence” (2007: 162). Independently of what we think about this objection to the quotational/constitutional account, what is interesting here is that Levine is assuming that a successful account of phenomenal concepts should explain “the specially intimate cognitive relation afforded by phenomenal concepts” (2007: 162), or a bit more controversially, “the doctrine that the essential nature of that with which we are acquainted is revealed thereby” (165).<sup>14</sup>

More recently, Philip Goff (2011) has provided a very interesting defence of the view that accounts of phenomenal concepts should explain how phenomenal concepts can provide that special kind of substantive knowledge about their referents. In particular, he argues that any version of *a posteriori* physicalism (including the PCS) is committed to a very problematic view of phenomenal concepts, namely, that phenomenal concepts are *opaque*. He characterizes opaque concepts as follows: “Let us say that a concept *C* of a property *F* is opaque iff *C* reveals nothing of what it is (or what it would be) for an object to have *F*” (2011: 192). Some examples of non-opaque concepts include: *being a friend*, and *being spherical in Euclidean geometry*. He adds: “When I reflect carefully on the phenomenal concept of pain, it seems to me that it is not opaque

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<sup>14</sup> Interestingly, Levine introduces two different views here. One view is the idea that phenomenal experiences are such that when we have a phenomenal experience, we are thereby aware of the nature or essence of that experience. The second view is the claim that if one possesses a phenomenal concept, one knows *a priori* the nature or essence of the corresponding phenomenal state. These two views could in principle come apart: one could hold the former but argue that it has nothing to do with phenomenal concepts, or one could hold the latter and say that having an experience is not sufficient in order to possess the corresponding phenomenal concept, and that only when one possesses the phenomenal concept can one know *a priori* what it takes for something to instantiate the corresponding phenomenal property. For a very interesting discussion of the former view see Damnjanovic (2012) (who argues that it is compatible with physicalism) and Nida-Rümelin (2007) (who argues that it is not). For further discussion of the latter view, see Schroer (2010) (who argues that it is compatible with *a posteriori* physicalism) and Holman (2013) (who argues that it is not, as Goff (2011) does). Here I focus mainly on the second view.

in this sense: at least something of what it is for something to feel pain is knowable *a priori*” (193). That is, Goff thinks that it is clear that phenomenal concepts do reveal something about what it is for something to instantiate the corresponding phenomenal states, and therefore they are not opaque. He contrasts opaque concepts with *transparent* concepts, which reveal all essential properties of the referent, and with *translucent* concepts, which reveal some but not all the essential properties of the referent.<sup>15</sup>

I agree that this is an important challenge to *a posteriori* physicalism. A central question, then, is whether there is any account of phenomenal concepts that the PCS could endorse, which allows us to maintain that phenomenal concepts are either transparent or translucent. In my view, the first thing an *a posteriori* physicalist should say in order to explain how phenomenal concepts reveal something about the nature of their referent is that phenomenal concepts and physical concepts can provide two conceptually distinct ways of knowing the nature of the same properties.<sup>16</sup> But, if so, what essential properties of phenomenal states are revealed by

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<sup>15</sup> Again, we can distinguish here two different claims, or two different ways of understanding the general intuition that phenomenal knowledge is substantive. (I am drawing here on Veillet’s (2015) excellent discussion.) On the one hand, we have the claim that Mary learns something substantive when she sees red for the first time. This could amount to the claim that our phenomenal beliefs involve a rich and substantive content that, say, the quasi-phenomenal belief that *Zombie-Mary* forms when she “sees” red for the first time doesn’t involve, given that she lacks a phenomenally conscious state. On the other hand we have the claim that possessing phenomenal concepts puts one in a position to know what it would take for something to instantiate the corresponding referent. As Veillet (2015) suggests, these two claims could come apart. On the one hand, someone could hold that our phenomenal concepts put us in a position to know certain truths about phenomenal states *a priori*, but that *Zombie-Mary* would also have this knowledge. On the other hand, someone could hold that Mary gains some substantive knowledge that *Zombie-Mary* lacks, but that this is not due to the special nature of phenomenal concepts, but to something else, say, the fact that Mary is acquainted with phenomenal redness but *Zombie-Mary* isn’t. As Veillet argues, these different claims about phenomenal knowledge being substantive are controversial, and not all physicalists have to accept all of them. In this paper, I am mainly focusing on the second understanding of the notion of substantivity, according to which phenomenal concepts reveal something of what it takes for something to instantiate the corresponding property. What I want to argue is that there are accounts of phenomenal concepts that can explain this intuition, while at the same time avoiding circularity.

<sup>16</sup> Goff (2011) calls this thesis ‘TDI’, that is, “thesis of dubious intelligibility”. In Diaz-Leon (2014), I argued that this thesis can be made intelligible. See also Elpidorou (2015) for further discussion.

phenomenal concepts? My answer is that phenomenal concepts are at least translucent concepts, in the sense that possessors of phenomenal concepts are in a position to know at least some conditions for the concept to be satisfied. More precisely, possessing a phenomenal concept puts the subject in a position to know application conditionals<sup>17</sup> of the following form *a priori*:

- (1) If  $x$  falls under the concept PAIN, then  $x$  is a mental state that feels like pain.
- (2) If  $x$  is a mental state that feels like pain, then  $x$  falls under the concept PAIN.

That is, possessors of phenomenal concepts know at least some necessary or sufficient conditions for the phenomenal concept to be satisfied, typically in terms of further *phenomenal concepts*.

This suffices, in my view, to do justice to the intuition that phenomenal concepts reveal something about the nature of their referents. A worry will immediately arise: these conditionals stated above do not seem to appeal to distinct phenomenal concepts, but rather to the very same phenomenal concept that they try to characterize. In response, I agree that the conditionals above are in a sense trivial, but they are not entirely vacuous: for instance, (1) reveals some necessary properties of pain, namely, that it is a mental state and that it feels like something. In my view, this sort of conceptual connections among phenomenal and other mental concepts can help to explain the intuition that phenomenal concepts reveal some essential properties of their referents. On the other hand, (2) states some sufficient conditions for something to fall under PAIN, or to instantiate the property of being in pain. Again, in my view to know an application conditional like (2) is a way of knowing something of what it takes for something to be in pain.

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<sup>17</sup> The notion of application conditional that I have in mind here is that developed by Chalmers & Jackson (2001). Strictly speaking, the application conditionals that Chalmers & Jackson focus on are application conditionals that state (non-trivial) sufficient conditions for something to fall under a concept, such as “If  $x$  is F, then  $x$  falls under C”. Here I focus both on conditionals that state sufficient conditions, such as (2), and on conditionals that state necessary conditions, such as (1).

In addition, we could also appeal to some conceptual connections between phenomenal concepts and some general, non-phenomenal, theoretical concepts, such as the following:

(3) If  $x$  is a number, then  $x$  is not a red sensation. (Stoljar 2005: 479)

(4) If  $x$  is phenomenally conscious, then  $x$ 's subject can become aware of  $x$ .

Crucially, these general conceptual truths are still compatible with the claim that microphysical truths do not entail phenomenal truths *a priori* (and therefore the epistemic gap still obtains).<sup>18</sup>

#### 4. *A New Dilemma for the Phenomenal Concept Strategy?*

We have seen that there are at least two desiderata in order to formulate a satisfactory account of phenomenal concepts: (i) our account should not be circular, and (ii) our account should not make phenomenal concepts opaque. We have seen in section 2 that we can solve the circularity worry in terms of accounts that explain the reference-fixing of phenomenal concepts by means of recognitional abilities or dispositions, without appealing to any further phenomenal descriptions or sortals. However, as we have seen in section 3, it could be argued that accounts of this sort will have the consequence that phenomenal concepts are opaque, that is, they do not reveal anything of what it would take for the phenomenal property to be instantiated. But as I have

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<sup>18</sup> Schroer (2010) has developed a similar response to the opacity worry. He says: “our phenomenal concepts provide a more substantial characterization of the intrinsic nature of the phenomenal colours—a nature that underpins the relations of resemblance that they stand in, relative to one another—than the meagre demonstrative characterization of ‘that quality’” (p. 512). That is, Schroer argues that whereas phenomenal concepts reveal something about the intrinsic nature of phenomenal states, namely, their relations of resemblance and their sharing component elements, this information provided by phenomenal concepts is not sufficient to allow us to infer phenomenal truths from physical truths *a priori*. According to my view, it is also the case that phenomenal concepts reveal some general information about phenomenal states *a priori*, which is still not enough to close the epistemic gap, but I want to remain neutral on the nature of the information that is so provided. I am not committed to Schroer’s claim that the relations of resemblance among phenomenal states are constitutive of phenomenal states, and in addition that phenomenal concepts reveal those relations. The examples of *a priori* conditionals revealed by phenomenal concepts that I offer here are less controversial, since they focus on very general conceptual connections such as the inference from being a red experience to being a colour experience, or from being an experience to being a mental state and therefore not a number, and so on.

argued, there is no good reason to believe that there is just one way of revealing (at least something of) what it would take for the property to be instantiated. We could explain the intuition that phenomenal concepts reveal something of what it is like to be in pain in terms of our *a priori* knowledge of conditionals such as (1-4). However, a final worry is still lingering: according to my account of what makes phenomenal concepts translucent concepts (and therefore not opaque), phenomenal concepts seem to be conceptually connected to some further phenomenal descriptions. On the other hand, I have said that if we want to avoid the circularity worry, phenomenal concepts cannot fix their referents in terms of further phenomenal concepts. Are these two solutions in tension? If so, this would be bad news indeed for the advocates of the PCS, because we need to posit an account of phenomenal concepts that can overcome the circularity worry and the opacity worry at the same time. In other words, we need an account of phenomenal concepts that can avoid circularity, without entailing that phenomenal concepts are opaque.

In my view, there is a way of reconciling these two aims. The crucial idea is the following: we can hold that although the reference-fixing mechanism for phenomenal concepts is purely causal/dispositional or recognitional, phenomenal concepts are nonetheless *a priori* connected with other phenomenal concepts (and perhaps also with some non-phenomenal theoretical concepts). I just gave some examples of these conceptual claims above (1-4). Another one is this:

(5): If  $x$  is an experience of dark red, then  $x$  is an experience of red.

This conditional claim seems clearly *a priori* (or at least a central, non-negotiable belief about red experiences), but in my view this claim is perfectly compatible with a dispositional or recognitional account of the reference-fixing of phenomenal concepts. An interesting question

here is what the source of this *a priori* knowledge is, if phenomenal concepts do not fix their reference by means of descriptions but just in terms of recognitional dispositions, as the PCS says. In general, I am sympathetic to *analytic* accounts of apriority, according to which *a priori* knowledge depends on the semantic properties of our concepts, and the conceptual or inferential connections that they enter in, which are partly constitutive of their content.<sup>19</sup> In this way, we can explain why the mere possession of a concept that is constituted in part by certain conceptual or inferential connections will put a subject in a position to know those inferences *a priori*, namely, because if someone possesses the concept then they have access to those inferential connections that are constitutive of the concept. However, the challenge here for the PCS is that the inferential role of phenomenal concepts is extremely thin, according to the PCS. In particular, phenomenal concepts are exceptional, and different from most other macroscopic concepts, in that they do not refer by description, that is, they do not just refer to whatever satisfies their associated inferential role, but rather, and crucially, by means of a recognitional disposition that is triggered by certain phenomenal tokens of a certain type in certain conditions. So, does this account allow for the existence of any substantive conceptual connections among phenomenal concepts themselves, and among phenomenal concepts and other non-phenomenal concepts, as would be required in order to solve the opacity worry? In my view, this challenge can be met. What we need is to posit some general *a priori* connections among some general concepts, such as the concept of experience, or even the more general concept of mental state, and other physical/functional or theoretical concepts, and then the particular *a priori* or conceptual truths that we are seeking (such as (1-5)) will automatically follow from these general conceptual truths. For instance, (5) arguably follows from (6), plus some plausible assumptions:

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<sup>19</sup> See Boghossian (2003) for a compelling defence of this analytic conception of a priori knowledge.

(6) If  $x$  is an experience of a dark shade of colour  $X$ , then  $x$  is an experience of colour  $X$ .

Likewise, the *a priori* truth (3) above follows from some more general *a priori* truths, namely the following:

(7) If  $x$  is a number, then  $x$  is not a mental state.

(8) If  $x$  is not a mental state, then  $x$  is not a red sensation.<sup>20</sup>

My central point here is that it is perfectly compatible, on the one hand, to endorse an account of the reference-fixing of phenomenal concepts in terms of recognitional dispositions, where what fixes the reference of a phenomenal concept is the fact that its application is triggered by certain phenomenal tokens of a certain type (rather than another), and on the other hand, to accept some very general conceptual or *a priori* truths such as (6-8) above (which in turn will entail *a priori* some more specific truths such as (3) and (5)). That is to say, the claim that (a) phenomenal concepts refer by means of a causal or recognitional mechanism rather than by description is compatible with the claim that (b) phenomenal concepts have a limited but not entirely vacuous inferential role, in part due to very general conceptual connections like (6-8), which give rise to many more specific conceptual truths involving more specific phenomenal concepts such as (3) and (5) above. As I said at the end of section 2, advocates of the PCS need to appeal to the different functional or inferential roles of co-referential phenomenal and physical concepts, in order to explain how phenomenal concepts have fine-grained individuation conditions, so that for example concepts such as ‘pain’ and ‘c-fibre firing’ turn out to be different concepts even if they have the same referents. What I am suggesting here is that we can also appeal to the distinctive inferential roles of phenomenal concepts in order to explain why the possession of

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<sup>20</sup> I used a similar example in order to defend the PCS from a related objection by Stoljar (2005), in Diaz-Leon (2008).

phenomenal concepts allows the subject to gain some substantive knowledge about the nature of the phenomenal properties, or in other words, why it puts the subject in a position to know at least something of what it would take for the concept to be instantiated.<sup>21</sup>

However, it could be argued that if those conditionals above are *a priori*, that is because phenomenal concepts refer by description (or are associated with sortals), some of which will be *phenomenal* descriptions (or sortals), which might give rise again to the circularity worry. Otherwise, how could these inferences be *a priori*? According to the view I am proposing here, phenomenal concepts are mental representations that fix their reference in virtue of being associated with dispositions to be applied to certain phenomenal tokens. That is, if a certain mental representation C\* is triggered by phenomenal tokens of a certain phenomenal property P\*, then that mental representation will refer to phenomenal property P\*. This solves the circularity worry. At the same time, I want to suggest that that phenomenal concept is inferentially connected with other concepts. For instance, that phenomenal concept C\* could be connected with the phenomenal concepts ‘colour experience’ and ‘experience of dark red’, such that the subject is disposed to infer ‘x is C\*’ from ‘x is an experience of dark red’, and to infer ‘x is a colour experience’ from ‘x is C\*’. This suggests that C\* has an inferential role corresponding to our concept ‘experience of red’. In my view there could be mental representations that are associated with these two kinds of dispositions: on the one hand, a disposition to be applied to certain phenomenal tokens (which is crucial in order to fix the referent), and on the other hand a disposition to be inferred from other mental representations. We could imagine a mental representation that only satisfies the first kind of disposition. These would be purely opaque

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<sup>21</sup> Levin (2012) talks about the *conceptual background* of recognitional concepts, which can guide their reference-fixing. In my view, this is similar to the idea that phenomenal concepts, *qua* recognitional concepts, can be associated with “thin” inferential roles that put some constraints on their referents.

concepts: they are triggered by certain phenomenal tokens but are not inferentially connected to any other concepts, so they do not reveal anything of what their referents are like *a priori*. In my view, an advocate of a recognitional or causal account of phenomenal concepts does not necessarily have to endorse this “purely opaque” view. Rather, she could also say that in addition to these purely recognitional or causal dispositions, phenomenal concepts are also associated with inferential roles. This means that those concepts cannot be satisfied by anything that does not satisfy the inferential role. This is an important difference, but I do not think that this is a problem for this view. That is, we can say that in order for C\* to refer to P\*, two conditions have to obtain. First, C\* has to be disposed to be triggered in the presence of tokens of P\*. In addition, P\* has to satisfy those necessary and sufficient conditions that are associated *a priori* with the concept C\*. But this does not entail, in my view, that C\* is associated with other phenomenal descriptions or sortals in a circular manner. That is, the central reference-fixing mechanism is still a purely dispositional mechanism, which does not need to appeal to a further phenomenal *concept* of the form ‘another experience of this kind’. (As I just said, it is possible to have a purely opaque concept that is associated to those directly referential reference-fixing dispositions, but is not inferentially connected to any other concepts, and therefore this shows that those reference-fixing dispositions do not require a conceptual or inferential connection to other concepts or descriptions, so they are not circular). But at the same time, we could have a very similar mental representation C\* that, in addition to those purely causal dispositions, also happens to be *a priori* connected with other phenomenal concepts (so that it would no longer be purely opaque), in the sense that C\* is such that subjects who possess it are thereby disposed to infer, say, ‘x is C\*’ from ‘x is a dark red experience’ and to infer ‘x is a colour experience’ from ‘x is C\*’ (and in this way these inferences are *a priori*, since it is necessary in order to possess

this particular concept C\* that one is so disposed). Or in other words: we could have a concept such as C\* that is associated both with a purely automatic, recognitional disposition on the one hand, and with an inferential disposition (internally characterized) on the other. The combination of these two dispositions can provide a solution to the circularity worry and the opaqueness worry at the same time.<sup>22</sup>

### 5. Conclusion

In this paper I have examined some recent objections to the phenomenal concept strategy, which is one of the most influential responses to anti-physicalist arguments. The two main objections that I have focused on are the circularity worry and the opaqueness worry. I have argued that it is relatively easy to respond to these objections independently. On the one hand, in order to solve the circularity worry, we have to make clear that phenomenal concepts refer directly, by means of causal or recognitional mechanisms, rather than by utilizing phenomenal descriptions or sortals. On the other hand, in order to solve the opaqueness worry, we have to make clear that phenomenal concepts have some associated inferential roles, which explain why they can bear some *a priori* or conceptual connections to other phenomenal and non-phenomenal concepts, and which in turn explain why mere possession of the concepts can provide knowledge of essential

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<sup>22</sup> Alternatively, we could try to explain why phenomenal concepts are not opaque in terms of the *recognitional abilities* that individuate phenomenal concepts, according to the recognitional account. That is to say, we could explain how acquiring new phenomenal concepts yields new knowledge, in terms of the new recognitional abilities that have been acquired. For instance, wine-tasting involves gaining the ability to recognize and re-identify new flavours (Levin 2007). Crucially, this is not just some sort of knowledge-how (although it does involve gaining new abilities): in addition, the PCS claims that these new recognitional abilities constitute the possession of new, more fine-grained phenomenal concepts. On this account, possessing a new phenomenal concept always corresponds to gaining a new recognitional ability, and this might explain at least in part why phenomenal concepts seem to provide knowledge about the nature of the corresponding phenomenal properties, even if phenomenal concepts refer directly rather than by description of their referents.

properties of the referents *a priori*. However, as I have suggested, the main challenge for the PCS is to explain how these two solutions are compatible, because it might seem that accounts of phenomenal concepts that explain reference-fixing in terms of purely recognitional mechanisms cannot explain the conceptual relations that phenomenal concepts allegedly stand in, and in addition, accounts of phenomenal concepts according to which phenomenal concepts have rich and substantive inferential and conceptual roles might not be in a good position to avoid the charge of circularity, since they might have to explain reference-fixing in terms of further phenomenal concepts, and so on without end. The key solution, in my view, is to distinguish reference-fixing mechanisms, on the one hand, from conceptual and inferential roles, on the other. In this way, we can see that recognitional accounts of phenomenal concepts can perfectly well appeal to dispositional accounts of the reference-fixing of PCs, in a way that does not need to rely on further phenomenal concepts, and at the same time appeal to general conceptual connections among general phenomenal and non-phenomenal concepts, which will give rise to more specific conceptual truths of the sort indicated above, which are rich enough, I contend, to explain the sense in which phenomenal concepts are not opaque.<sup>23</sup>

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<sup>23</sup> Ancestors of this paper have been presented at the ESPP at Bochum & Essen, the WCPA at Calgary, the Joint Session at Sussex, the TSC conference in Helsinki, workshops in Fribourg and Rio de Janeiro, and colloquiums in Barcelona and Rochester. I am very grateful to the audiences in those occasions for very useful feedback. Extra thanks are due to the following, for very helpful comments and discussion: Derek Ball, David Chalmers, Andreas Elpidorou, Manuel García-Carpintero, Philip Goff, Marta Jorba, Janet Levin, Joseph Levine, Dan López de Sa, Alyssa Ney, David Pineda, Henry Taylor, Bénédicte Veillet, Assaf Weksler, and Helen Yetter-Chapell. I am also grateful to several anonymous referees for very useful suggestions.

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