

New Wave Pluralism

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Final Version forthcoming in *dialectica*

ABSTRACT The aim of this paper is to develop a pluralist interpretation of the phenomenal concept strategy (PCS). My starting point is Horgan and Tienson's deconstructive argument according to which proponents of PCS face the following dilemma: either phenomenal concepts or physical concepts allow us to conceive phenomenal states as they are in themselves. If phenomenal concepts allow us to conceive phenomenal states as they are in themselves, then phenomenal states are non-physical states and physicalism is wrong. If physical concepts allow us to conceive phenomenal states as they are in themselves, then phenomenal concepts are derivative and PCS is wrong. While Horgan and Tienson assume that their argument shows that PCS leads to dualism, I argue that one can also adopt an 'epistemic pluralism' that rejects the idea of only one fundamental way of conceiving phenomenal states as they are in themselves. However, I also argue that epistemic pluralism eventually leads to a position that is compatible neither with dualism nor physicalism. Instead of justifying a non-reductive 'new wave materialism', PCS may therefore lead to a 'new wave pluralism' that is at odds with all mainstream positions in philosophy of mind.

1. Introduction

The phenomenal concept strategy (PCS) provides one of the currently most popular frameworks for non-reductive physicalism. Proponents of PCS agree with dualists on the existence of an explanatory gap between the phenomenal and physical perspective but disagree with them on its nature. According to proponents of PCS, the explanatory gap is not due to differences between phenomenal and physical *states* but differences between phenomenal and physical *concepts*. There is no ontological gap but a fundamental conceptual gap which is why even physicalists can accept the irreducibility of phenomenal consciousness.

The aim of this paper is to present a pluralist interpretation of PCS. My starting point is Terry Horgan and John Tienson's deconstructive argument against a physicalist interpretation of PCS (i.e. "new wave materialism"). According to Horgan and Tienson, new wave materialists face a dilemma that is based on the assumption that there is exactly one fundamental way of conceiving phenomenal states as they are in themselves. If phenomenal concepts allow us to conceive phenomenal states as they are in themselves, then phenomenal states cannot be physical states and physicalism is wrong. If physical concepts allow us to conceive

phenomenal states as they are in themselves, phenomenal concepts must be derivative and PCS is wrong. Therefore, physicalism and PCS are incompatible and new wave materialism is wrong.

In this paper, I will argue that the deconstructive argument does not show that PCS leads to dualism as one can also adopt an epistemic pluralism that insists on different but equally fundamental ways of referring to the same entities. Epistemic pluralism claims that there is not one fundamental way of conceiving entities as they are in themselves and allows proponents of PCS to argue that there is not one fundamental way of conceiving phenomenal states as they are in themselves, either.

Although epistemic pluralism offers an attractive response to Horgan and Tienson's deconstructive argument, I argue that it has surprising metaphysical consequences as it turns out to be incompatible with *both* dualism and physicalism. Epistemic pluralism is incompatible with dualism because it interprets the gap between the physical and phenomenal perspective as a conceptual and not as an ontological gap. At the same time, epistemic pluralism is also at odds with physicalism by rejecting the metaphysical priority of the physical perspective. I therefore conclude that a pluralist interpretation of PCS does not lead to 'new wave materialism' but a 'new wave pluralism' that rejects the ontological commitments of both dualism and physicalism.

I conclude that PCS offers an attractive response to explanatory gap problems in philosophy of mind if *and only if* one is willing to give up the metaphysical commitments of both dualism and physicalism. While this result challenges Horgan and Tienson's claim that PCS collapses into dualism, it is even more troubling for non-reductive physicalists who present PCS as a physicalist strategy of solving explanatory gap problems in philosophy of mind.

2. *The phenomenal concept strategy*

Proponents of PCS agree that the explanatory gap between the physical and phenomenal perspective is due to differences between physical and phenomenal concepts and not due to ontological differences between physical and phenomenal states. At the same time, they disagree on how to characterize these differences and offer a large variety of accounts of phenomenal concepts.¹ The classical formulation of PCS is Loar's recognitional-demonstrative proposal according to which phenomenal concepts crucially differ from physical concepts in having the form "x is one of *that* kind" (Loar 1997, 600). Imagine a headache and the thought "Oh no, not *that* headache again." According to Loar, the phenomenal concept "*that* head-ache" involves a demonstrative instead of a descriptive mode of presentation. The

¹ See Balog (2009) for an overview.

ability to refer to a specific headache is independent from the ability to describe it in a way that distinguishes it from other headaches. Instead, the phenomenal concept “*that* headache” seems to require the ability to demonstratively focus on the experience and to recognize different instantiations of the same type.

The recognitional-demonstrative character of phenomenal concepts contrasts with the theoretical character of physical concepts and Loar suggests that this difference already provides the first step in understanding the epistemic gap between the phenomenal and physical perspective: “What then accounts for the conceptual independence of phenomenal and physical-functional concepts? The simple answer is that recognitional concepts and theoretical concepts are in general conceptually independent” (Loar 1997, 602).

However, the recognitional-demonstrative character of phenomenal concepts cannot be the whole story as not every recognitional concept is a phenomenal concept. Consider, for example, someone using the non-phenomenal recognitional concept of “*that* dog”. According to Loar, the crucial difference between “*that* headache” and “*that* dog” is that the latter is based on a “contingent mode of presentation” which means that the concept picks out its referent through contingent and therefore non-essential properties such as its visual appearance or its barking. Loar suggests that the situation is different in the case of phenomenal concepts: one can imagine the dog without these contingent properties, but one cannot imagine a headache without the phenomenal property of a headache feeling. Phenomenal concepts provide a direct grasp of their referents that is not mediated through a contingent property. “It is natural to regard our conceptions of phenomenal qualities as conceiving them as they are in themselves, i.e. to suppose we have a direct grasp of their essence” (Loar 1997, 608–609). To sum up, Loar’s variant of PCS is based on two ideas. First, phenomenal concepts are recognitional concepts which partly explains their independence from physical concepts. Second, they are different from non-phenomenal recognitional concepts by not relying on a contingent mode of presentation but conceiving phenomenal qualities as they are in themselves.

Although Loar’s recognitional-demonstrative proposal is widely recognized as the classical formulation of PCS, many current proponents of PCS prefer alternative accounts of phenomenal concepts. Michael Tye (2003), for example, argues that phenomenal concepts refer via the causal connection they have with their referents and takes his proposal to offer an explanation of the crucial epistemic features of the phenomenal perspective.² The quotational model of phenomenal concepts (e.g., Balog 2012) goes even further and argues that phenomenal concepts are not caused but partly constituted by the phenomenal states they refer to.

² Tye (2010) now rejects PCS and argues that there are no phenomenal concepts.

Both Tye's causal account and the quotational model can be understood as further developing parts of Loar's proposal by offering accounts of crucial features of the recognitional-demonstrative proposal such as the direct reference and the non-contingent mode of presentation of phenomenal concepts. However, not all current accounts of PCS are that close to Loar's proposal. David Papineau (2007), for example, has argued that phenomenal concepts are not demonstrative but should be understood as retrieval of stored sensory templates. According to Papineau, sensory templates are set up on initial perceptual encounters with their referents. They can be reactivated on later occasions such as encounters with the same referents or in imagination. Papineau suggests that phenomenal concepts are also based on sensory templates:

I want now to suggest that we think of phenomenal concepts as simply a further deployment of the same sensory templates, but now being used to think about perceptual experiences themselves, rather than about the objects of those experiences. I see a bird, or visually imagine a bird, but now I think, not about that bird or a species, but about the experience, the conscious awareness of a bird. (Papineau 2007, 122)

3. The deconstructive argument

Even if proponents of PCS offer different accounts of phenomenal concepts, they share the overall goal of explaining the irreducibility of the phenomenal perspective by pointing out fundamental differences between phenomenal and physical concepts. Although PCS is a popular position in philosophy of mind, it is not hard to find philosophers who consider PCS inherently unstable and argue that every account of PCS will either collapse into dualism or reductive physicalism (e.g., Chalmers 2006). Among the most influential critics of PCS are Terry Horgan and John Tienson, who argue that "new wave materialism" (i.e., a physicalist interpretation of PCS) is almost trivially self-defeating.

Here is what they call the "deconstructive argument":

1. When a phenomenal property is conceived under a phenomenal concept, this property is conceived otherwise than as a physical-functional property.
2. When a phenomenal property is conceived under a phenomenal concept, this property is conceived directly, as it is in itself.
3. If i) a property P is conceived, under a concept C, otherwise than as a physical-functional property, and ii) P is conceived, under C, as it is in itself, then P is not a physical-functional property.

Hence,

4. Phenomenal properties are not physical-functional properties. (Horgan and Tienson 2001, 311)

Although Horgan and Tienson present the deconstructive argument as an objection against new wave materialism in general, one may wonder whether it affects more recent formulations of PCS. In the case of Loar's account, the deconstructive argument seems pressing because Loar explicitly endorses not only its first but also its second premise: "It is natural to regard our conceptions of phenomenal qualities as conceiving them as they are in themselves" (Loar 1997, 608–609). Arguably, it is this commitment to the fundamentality of phenomenal concepts that raises the question whether PCS is really compatible with physicalism. But even if the deconstructive argument means trouble for Loar, a new wave materialist may insist that it is irrelevant for other variants of PCS such as Tye's causal-recognitional account, the quotational model, or Papineau's theory of sensory templates.

Unfortunately, I think that the challenge of the deconstructive argument is not limited to Loar's proposal. On the contrary, the core of Horgan and Tienson's worry is clearly independent of the specifics of Loar's formulation. Any interpretation of PCS that is strong enough to make sense of the irreducibility of the phenomenal perspective seems to be committed to the fundamentality of phenomenal concepts: phenomenal concepts are not only different from physical concepts but they also "conceive their referents *as they are in themselves*" (Loar 1999, 431, italics in original). This is why we cannot expect a physical explanation of the phenomenal perspective and why we should accept the first two premises of the deconstructive argument. However, any robust physicalism seems to be committed to the priority of physical concepts and the claim that *only* physical concepts allow us to conceive reality as it is in itself. This is why a physicalist should accept the third premise. If physicalism is true, then reality is conceived as it is in itself only if it is conceived under a physical concept.

The result is a dilemma that is independent of Loar's formulation of PCS. *Any* account of PCS will either have to deny the priority of physical concepts over phenomenal concepts or fundamentality of phenomenal concepts. The first horn makes PCS incompatible with physicalism; the second horn makes PCS too weak to offer an interesting solution to the problem of the explanatory gap.

4. Epistemic pluralism

How can new wave materialists react to the deconstructive argument? One possibility is to embrace the second horn of the dilemma and to insist that only physical concepts are fundamental in the sense that they conceive reality as it is in itself. This strategy challenges the deconstructive argument by denying its second premise: if phenomenal states are conceived under phenomenal concepts, they are not *really* conceived as they are in themselves.

Although it is possible to reject the second premise of the deconstructive argument, Loar is clearly committed to its truth as he explicitly claims that phenomenal concepts conceive phenomenal states “as they are in themselves” (Loar 1997, 608–609). However, one may argue that this is a problem of Loar’s proposal that can be avoided by embracing a different account of PCS. Recall that there is a large variety of accounts of phenomenal concepts including Tye’s recognitional-causal proposal, the quotational model, and Papineau’s theory of sensory templates. It is far from clear that all of these accounts of PCS are committed to the claim that phenomenal concepts allow us to conceive phenomenal states as they are in themselves. Instead, one may claim that only physical concepts are fundamental but that phenomenal concepts are still different from other concepts and therefore lead to a unique epistemic situation.

However, there is an important reason to be suspicious about this strategy. The rejection of the second premise of the deconstructive argument threatens to weaken PCS in a way that it becomes ineffective as a non-reductive approach to the problem of the explanatory gap. Loar’s new wave materialism provides an attractive theory of phenomenal consciousness precisely because of its suggestion that phenomenal concepts are fundamental, as well. If phenomenal concepts allow us to conceive phenomenal states as they are in themselves, then we have a good reason to reject the expectation of a reductive explanation of the phenomenal perspective. The phenomenal perspective is fundamental and there is no reason to expect it to be physically explicable or to worry about an explanatory gap.

If we take only physical concepts to be *truly* fundamental, however, we undermine this deflationary strategy and it becomes unclear whether PCS still has anything new or interesting to say about the irreducibility of the phenomenal perspective. A variant of PCS that rejects the fundamentality of phenomenal concepts faces the same challenges as more traditional variants of non-reductive physicalism. If a proponent of PCS claims that phenomenal states are conceived as they are in themselves *only* if they are conceived under physical concepts, then we are again left with the question why there isn’t a physical explanation of the phenomenal perspective.

Given these worries, one may assume that PCS is indeed a lost cause as the assumption of fundamental phenomenal concepts implies the existence of non-physical phenomenal states. In the remainder of this section, I want to argue that this conclusion is premature as proponents of PCS can also challenge the notion of “conceiving entities as they are in themselves” as presupposed by Horgan and Tienson. More specifically, I want to discuss a strategy that rejects the idea that there is only one metaphysically fundamental way of conceiving entities, and instead insists on different but equally fundamental ways of conceiving phenomenal states. Let us call the general idea behind this strategy “epistemic pluralism”:

There can be different but still equally fundamental ways of conceiving phenomenal states because there is not only one metaphysically fundamental way of conceiving reality in general.

This strategy can be interpreted as rejecting the second or the third premise of the destructive argument depending on how the phrase “conceiving entities as they are in themselves” is understood. If the phrase is understood in the strong meta-physical sense of providing the only metaphysically fundamental way of conceiving an entity, then epistemic pluralism challenges the second premise by challenging the very idea that phenomenal states can be conceived as they are in themselves. Instead, epistemic pluralism suggests that we can conceive phenomenal states from a physical and from a phenomenal perspective without having to assign metaphysical priority to one of them.

However, one can reformulate the second premise in a way that is compatible with epistemic pluralism by stating that phenomenal concepts provide an epistemically fundamental way of conceiving phenomenal properties that is not reducible to some more fundamental (e.g., physical) account:

- 2'. When a phenomenal property is conceived under a phenomenal concept, this property is conceived in a fundamental way in the sense that is not reducible to some more fundamental account.

While this reformulation in terms of epistemic fundamentality will lead epistemic pluralists to accepting the second premise, it casts doubts on the viability of the third premise. Horgan and Tienson argue that the third premise is “virtually tautologous” (Horgan and Tienson 2001, 311). However, this is true only if we presuppose the strong metaphysical interpretation of either phenomenal or physical concepts allowing us to conceive P as it is in itself. Given the metaphysically less ambitious interpretation of epistemic fundamentality, an epistemic pluralist will clearly challenge the third premise of the deconstructive argument by arguing that there is not only one fundamental way of conceiving a property P.

Given the possibility of a pluralist challenge, the discussion of the deconstructive argument becomes inevitably entangled with general metametaphysical issues. While Horgan and Tienson’s case against new wave materialism rests on the assumption that there can be only one fundamental way of conceiving entities as they are in themselves, a pluralist defense of PCS has to argue for the possibility of different but equally fundamental ways of conceiving reality.

Although Horgan and Tienson do not discuss this metametaphysical issue in their presentation of the deconstructive argument, Horgan has endorsed this kind of “metaphysical realism” in earlier publications (e.g. Horgan 1991). Horgan takes his “metaphysical realism” to be committed to the idea that “the only correct way of carving would be the one that corresponds to how THE WORLD is in itself – that is, the carving that picks out the genuine, mind-independently real, OBJECTS,

and that employs predicates expressing the genuine, mind-independently real” (Horgan and Timmons 2002, 88).

Horgan’s metaphysical realism has indeed serious implications for PCS: either phenomenal concepts carve the WORLD as it is in itself or they do not carve the WORLD as it is in itself. If they carve the WORLD as it is in itself, then physical concepts cannot conceive phenomenal states as they are in themselves and physicalism is wrong. If they do not carve the WORLD as it is in itself, then they cannot be fundamental and PCS must be wrong. In other words: given the commitment to metaphysical realism, it is indeed true that the third premise of the deconstructive argument is “virtually tautologous.”

While the deconstructive argument depends on the endorsement of metaphysical realism, the pluralist interpretation of PCS requires the rejection of this meta-physical picture. Consider a proponent of PCS who insists that we do not have to decide whether phenomenal or physical concepts allow us to conceive phenomenal states as they are in themselves because there is no reason to assume that there is only one fundamental way of conceiving phenomenal states. This pluralist variant of PCS clearly requires the rejection of metaphysical realism in the sense of Horgan’s formulation. But what would an alternative account look like?

One well-known alternative to metaphysical realism is Hilary Putnam’s “pragmatic realism” that is based on his arguments for “conceptual relativity” (e.g., Putnam 1987; 2004). Putnam’s case for conceptual relativity is often illustrated with examples such as a universe with three elementary particles (x_1 , x_2 , and x_3) in an empty space. How many objects exist in this universe? Clearly, the crucial question is whether the elementary particles compose new objects such as $x_1 + x_3$ or $x_1 + x_2 + x_3$. While many metaphysical realists take these kinds of questions very seriously (e.g., van Inwagen 1990), Putnam insists that the question how many objects *really* exist in a universe with three elementary particles is ill-posed. We can use a conceptual framework that accepts composed objects such as $x_1 + x_3$ or we can use a conceptual framework that does not accept composed objects. There is not only one fundamental description of a universe with three elementary particles but there are different but still equally fundamental ways of describing the same reality.

Putnam believes that there is a general lesson to be learned from these kinds of examples. If philosophers aim at one single and absolute description of reality, then conceptual relativity shows that there is something wrong with the entire project. We can always describe the world in terms of different but equally fundamental vocabularies and any serious “conceptual pluralism” (Putnam 2004, 48) will have to give up the idea of only one fundamental description that carves the WORLD as it is in itself.

It is not hard to see why conceptual relativity provides an attractive framework for a pluralist interpretation of PCS. Given conceptual relativity, there is nothing

suspicious about the claim that phenomenal and physical concepts provide different but still equally fundamental ways of conceiving phenomenal states. The second premise of Horgan and Tienson's deconstructive argument is flawed because there is not one metaphysically prior way of conceiving entities such as phenomenal states as they are in themselves. Furthermore, the third premise should be rejected because we do not have to decide whether phenomenal or physical states conceive phenomenal states as they are in themselves. They both conceptualize the same reality in fundamentally different ways and none of them can claim priority over the other.

My sketchy presentation of metaphysical realism and conceptual relativity leaves many questions open and any comprehensive discussion would have to get involved into current debates regarding metaphysical or ontological realism.³ In this article, however, I do not want to present any arguments in favor or against any of these metametaphysical positions. Instead, my explanatory goal is more modest as I only want to make the case for the following entanglement between PCS and metametaphysical theories.

Given metaphysical realism, the deconstructive argument is indeed inescapable. There can be only one fundamental way of conceiving phenomenal states as they are in themselves, i.e., one way that carves the WORLD at its joints. If physical concepts allow us to conceive phenomenal states as they are in themselves, then phenomenal concepts must be derivative and PCS is wrong. If phenomenal concepts allow us to conceive phenomenal states as they are in themselves, then physical concepts cannot allow us to conceive phenomenal states as they are in themselves and physicalism is wrong.

Given epistemic pluralism, the deconstructive argument does not appear convincing as there is no reason to believe that its second and third premise are true. There can be different and equally fundamental ways of conceiving the same entities and there is not just one way of carving the WORLD as it is in itself. Therefore, it is coherent to assume that both phenomenal and physical concepts provide different but equally fundamental ways of conceiving phenomenal states.

5. Metaphysical implications of new wave pluralism

In the last section, I argued that the prospects of PCS depend on general metametaphysical issues. In the light of metaphysical realism, PCS appears self-defeating as we have to choose whether physical or phenomenal concepts allow us to conceive phenomenal states as they are in themselves. If we reject the idea that there is only one fundamental way of conceiving reality, however, PCS appears far

³ Putnam's notion of metaphysical realism (e.g., Putnam 1981) is quite complex and ontological realism may be a more fitting label. For contemporary accounts of ontological (anti-)realism, see Chalmers (2009) Sider (2009), and Hirsch (2011).

more attractive. Under the assumption of epistemic pluralism, proponents of PCS can argue that phenomenal and physical concepts provide different but equally fundamental ways of conceiving phenomenal states and the dilemma of the deconstructive argument can be avoided.

I assume that some proponents of PCS will consider the rejection of metaphysical realism a small price to pay. At least for pragmatists and other critics of metaphysical realism, the suggested new wave pluralism may appear as a highly attractive and almost uncontroversial interpretation of PCS. In this section, however, I want to argue that new wave pluralism is a quite radical position that is not only incompatible with dualism but also with physicalism. To see why a pluralist interpretation of PCS may have such far-reaching metaphysical consequences, it is helpful to distinguish the following claims:

- (1) Only physical concepts allow us to conceive the fundamental structure of reality or reality as it is in itself.
- (2) Phenomenal and physical concepts do not refer to ontologically distinct entities.

New wave pluralism in the sense of the last section rejects (1) and accepts (2). This clearly puts PCS in opposition to any substantive dualism that rejects not only (1) but also (2). However, this does not mean that a pluralist interpretation of PCS implies non-reductive physicalism. On the contrary, I want to argue that the rejection of (1) makes PCS also incompatible with any substantive physicalism. If physicalism is true, proponents of PCS need a variant of (1) in order to justify the metaphysical priority of the physical.⁴ I will conclude that a pluralist interpretation of PCS leads to an alternative picture that differs from dualism in its rejection of an ontological gap between phenomenal and physical states and from physicalism in its rejection of the metaphysical priority of the physical.

I anticipate the objection that a pluralist interpretation of PCS does not contradict physicalism and that physicalists are not committed to (1). Isn't it enough for a non-reductive physicalist to endorse (2) and to insist that there is no ontological gap between phenomenal and physical states? I think that it is rather obvious that (2) is not sufficient for physicalism as it is endorsed by very different monist theories, including variants of physicalism, neutral monism, and idealism. If "physicalism" means more than "monism," then physicalists have to go beyond

(2). In the same way as idealists have to combine (2) with an argument for the priority of the mental, physicalists have to combine (2) with an argument for the priority of the physical.

⁴ At least, as long as "physicalism" is taken to constitute a substantive metaphysical position instead of a methodological or epistemological principle (e.g., Ladyman and Ross 2007, 40).

However, if we take the rejection of (1) seriously, it is hard to see how proponents of PCS can meet the challenge of providing an argument for the priority of the physical. Let us first consider two obvious non-starters: one way of articulating the priority of the physical would be to argue that everything is explainable in terms of a fundamental physical theory. If everything turns out to be physically explainable, then there is also a clear sense in which the physical is prior to everything else. However, this strategy is clearly incompatible with PCS. The very point of PCS is to offer an alternative to reductive physicalism and to explain why phenomenal states are *not* physically explainable. Another non-starter is based on a brute notion of metaphysical priority: mental and physical states are not ontologically distinct *and the physical perspective is metaphysically prior*. Although this strategy may be attractive for some non-reductive physicalists, it is not available to new wave pluralists who insist that physical and phenomenal concepts allow us to conceive phenomenal states in equally fundamental ways.

If a substantive formulation of physicalism is available to new wave pluralists, it will most likely be based on the notion of supervenience. In its simplest form, supervenience describes a non-modal relation: F supervenes on G if there is no F -difference without a G -difference. For example, every organism with an exoskeleton is an invertebrate and in this sense having an exoskeleton supervenes on being an invertebrate. This kind of “de facto supervenience” (McLaughlin 1995, 18) is clearly too weak to carry any ontological conclusions: the property of having an exoskeleton is ontologically distinct from the property of being an invertebrate (i.e., not having a backbone). In order to have ontological implications, supervenience will have to describe a necessary connection. Following Kim, philosophers often distinguish between ‘weak’ and ‘strong supervenience’ and define them by quantifying over possible worlds (see Kim 1987, Bennett and McLaughlin 2011):

F-properties *weakly* supervene on *G*-properties iff for any possible world w and any x and y in w , if x and y are *G*-indiscernible in w , then they are *F*-indiscernible in w .

F-properties *strongly* supervene on *G*-properties iff for any possible worlds w_1 and w_2 and any x in w_1 and y in w_2 , if x in w_1 is *G*-indiscernible from y in w_2 , then x in w_1 is *F*-indiscernible from y in w_2 .

It is obvious that weak supervenience does not provide a sufficient condition for physicalism: if there are possible worlds in which phenomenal states do not supervene on physical states, then phenomenal states cannot *be* physical states. Consider non-interactionist dualisms such as epiphenomenalism or psychophysical parallelism. These theories provide counterexamples to any attempt to define physicalism in terms of weak supervenience as they can accept weak mind-body supervenience without accepting physicalism. If there is a satisfying account of physicalism in terms of supervenience, it must be based on strong supervenience.

However, there are several problems with the use of strong supervenience in a definition of physicalism. The first problem arises from the notion of possible worlds. What does it mean that mind-body supervenience holds with respect to every possible world? One option is to interpret possible worlds as *logically* possible worlds. However, this kind of logical supervenience cannot be what non-reductivists are looking for. If phenomenal states would logically supervene on physical states, phenomenal differences without physical differences would not even be logically possible. Therefore, thought experiments such as inverted qualia or philosophical zombies would turn out to be logically impossible and there would be no explanatory gap. Proponents of PCS cannot endorse logical supervenience, if they want to maintain a substantively non-reductive position.

An alternative interpretation defines possible worlds as *nomologically* possible worlds. However, we do not need a comprehensive account of ‘nomological possibility’ to see why nomological supervenience is unlikely to lead to a satisfying account of physicalism. Situations are nomologically impossible iff they violate natural laws. This implies that nomological supervenience is compatible with standard forms of dualism such as epiphenomenalism. Epiphenomenalists claim that phenomenal states are caused by physical states and are happy to concede that there are psychophysical laws that satisfy nomological supervenience.

Logical supervenience is too strong for non-reductivism while nomological supervenience is too weak to rule out dualism. This creates an uncomfortable situation for supervenience-based formulations of physicalism. It seems that the only way out is a notion of *metaphysical supervenience* that does not interpret possible worlds as logically or nomologically possible worlds but insists on a brute notion of metaphysically possible worlds or metaphysical necessity. Although there are good reasons to be suspicious about these notions (e.g., Chalmers 2011, 184–192), I want to accept them for the sake of the argument as I think that even metaphysical supervenience would not lead to a satisfying account of physicalism.

As long as dualism is seen as physicalism’s only contender, metaphysical necessity may be sufficient for a supervenience-based account of physicalism. However, the limitation to physicalism and dualism is short-sighted both from a historical and systematic standpoint. Historically, there are many monist theories that accept (2) but reject materialism. Consider, for example, the parallelist tradition from Gustav Fechner’s (1966) *Elements of Psychophysics* to Feigl’s (1967) *The “Mental” and the “Physical”*.⁵ Moritz Schlick, one of the most prominent

⁵ Michael Heidelberger’s book on Fechner (2004) and his articles on Riehl, Mach, Schlick, and Feigl (e.g., 2000) offer the most comprehensive and solid introduction to the history of psychophysical parallelism.

proponents of a Fechner-style parallelism, introduced “psychophysical parallelism [as] a harmless parallelism of two differently generated concepts” (Schlick 1927) that implies that mental and physical states are *not* ontologically distinct. Despite his rejection of dualism, Schlick was also very vocal in his criticism of materialism. Schlick argued that physical concepts should not be considered the only metaphysically prior or fundamental concepts and that materialists are as wrong as idealists who consider only the mental to be fundamental. “Earlier we were obligated most emphatically to reject the mistaken idea that a different kind or a different degree of reality must be ascribed to these two groups of reality [the mental and the extra-mental], that one group is to be characterized as merely an ‘appearance’ of the other. On the contrary, they are all to be regarded as, so to speak, of equal value” (Schlick 1918/1974, 244).

Schlick’s monism and other parallelists in the tradition of Fechner provide counter-examples to supervenience-based accounts of physicalism *even if* we grant metaphysical supervenience. These kinds of non-physicalist monisms will be happy to accept that mind-body supervenience holds with metaphysical necessity as they claim that phenomenal and physical concept do not refer to ontologically distinct entities.

Metaphysical supervenience may be helpful in rejecting the dualist counter-examples to supervenience-based accounts of physicalism. However, metaphysical supervenience is irrelevant in the case of non-physicalist monisms such as Fechner-style parallelism. It is not enough for physicalists to show that mental and physical states are not ontologically distinct, they also have to show that the physical is metaphysically prior to everything else.

The discussion of this section leads to the conclusion that new wave pluralism has to be distinguished from both dualism and physicalism. Recall the distinction between (1) and (2). New wave pluralists reject (1) as they claim that physical and phenomenal concepts provide different but equally fundamental ways of conceiving phenomenal states. At the same time, they accept (2) as they claim that mental and physical concepts do not refer to ontologically distinct entities. While the endorsement of (2) puts new wave pluralism clearly in opposition to any substantive dualism, one may object that new wave pluralism should be considered a variant of non-reductive physicalism. Unfortunately, a pluralist interpretation of PCS also undermines the prospects of a substantive physicalism. For proponents of PCS, physicalism cannot mean that everything is physically explainable as the very point of PCS is to offer a non-reductive account of the phenomenal perspective. Furthermore, a pluralist interpretation of PCS prevents any reference to a brute notion of metaphysical priority in the sense of (1). Finally, supervenience-based formulations of physicalism do not help either as they are either too weak to exclude non-physicalist monisms (e.g., nomological or metaphysical supervenience), collapse back into reductivism

(logical supervenience), or require the endorsement of a brute notion of meta-physical priority in the sense of (1).

Of course, the endorsement of (2) makes new wave pluralism a variant of monism in following sense: phenomenal and physical concepts do not refer to ontologically distinct entities but they allow us to conceive the same reality in two fundamentally different ways. However, this rejection of an ontological gap does not imply anything about the priority of one of the relata. Therefore, new wave pluralism is not a variety of new wave materialism but turns out to be closer to non-physicalist monisms such as Schlick's parallelism.

6. Conclusion

I have introduced PCS as the claim that the explanatory gap is not due to differences between phenomenal and physical *states* but differences between phenomenal and physical *concepts*. Usually, PCS is presented as a defense of non-reductive physicalism or even taken to be synonymous with 'new wave materialism'. I have argued that we have to distinguish between PCS and 'new wave materialism' because a successful defense of PCS requires a pluralism that is at odds with both dualism and physicalism. Contrary to physicalism, a pluralist interpretation of PCS rejects the metaphysical priority of physical concepts. Contrary to dualism, it insists that phenomenal and physical concepts do not refer to ontologically distinct entities.

New wave pluralism is attractive because it provides proponents of PCS a powerful reply to Horgan and Tienson's deconstructive argument that is based on the assumption that we have to decide whether phenomenal or physical concepts allow us to conceive phenomenal states as they are in themselves. Horgan and Tienson assume that this decision leads to a fatal dilemma for proponents of PCS. New wave pluralism dissolves this dilemma by rejecting the assumption that we have to *choose* between either phenomenal or physical concepts being fundamental. There is not just one fundamental and metaphysically prior way of conceiving reality.

Furthermore, new wave pluralism is also obviously attractive on a more general level that is independent of the specifics of Horgan and Tienson's argument: if new wave pluralism is true, then there is no reason to worry about the explanatory gap. A physicalist who claims that only physical concepts allow us to conceive phenomenal states as they are in themselves should be troubled by the fact that there is no physical explanation of phenomenal states. A new wave pluralist who rejects these kinds of priority claims will not encounter the same problem. According to a new wave pluralist, physical concepts are not prior to phenomenal concepts and there is no reason to assume that everything *must* be physically explainable.

While the perspective of avoiding explanatory gap problems makes new wave pluralism attractive, there is also a metaphysical price to pay. I have argued that a rejection of one fundamental way of conceiving reality undermines the prospects of a stable physicalism as it does not allow us to make sense of the metaphysical priority of the physical. While a small camp of pluralists and pragmatists in contemporary philosophy of mind may be happy to accept this conclusion (e.g., Dupré 1993; El-Hani and Pihlström 2002; Horst 2007; Putnam 1999), most pro-ponents of PCS aim at a non-reductive variant of physicalism.⁶ A new wave pluralist can suggest that non-reductivists actually do not lose much in giving up physicalism. Non-reductivists can still insist on a thoroughly anti-dualist stance that rejects an ontological gap between the physical and the phenomenal and they only have to drop the flawed idea of one metaphysically prior perspective.

The lessons of this paper differ for philosophers who are not convinced by ‘new wave pluralism’. Reductive physicalists and dualists are arguably in a comfortable position as they can interpret the incompatibility of PCS and physicalism as a *reductio* of PCS and therefore as an important reason to reject non-reductive physicalism. The situation is more challenging for non-reductive physicalists who seem to have to choose between three equally unattractive options: (a) Only phenomenal concepts allow us conceive phenomenal states as they are in themselves; (b) Only physical concepts allow us conceive phenomenal states as they are in themselves; or (c) There is not only one fundamental way of conceiving phenomenal states as they are in themselves. I have argued that (a) leads to dualism, (b) leads to reductive physicalism, and (c) leads to a non-physicalist epistemic pluralism. Non-reductive physicalists are therefore challenged to show that there is a different option that leads to a coherent physicalist interpretation of PCS.

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⁶ Furthermore, even some epistemic pluralists like Eronen (2011) are not willing to give up the label “physicalism”.

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