




Russellian Physicalists get our phenomenal concepts wrong

Marcelino Botin¹ 

Accepted: 31 March 2023 / Published online: 19 April 2023
© The Author(s) 2023

Abstract

Russellian physicalism is becoming increasingly popular because it promises to deliver what everybody wants, realism and physicalism about consciousness. But Russellian physicalists are not the first to swear on “the promise”, standard Type-B physicalism is a less fanciful view that also claims to give everything and take nothing. In this paper, I argue that our hopes should not be placed on Russellian physicalism because, unlike Type-B physicalism, it cannot explain how phenomenal concepts can reveal the nature of phenomenal properties without weakening its physicalist credentials. The revelation challenge shows that Russellian physicalism is either committed to an anti-realist and self-defeating view of phenomenal concepts or it is physically unacceptable.

Keywords Consciousness · Russellian physicalism · Type-B physicalism · Phenomenal concepts · Revelation · Mind/body problem

It is hard to see how pain could be a brain state. Partly because physical facts don't look like the kind of fact that could entail nor explain phenomenal facts and partly because painfulness does not seem like a property of soggy grey matter. These problem intuitions¹ suggest dualism, but dualists have a hard time integrating consciousness with the physical world and accommodating the causal efficacy of conscious states. This conundrum has pushed philosophers to abandon their posts and embrace Russellian monism (*RM*), a view that occupies a middle ground between dualism and physicalism and promises to avoid their shortcomings. However, the desert-

¹ The “problem intuition” terminology was introduced by Chalmers (2018) when discussing the “meta-problem” of consciousness.

✉ Marcelino Botin
marcelinobotin@gmail.com

¹ Faculty of Philosophy, University of Barcelona, Barcelona, Spain

ers of standard forms of physicalism and dualism have struggled to fight under the same banner. Those who cannot give up the view that consciousness is fundamental embrace a panpsychist version of RM (Strawson, 2006; Mørch, 2014; Chalmers, 2015; Goff 2017, 2019) and those who cannot accept that consciousness is fundamental embrace a panprotopsychist or physicalist version (Stoljar, 2001, 2006; Pereboom, 2011; McClelland, 2013; Coleman 2015; Montero, 2015; Morris, 2016; Alter & Nagasawa, 2012; Brown, 2017, 2021).²³ RM may not bridge the central physicalist/non-physicalist divide in the philosophy of mind, but, for all that, one of the versions of RM may be right about consciousness (Kind, 2015).

This paper will concern Russellian physicalism (*RP*), a view forged under oath: “unlike standard physicalists we, RPs, take consciousness very seriously and we will integrate all of your “dualist” intuitions within a physicalist framework. Furthermore, unlike, dualism, we promise you a metaphysics of mind which is smoothly natural and does not lead to a disjointed ontology”. To increase the lure of their physicalism even further, Russellians, along with anti-physicalists, insist that standard physicalism is a form of illusionism. But this grouping of all standard forms of physicalism as consciousness-deniers is mistaken. The orthodox physicalist is a realist who takes consciousness just as seriously as any. In fact, Type-B physicalism, the most popular form of physicalism, also pledges to deliver “the promise”. Type-Bs share the “dualist” problem intuitions and, like Russellians, they promise to accommodate these intuitions within a physicalist framework. Does this mean that physicalists have two ways of reconciling with realism about consciousness? Unfortunately no, I will argue that there is just one way of defending physicalist realism and it is not the Russellian way.

My argument will be familiar to anyone who rejects the standard versions of physicalism by reflecting on their phenomenal concepts (as I am sure many Russellians do).⁴ Indeed, it has been argued that Type-B physicalism cannot accommodate the knowledge afforded by our phenomenal concepts (Levine, 2006; Nida-Rümelin, 2007; Chalmers, 2006). Goff (2011) provides one of the clearest expositions of the problem. Our phenomenal concepts, he says, *reveal* the nature of phenomenal properties and this is incompatible with Type-B physicalism. I will focus on this formula-

² As I will explain in Sect. 1, all versions of RM appeal to intrinsic properties to explain consciousness. Panprotopsychists say that while intrinsic properties are not fully mental they are specifically apt to ground consciousness. Sometimes panprotopsychism is formulated as a version of physicalism (Montero, 2015). However, Morris (2016) and Brown (2017) have argued that physicalism is incompatible with the experience specific fundamental protophenomenal properties postulated by panprotopsychism. A full-blooded Russellian physicalism requires that fundamental intrinsic properties are equally apt to ground both phenomenal and non-phenomenal properties. Alter and Coleman (2020) respond that intrinsic properties need not be individuated by their grounding roles and, accordingly, that some versions of panprotopsychism should count as physicalist. I believe that the issues raised in this paper cut through this dispute. If it turns out that there is some version of panprotopsychism that escapes the revelation challenge and we decide to call it physicalism, this will be a terminological decision that is not in conflict with the substantive claims of this paper.

³ There is also a neutral version of RM which argues that intrinsic properties are neither mental nor physical. However, some argue that there is no theoretical space for this view (Kind, 2015).

⁴ In general, phenomenal realists reject a-priori (type-A) physicalism because it is committed to an unpalatable functional view of our phenomenal concepts.

tion of the *revelation challenge* and show that although it is a surmountable difficulty for Type-Bs, the argument, applied to RP, is deeply problematic.

This is the plan: Section one briefly explains Russellian and Type-B physicalism. Section two presents Goff's argument against Type-B physicalism and shows that it is more problematic for RP. The revelation challenge, or so I argue, gives rise to a dilemma according to which the RP is either committed to a self-defeating anti-realist account of phenomenal concepts or it is physically unacceptable. Section 3 considers two ways of resisting horn B of the dilemma and argues that they fail. Section 4 explores whether the tenets of RP may, nonetheless, earn their explanatory keep in a hybrid version of a-posteriori physicalism and argues that they do not.

1 Russellian physicalism, Type-B physicalism and problem intuitions

We have the problem intuition, prompted by the zombie argument and the Mary thought experiment, that no amount of physical information could entail nor explain phenomenal consciousness. We also have the problem intuition that phenomenal properties are not physical properties. These problem intuitions, according to the dualist, arise precisely because there is a problem, phenomenal properties are ontologically distinct from physical properties. As mentioned in the introduction, both Russellians and Type-B physicalists agree with the intuitions but reject the ontological conclusion. How do they do this? Let's start with RP.

In "The Analysis of Matter" (1927), Russell pointed out that science, for all of its success, is confined to describing the world dispositionally, structurally or relationally. This is so because we know about the properties of the world through the way that they affect us, either immediately, as in perception, or indirectly, via our measuring instruments. And, thus, science can only grasp and characterise properties in terms of *what they do*. Mass, for example, is characterised by its tendency to resist acceleration. But something more, said Russell, is needed to give reality its concrete nature. Where we have relational/dispositional structure, there must be some underlying intrinsic properties that ground it.⁵ All versions of RM claim that there is a single class of inscrutable intrinsic properties at the fundamental level of reality which are the common base of everything else, of the chair in which I now sit and of my experience while writing this sentence. RP, in particular, defends that such inscrutable intrinsic properties are *purely physical*. And while it may seem that more physical properties cannot help with the hard problem, according to RP, postulating intrinsic properties that constitute consciousness can explain our problem intuitions. Indeed, the physical facts that we are familiar with do not entail nor explain phenomenal facts because they hide consciousness-relevant facts, they are silent on the intrinsic aspect of the physical. Similarly, we are reluctant to accept that phenomenal properties are properties of soggy grey matter because we underestimate the physical due to our ignorance of the full nature of our brains (Strawson, 2019).

⁵ In the literature, intrinsic and categorical are used interchangeably. The difference between these notions is not important for the arguments in this paper (see Alter & Nagasawa 2012).

In contrast, Type-B physicalists accommodate our problem intuitions within a physicalist framework by appealing to the nature of phenomenal concepts. The phenomenal concept strategy (PCS) argues that phenomenal concepts are isolated from physical/functional concepts and that this explains why there are gaps between the physical and the phenomenal even if there is no ontological gap. Different accounts of phenomenal concepts appeal to different features of our concepts to explain cognitive isolation. On Balog's (2012) constitutional account, phenomenal concepts are constituted by instances of the experiences they pick out. The concept "RED*" is constituted by the reddish phenomenology produced by previous experiences of red. Which is just to say that the same physical property that is (or grounds) the experience constitutes the concept that refers to that experience. In virtue of this constitutional fact, phenomenal concepts refer without descriptions to a given experience by presenting or involving the experience itself. In contrast, our non-experiential concepts refer via a descriptive mode of presentation because, as mentioned above, we know about the outside world through the way that it affects us. Inevitably, then, our criteria for a property being instantiated will involve some description of what *it does*. The concept "water", for example, is tied to the description of a colourless liquid that freezes at certain temperatures and covers the ocean. Now, given these criteria for what it takes to be water, we can see that H₂O satisfies it. But we cannot see what physical state satisfies the criteria of being an experience of red because under a phenomenal concept we think of red experiences in terms of what it is like to have them and not in terms of something that could be specified by a physical characterisation of, say, a functional role. Our phenomenal concepts are, therefore, *cognitively isolated* from physical concepts and this explains why physical facts cannot entail phenomenal facts. Furthermore, if our thinking in phenomenal terms is isolated from our thinking in physical terms, then no wonder why we feel as if phenomenal properties, conceived under phenomenal characterisations, cannot be properties of brain states, conceived under physical characterisation.

Simply put, according to RP we cannot see that C-fiber firings is pain because our *physical concept* "C-fiber firings" does not reveal its intrinsic nature. And according to Type-Bs, we cannot see that C-fiber firings is pain because our *phenomenal concept* "PAIN*" does not reveal its physical nature (Goff, 2015). As a consequence, RPs are committed to the view that if we had a transparent account of the physical that includes all facts about the intrinsic nature of the physical, the identity of pain and C-fiber would be *a-priori* (Goff & Coleman, 2020, p. 313). But Type-B physicalists maintain that even if we had a complete and transparent account of the physical, the identity of pain and C-fiber would be *a-posteriori* (Chalmers, 2003, 2015). This difference will be crucial to understand the available responses for each brand of physicalism to Goff's argument, to which I now turn.

2 The revelation challenge against Type-B and Russellian physicalism

Through introspection, we can form concepts, phenomenal concepts, that refer to our experiences in terms of what it is like to have them. And there is something very substantive to be learned by attending to such concepts. When you deploy your concept of pain and carefully introspect “painfulness” you thereby know how pain feels. And if you know how pain feels then you know part of what the experience of pain is. In other words, the essence of pain, or what it would take for someone to be in pain, is revealed by attending to our phenomenal concepts. This is the revelation thesis.⁶ It forms the basis of strong arguments against physicalism and it is one of the pillars of realism about consciousness. Indeed, if revelation is false and introspection does not tell us anything about what it is for something to be pain, then it is hard to see on what grounds one could build the hard problem and challenge non-phenomenal physicalism. It would be exclusively up to science to tell us what pain really consists of (Goff, 2018). For the realist, then, our phenomenal concepts reveal some essential properties of our experiences. Both Type-Bs and RPs are committed to realism and therefore they are also committed to revelation.⁷ This commitment, however, makes these views susceptible to Goff’s revelation challenge, which he formulates against Type-B physicalism.

Goff pressures Type-Bs to construct phenomenal concepts as belonging to one of the three following categories: *Transparent*: the concept reveals all of the essential properties of its referent (it reveals everything of what it is for X to fall under the concept). *Translucent*: the concept reveals part (but not all) of the essential properties of its referent (it reveals something of what it is for X to fall under the concept). *Opaque*: The concept reveals none of the essential properties of its referent (it reveals nothing of what it is for X to fall under the concept). He then claims that Type-Bs cannot accept that our phenomenal concepts are *transparent*. If our concepts reveal all of the essential properties of its referent and our conscious states have a physical nature then we would have access to such nature via introspection. But by the own lights of Type-Bs, when we introspect the feeling of pain nothing tells us that to be in pain is to instantiate C-fiber firing (otherwise it would be a-priori that phenomenal concepts

⁶ There are some physicalists who will not want to embrace phenomenal concepts. However, the revelation challenge can get off the ground just as easily by appealing to introspection (Chalmers, 2015) or more generally to a claim about the essence of phenomenal properties (Liu, 2021). Thus, while I stick to phenomenal concepts for the sake of clarity, the argument applies to any physicalist who wants to accommodate revelation within a physicalist framework, even if they reject the technical notion of phenomenal concepts.

⁷ Although I have insisted that all realists and thus all type-B physicalists should accept revelation, there are a few type-Bs who allow that consciousness exists but argue that our phenomenal concepts are *opaque*. They carry no substantive information about the nature of their referent (Papineau, 2002). Knowing how an experience of pain feels, they say, tells us nothing about what an experience of pain is. I think Goff (2011) is right to think that this is an implausible view of phenomenal concepts. Moreover, as mentioned above, I think it concedes too much ground to illusionism and undercuts the motivation of the realist program. However, I can not rule out that something worth calling realism may be compatible with the denial of revelation. To clarify then, in this paper, by “realists” I mean strong realists who want to accommodate revelation within a physicalist framework.

refer to physical properties). He also argues that type-Bs cannot accept that our concepts are *translucent*. “Some but not all” of the properties of a wholly physical state, says Goff, are themselves physical. And, thus, if our phenomenal concept “pain” reveals any such properties, it would reveal physical properties. But again, Type-Bs argue that we find no recognisably physical properties in introspection. To uphold their brand of a-posteriori physicalism, type-Bs must deny that phenomenal concepts reveal that to be in pain is to insatiate a physical property. The only option available for type-Bs, says Goff, is that our phenomenal concepts are *opaque*, revealing nothing of what it is for someone to feel pain. But if phenomenal realists reject illusionism by reflecting on their mental concepts they ought to reject Type-B physicalism too because, as mentioned above, no realist should accept that our phenomenal concepts are opaque. Thus, if physicalism wants to deliver on “the promise” of reconciling with realism they ought to look beyond type-B physicalism.

Fortunately, I think Goff is wrong to conclude that revelation commits Type-Bs to *opaque* phenomenal concepts. They can respond to the argument by claiming that our phenomenal concepts reveal physical properties of a wholly physical state but not under a physical characterisation. This is intelligible because, as explained above, Type-Bs maintain that we know about the nature of consciousness in two conceptually distinct and isolated ways. And, thus, even when the referent of a phenomenal concept is a physical state, introspection will hide that this is so. Insofar as there is a physically acceptable explanation of the conceptual isolation, Type-Bs can maintain that our phenomenal concepts are *translucent*. They reveal the essence of our phenomenal states but only under a phenomenal characterisation. To be sure, this phenomenal characterisation reveals something crucial. In knowing “what is like” to undergo a given experience we grasp part of what having such an experience consists of, in terms of further phenomenal concepts. But we fail to learn other essential information, introspection does not reveal that the experience really is a physical state. Goff (2011) sets this response aside, challenging Type-Bs to “put some meat on the bone” to make it intelligible. I believe that the challenge has been met (Diaz-Leon, 2014; Elpidorou, 2016; Trogdon, 2017). However, I will not repeat the arguments here. My aim is merely to highlight that there is a plausible Type-B answer to the revelation challenge which avoids the undesirable commitment to *opaque* phenomenal concepts. As I will now show, it is hard to see how RP can escape the challenge.

RP claims that to have an experience is to instantiate a set of purely physical intrinsic properties arranged in the right kind of physical high-level state. If RP is true and reflecting on our phenomenal concepts reveals all the essential properties of their referents, then our phenomenal concepts should reveal that to have an experience is to instantiate purely physical intrinsic properties arranged in a physical high-level state. However, when we reflect on pain nothing tells us that it is a state of C-fiber firings grounded in a set of fundamental intrinsic properties. Thus, RP must reject that our phenomenal concepts are *transparent*. A Russellian may reply that when we reflect on our phenomenal concepts what gets revealed are non-fundamental intrinsic properties which are grounded on physical fundamental intrinsic properties arranged in a high-level physical state, although this latter grounding fact is hidden from our introspective guise. But, again, the problem is that any property of a purely physical state must be physical. Our phenomenal concepts, however, do not reveal non-fun-

damental intrinsic properties as physical. Our phenomenal concept of pain does not reveal that what it is for someone to feel pain is to instantiate any recognisably physical property at all and, thus, RP can't claim that our concepts are *translucent*. Lastly, the Russellian cannot even hold that our phenomenal concepts are *opaque*. First, because, as explained above, *opaque* phenomenal concepts are at odds with phenomenal realism and phenomenal realism is the motivating force of RP. And second, because if our concepts are *opaque*, then even if we had a complete and transparent account of the physical, one that uncovers the intrinsic properties of the physical, the identity of pain and C-fiber stimulation + (+inscrutable intrinsic properties) would *not* be a-priori due to the opaqueness of phenomenal concepts. Thus, RPs appeal to our ignorance of intrinsic physical properties to explain why we find zombies conceivable and so on would be explanatory redundant. And surely we should restrain from making unnecessary fundamental posits.

A Russellian could respond along the lines of Type-B physicalists. They could accept that our phenomenal concepts do not reveal phenomenal properties under physical characterisations, but insist that insofar as the grounding claim obtains these properties a physical through and through. Unfortunately, this strategy is ruled out by their commitment to a-priori entailment (given an account of the intrinsic nature of the physical). RP cannot make sense of their being two conceptually distinct and unconnected ways of characterising the essence of our phenomenal states because there can be no a-priori entailment between two conceptually distinct ways of thinking. Recall that type-Bs think that our phenomenal concepts are isolated from physical/functional concepts because they "hide" their more fundamental physical nature. They carry no "fine-grained" information that could be specified by a physical description. RPs agree that the physical facts that we are familiar with do not entail phenomenal facts. But they argue that adding facts about intrinsic properties will entail such facts. Now, for this to work, RPs have to deny that our phenomenal concepts are cognitively isolated from physical concepts+ (where "+" adds concepts for intrinsic physical properties) and so they also have to deny that our phenomenal concepts are *hiding* the more fundamental nature of such intrinsic properties. Instead, our phenomenal concepts must be illuminating such nature by carrying some content that can be specified under a physical characterisation and that will allow physical characterisations of intrinsic properties to sustain the a-priori entailment. But the problem is that our phenomenal concepts do not reveal any "fine-grained" physical information because they lack content that can be specified by physical characterisations. Under phenomenal concepts we think of our experiences in terms of how they feel, that is, under phenomenal/qualitative modes of presentation. And so only qualitative characterisations of intrinsic properties can latch onto and entail such concepts.⁸

In short, if physical concepts+ (where "+" adds concepts for intrinsic physical properties) and phenomenal concepts are a-priori connected then both concepts must have recognisably similar modes of presentation.⁹ Our phenomenal concepts have a

⁸ See Pereboom (2011) for a different defence of this point.

⁹ While the assumption that non-qualitative concepts cannot entail qualitative concepts is in part motivated by intuition, it is also held by key figures on both sides of the debate (Chalmers, 2015; Pereboom, 2019; Brown, 2019; Cutter 2019). Thus, I do not think it is dialectically problematic.

phenomenal/qualitative mode of presentation and thus only qualitative characterisations of intrinsic properties can help the entailment. But this is incompatible with physicalism because it would mean that the intrinsic properties of the physical are like the properties we find in introspection. And the only properties of this sort are either phenomenal or protophenomenal.¹⁰

Against this, an anonymous reviewer raised an important worry: “Computer digits consisting of 0s and 1s are very different from the graphics I see on my screen, but there is certainly some a-priori connection between them”. Fortunately, a closer look shows that the example does not challenge but rather elucidates the argument above. Indeed, I grant that 0 and 1s are very different to how we *experience* the icons on the computer screen. But one thing is to say that 0 and 1s are very different to what the icons look to us and another is to say that they are really different to what the icons are. For the analogy to work against my account, the relevant claim has to be that 0 and 1s are very different to what the icons on the screen really are. But then it seems false. If someone knows what an icon is, then they know that it is a pattern of light reflectance on a screen. Thus, they also know about its underlying “patternny” nature. 0 and 1s share this “patternny” nature and so we have no problem seeing how they could realize patterns of light reflectance. But if the concepts we use to think about the icons were to completely *hide* such “patternny” nature and present the icons as something radically different, say as simple unstructured properties, then the information about underlying patterns would not entail facts about the icons. These concepts would be isolated because they would carry no “patternny” information for “patternny” concepts to latch onto. In other words, 0 and 1s and icons are presented under a similar mode of presentation, as patterns, so the a-priori entailment is not problematic.¹⁰

Note that I am not assuming that phenomenal concepts reveal phenomenal properties as *non-physical*. Rather the claim is that they do *not* reveal phenomenal properties as *physical*. This is compatible with such properties being physical insofar as there is a physically acceptable explanation of how this is so. And the problem is that while Type-Bs have a ready explanation, RPs need an alternative that is compatible with their commitment to a-priori entailment.

To this end, a defender of RP may insist that our phenomenal concepts do reveal physical properties, but we fail to conceptualise them as such due to our limited (structural) conception of the physical. After all, we are completely ignorant of the nature of the intrinsic properties of matter and, for all we know, these properties may be akin to phenomenal properties (McClelland, 2013). But for this to work, we would have to find a notion of physical property that is akin to the properties we find when

¹⁰ Perhaps there is some alternative mechanism that allows subjects to see a-priori that two concepts are coreferential (I thank Esa-Diaz Leon for bringing this up). Some claim that intuitions, although they are not inferential, are a form of a-priori rational insight or “intellectual seeing” that something is necessarily true. It seems unlikely, however, that this sort of insight will happen when the mode of presentation of the two concepts is radically distinct. Indeed, some have argued that radically distinct modes of presentation lead to the opposite insight. They say that it is the radically distinct mode of presentation of phenomenal and non-phenomenal concepts that underlies the intuition of distinctiveness. That is, the intuition that phenomenal and physical concepts cannot be coreferential (“use-mention fallacy” (Tye, 1999; Papineau, 2002) or “primitive quality attribution” (Pereboom, 2011)).

reflecting on our phenomenal concepts but that is, at the same time, recognisably physical, to deserve being kept in a physicalist version of RM. This runs into a seemingly unavoidable dilemma:

- If intrinsic properties are recognisably physical (somewhat similar to standard physical properties) then introspection does not reveal any such property and RP would have to accept that our phenomenal concepts are *opaque*. But, for the reasons provided above, Russellians cannot accept that our phenomenal concepts are *opaque*.
- If intrinsic properties are like the properties we find in introspection, the Russellian can accept that our phenomenal concepts are *translucent* but then there can be no physicalist version of RM.

One could think that much is riding on the notion of the physical being deployed to set up the dilemma since, on some understandings of physical property, horn B would fail to get off the ground. For example, a Russellian may appeal to Stoljar's (2001) influential distinction between theory-based and object-based conception of the physical. According to the former, a property is physical if it is described by physical theory or is a-priori grounded on the properties that physical theory describes. According to the latter, a property is physical if it is required by an account of the intrinsic nature of paradigmatic physical objects or it is a property that is a priori grounded on the properties described by an account of the intrinsic nature of paradigmatic physical objects (p. 396). On a theory-based conception of the physical, no version of RM counts as physicalist (since they appeal to inscrutable intrinsic properties which are not knowable by the natural sciences). But, since according to RP the properties required by an account of the intrinsic nature of chairs and tables are the same properties required by an account of the intrinsic nature of phenomenal states (Brown, 2017, 2021), on an object-based conception of the physical, any such property ought to count as physical even if they are akin to the properties we find in introspection.

Following this understanding of physical property, views such as Coleman's panqualityism which argues that intrinsic properties are unexperienced qualities—"properties just like the qualia we experience, only without anyone experiencing them" (Coleman, 2017, p. 1), would escape the dilemma unscathed.¹¹ However, I

¹¹ That being said, panqualityism has problems. Some will find the notion of unexperienced qualia incoherent. Panqualityism says that there are painful qualities without anyone experiencing them. But I struggle to see what would make a property "painful" if it does not hurt. In my view, painfulness cannot exist detached from a subject. An anonymous reviewer suggested that perhaps we can understand panqualityism along the lines of phenomenal without access consciousness. But even Block (2007) acknowledges that experiences cannot float around unattached to a subject who is in some sense aware of those experiences, even if this awareness is not the full-blown cognitive access that underlies reporting (2007, p. 484). So although in Block's view we can be in pain without *noticing*, it is still the case that the painfulness is felt by a subject. She is in some (minimal) sense *aware* of the pain. Otherwise, there would be no pain at all. Another problem is that of accounting for awareness. Panqualityist who, like Coleman, think that awareness is a purely extrinsic structural property will face a zombie-awareness challenge. It is conceivable that a being who instantiates all of our physical properties, including the intrinsic unexperienced qualia, will lack awareness of them (Chalmers, 2015). Furthermore, if awareness is a purely extrinsic mechanism then

think most physicalists would deem panqualityism a form of physicalism in name only. It is for this reason that Coleman himself is reluctant to attribute the physicalist title to his view. He writes, “in another possible world I should have liked to call panqualityism plain physicalism” (2017, footnote 5). But he is quick to acknowledge that actual physicalists will judge panqualityism as incompatible with physicalism. To do justice to the spirit of physicalism we need a further constraint on what gets to count as a physical property. The object-based conception of the physical is too liberal (Kind, 2015). One popular strategy is the so-called “via negativa”, which says that a property is physical if it is not identical nor grounded on something that is fundamentally mental (Papineau & Spurrett, 1999; Montero & Papineau, 2005). But given that our notion of the mental is derived from reflecting on our phenomenal concepts, the dilemma as presented above would once again gain traction. For if intrinsic properties are like the properties we find in subjective experience the “via negativa” would render them non-physical.

Be it as it may, this is no place to settle on the right formulation of physicalism. If it turns out that we come to an understanding of physical properties whereby views such as panqualityism are accepted as versions of physicalism, I would be happy to restrict my conclusion to the claim that Russellian “physicalism” needs to posit unexperienced qualia (or some other notion of intrinsic property closely related to phenomenal properties) to make sense of the revelation challenge, for this will be cold comfort for those who not only want to retain the letter of physicalism but also its spirit. Spelling out what this amounts to is beyond the scope of this paper. But a key idea here is that the, for physicalists, the world was *not* created with a “special ingredient” to bring about mentality (Montero, 2010). Panqualityism, however, suggests that properties that are especially apt to ground our experiences are a fundamental ingredient of the world. It seems that God thought: “Let’s make sure these fundamental properties give rise to consciousness by making them *just like phenomenal properties*”. For this reason, the RPs I have in mind distance themselves from any such view. They argue that no version of RP deserving of its physicalist credentials can accept that fundamental intrinsic properties have a special relation to phenomenal properties (Morris, 2016). In fact, horn B intentionally paraphrases Brown’s claim that “if fundamental categorical properties are like the properties we find in subjective experience, then they are non-physical” (2021, p. 11). Thus, for our present purposes, I will assume that something like the “via negativa” is the right way to go, since this assumption is in no way question-begging. The dilemma meets the Russellian physicalist on her own terms. The difficulties of horn A arise due to RPs’ commitment to phenomenal realism and the difficulties of horn B arise due to RPs’ commitment to a “properly physical” version of RP.

Horn A, I believe, is a non-starter for the Russellian, since I cannot see a way of circumventing the self-defeating and anti-realist consequences of accepting *opaque* phenomenal concepts (discussed above). In the next section, however, I will consider two ways in which RPs may try to resist horn B and argue that neither succeeds in avoiding the conclusion that RP is either committed to an anti-realist and

how could it access inscrutable intrinsic properties which, by definition, are outside the grasp of structural systems? (See page 9).

self-defeating view of phenomenal concepts or it is physically unacceptable. Either way, RP fails to deliver on the promise of reconciling realism and physicalism about consciousness.

3 Two attempts to resist Horn-B

3.1 Brown's response to the "panpsychist" challenge

The dilemma presented in the previous section is a close relative to other dilemmas that have recently appeared in the literature (Brown, 2017; Chan, 2021; Goff & Coleman, 2020).¹² Although they all share the conclusion that RM is either implausible or physically unacceptable, these other construals, arrive at such a conclusion by focusing on the physical concepts postulated by RP. The argument from revelation, in contrast, focuses on our phenomenal concepts. Nonetheless, one may wonder whether a solution to these other challenges may also help with the problem as construed in this paper.

Brown (2017, 2021) provides a powerful response to what he calls the "panpsychist challenge", according to which only phenomenal or protophenomenal intrinsic properties help explain consciousness. He claims that even if we lack a specific characterisation of intrinsic physical properties, we can construct a partial notion of such properties with intelligible explanatory content. This content, says Brown, is derived from introspectable features of phenomenal properties which are not related to standard physical properties but are not themselves mental. If we construct intrinsic physical properties as having these features or as having features that can a-priori entail these features (features that will be discussed in Sect. 4) we could explain the phenomenological features in question (and respond to the panpsychist challenge) and embrace horn B of the dilemma by allowing that our phenomenal concepts are *translucent*, revealing some essential features of phenomenal properties which are not mental and that can be entailed and explained by positing purely physical intrinsic properties.¹³

Unfortunately, the strategy will not work this time around because even if some of the features we find in introspection do not reveal themselves as mental nor physical, all that one needs for trouble is that some of the features revealed as essential are also not revealed as neutral nor plausibly physical (as they appear to be). When I reflect on my phenomenal concept "RED*", the qualitative character of phenomenal red, the redness or red (which is part of what it would take for someone to instantiate phenomenal red) does not reveal itself as involving plausibly physical properties. That is, when I reflect on the "redness" there is no "fine-grained" information that could be specified under physical modes of presentation. But this should be the case

¹² Goff and Coleman (2020) do not construe the dilemma explicitly but point toward the seemingly unavoidable disjunct implicitly.

¹³ Brown is not the first to point out that some features of our experiences are not problematic for physicalists. Some argue that some introspectable features of our experiences are akin to standard physical properties. For example, Tononi and Koch (2015) argue that introspection reveals a functional structure of our experiences.

if revelation is true and the experience of red is a wholly physical state (since any aspect of a wholly physical state is itself physical). Hence, RP, like any physicalist view, will need a story that explains why RED* presents the redness of red under a purely qualitative/phenomenal mode of presentation when, in fact, the redness of red is physical through and through. Or, put differently, a story as to how the redness of red turns out to be purely physical when it is not presented under a recognisably physical characterisation.

But now the problem discussed in the previous section reemerges. It seems very unlikely that any such a story will leave room for a-priori entailment because there can be no entailment between two radically distinct modes of presentation. So either RED* is characterising the redness of red as having a qualitative nature akin to the qualitative nature of intrinsic physical properties or it is characterising the redness of red as having a qualitative nature that is very different to the non-qualitative nature of intrinsic properties. If the former is true then the view betrays RPs commitments to an account of fundamental intrinsic properties that are not akin to phenomenal properties. As Brown insists, if intrinsic properties are anything like a bit of phenomenal colour, then physicalism is false (2021, p.11). And, if the latter is true, then RP collapses into Type-B physicalism because there would be no a-priori entailment. And, as explained above, if there is no a-priori entailment even when we have a transparent account of the intrinsic nature of the physical, the Russellian appeal to our ignorance of intrinsic physical properties to explain problem intuitions would be explanatory redundant. And, again, we should restrain from making unnecessary fundamental posits.

If this is right, then the revelation challenge seems to create a deeper problem for RP than the “panpsychist challenge” and, as such, even if Brown’s strategy may help with the latter, it does not help with the former.

3.2 Pereboom’s minimal illusionism

As just explained, the problem with the response to the revelation challenge considered above is that even if some of the features of phenomenal properties revealed by introspection are non-problematic, the qualitative character of phenomenal red, the redness of red, causes trouble because it is not revealed as plausibly physical (as it appears to be). However, very recently, Pereboom (2021) has defended a version of RP which can escape the problems I raised against the “Brown-inspired” solution to our dilemma. Indeed, in Pereboom’s version of RP these problems never arise because introspection reveals phenomenal properties as having qualitative natures they do not actually have. Pereboom is a Russellian illusionist who denies that the redness of red is the *real* qualitative nature of phenomenal red. And dissolves the problem by denying the phenomenon that it concerns.¹⁴

¹⁴ Alternatively: while we can see how purely physical intrinsic properties can a-priori entail some of the features we find in introspection it seems that no purely physical properties could a-priori entail the redness of red. In denying that the redness of red is the real qualitative nature of phenomenal red, Pereboom can claim that while there is *no* a-priori entailment from P* (physical facts which include facts about intrinsic properties) to *illusory* qualitative natures there is an a-priori entailment from P* to the *real* qualitative nature of phenomenal properties.

Initially, this proposal may seem to have no place in this paper. After all, we are *not* looking for the most plausible version of RP, we are looking for the most plausible version of physicalist realism. And if Pereboom is right that RP requires some form of illusionism, then this paper reaches a sound conclusion: Type-B physicalism, and not RP, is the way to reconcile with realism about consciousness. But Pereboom insists that his illusionism is only minimal (2021, p. 189). He is not denying that phenomenal properties are real and he accepts that they have some of the features we think they have. In fact, he claims that introspection, for all its flaws, accurately reveals that these properties are *absolutely* intrinsic (not entirely dependent on more fundamental properties that are extrinsic) and causally efficacious (qua phenomenal) (2021, p.189). Furthermore, although Pereboom claims that the qualitative nature of phenomenal properties as presented in introspection is illusory, he allows that these properties really do have a real qualitative nature (which could be a-priori entailed by physical facts which include facts about intrinsic properties) but that is hidden from our introspective grasp. Our phenomenal concepts, on this view, are *translucent*, they reveal some of the essential features of phenomenal properties (features that RP can accommodate) but they also misrepresent other features as essential when they are in fact illusory (features that RP cannot accommodate). As such, the Russellian can embrace horn B of the dilemma while avoiding its anti-physicalist implication.

This is a suspiciously erratic view of the power of introspection. But the more pressing question for our purposes is whether this form of illusionism is minimal enough to appease the realist and earn its keep in a physical realist theory of consciousness. And, unfortunately, I think the answer is no. Illusionism is often met with an incredulous stare not because it is hard to accept that it is true but because it is hard to understand how it could be true. Thus, to gain an advantage over standard illusionism, minimal illusionism, even if it is hard to accept, cannot be hard to see how it could be true. Standard illusionism is hard to understand because it is very difficult to picture what it would mean to not be in pain even though my recently vaccinated arm appears to hurt badly. Plausibly, the difficulty arises because we cannot draw a reality/appearance distinction when it comes to consciousness. The illusion of a state that feels like pain seems enough to constitute the experience itself. Similarly, I admit to being unable to picture what it would mean that painfulness is not what pain really consists of, that pains are like something other than painful, that they have a qualitative essence that appears to be painfulness but that is something completely different. And again, the difficulty seems to arise because one cannot separate the illusion of the qualitative character of pain from its actual qualitative character. On the contrary, however, denying that phenomenal properties have the features that Pereboom defends is not puzzling at all. I can easily see what it would mean that phenomenal properties are not absolutely intrinsic or that they are not causally efficacious qua phenomenal (although the latter is hard to accept). Pereboom's attempt to soften the blow of his illusionism by appealing to these features fails because the realist's incredulous stare does arise from their denial. Instead, it arises, at least

partially, from the denial of the features he actually denies, that painfulness is part of what pain is actually like.¹⁵

To bring the point home, notice that, if Pereboom is right, our phenomenal concepts only reveal essential features of consciousness as such, but tell us nothing about what makes a phenomenal state the particular phenomenal state that it is. For, presumably, phenomenal states are individuated by their qualitative character; it is the redness of red and the painfulness of pain that makes these phenomenal states the particular experiences that they are. On Pereboom's account, although introspection can tell us that pleasure and pain are both real properties that are absolutely intrinsic and causally efficacious, it cannot distinguish one phenomenal state from the other because the real qualitative nature of these states is hidden. Surely, a realist must immediately balk at this suggestion. Indeed, realists think that our phenomenal concepts are able to capture the differences and similarities between our phenomenal states (Schroer, 2010). We think we know that phenomenal red is more similar to phenomenal orange than it is to phenomenal green, but if Pereboom is right, we do not know, for all of this substantive knowledge is illusory. According to him, we do not know the real qualitative nature of these phenomenal states and thus, for all introspection shows, phenomenal red may be more akin to phenomenal green than to phenomenal orange. Actually, for all introspection shows, the real qualitative nature of phenomenal red may be more akin to the real qualitative nature of pain than to the real qualitative nature of phenomenal orange! This is surely a story that no realist should accept and, thus, Russellian illusionism should be met with the same resistance as standard illusionism for this form of "minimal" illusionism is not minimal at all.

Philosophy has a way of repeating itself. Traditional a-priori physicalism was soon frustrated because physical facts are not the kind of fact to entail and explain a phenomenal fact. Nowadays, most physicalists deny the entailment either by arguing that there are no phenomenal facts at all (illusionist) or by appealing to the cognitive isolation of phenomenal concepts (Type-Bs). The revelation challenge pushes a-priori RPs to the same disjunction. Our phenomenal concepts reveal some essential aspects of phenomenal states that are not recognisably physical. Like traditional a-priori physicalists, RPs must either say that these features are physical features that are not presented under a characterisation that illuminates their physical nature (but give up on a-priori entailment) or deny that these features exist (and embrace a form of illusionism). Like Pereboom, his Russellian comrades ought to concede one way or the other, for otherwise, their project may soon be frustrated as well. But unlike Pereboom, RPs need not choose the more radical option. Indeed, giving up on a-priori entailment does not mean that the tenets of RP cannot figure in our best physicalist realist theory of consciousness. In the following section, I will consider whether RP can go *hybrid* and combine with a-posteriori physicalism.

¹⁵ Pereboom recognises that his proposal, like standard illusionism, gives rise to the illusionist meta-problem (Kammerer, 2018), which is the problem of explaining away its apparent implausibility. Pereboom (2021) provides an answer to the problem. But my task here is not to evaluate whether or not it succeeds. What matters is that his illusionism faces the same "implausibility" problem as standard illusionism because it is just as strong and seemingly implausible. Therefore, even if he successfully answers the illusionist meta-problem, this will be no help for the realist.

4 Going hybrid: A-posteriori Russellian physicalism?

Initially, this hybrid proposal may seem a non-starter. Traditionally, the metaphysics of consciousness has focused on the question of whether the lack of a-priori entailment from physical to phenomenal facts provides a good argument against physicalism and, accordingly, the theoretical landscape is carved such that the different positions in the literature are individuated by the way they explain (or explain away) the problem intuitions (Zombies, qualia inversions, Mary...) that establish the impossibility of entailment (Chalmers, 2003). RP is individuated by the explanation of problem intuitions in terms of our ignorance of the full nature of the physical. RP responds to the zombie argument by saying that we can only conceive of a structurally identical world and that such conceivings tell us nothing of what is possible in a world that is truly physically identical to ours. But once they give up on the a-priori entailment this response no longer suffices, for zombies would remain conceivable regardless of whether or not we are ignorant of intrinsic properties. RP would then need some “phenomenal concept strategy-like” story to explain the lack of derivability and so, in the end, there would be no separate space for RP and no explanatory work for the tenets of their theory.

But recently the debate has moved away from the question of derivability (Schroer, 2010; Levin, 2019). And rightly so, because the hard problem is not exhausted by derivability intuitions. It also involves positive characterisations of consciousness seemingly at odds with physicalism (Chalmers, 2018; Papineau, 2019). If the appeal to intrinsic properties can explain, in a way that is compatible with physicalism, some of the features we attribute to consciousness, the tenets of RP would earn their explanatory keep and we would have reasons to accept a hybrid version of physicalism that involves insights from Type-Bs (to explain lack of derivability and respond to the revelation challenge) and RP (to explain positive characterisations of consciousness).

As mentioned above, Brown (2017, 2021), has argued that purely physical intrinsic properties can explain important introspectable features of phenomenal properties. Physical intrinsic properties, he says, can account for the fact that phenomenal properties are described as (1) having an intrinsic character (2) that is knowable only from the first-person perspective and (3) which cannot be reduced by scientific analysis. The Russellian explanation of these features is the following: the intrinsic properties postulated by RP, give high-level physical properties their intrinsic “is-ness”, concreteness, or inner being (2017, p.42). Since intrinsic properties are, well, intrinsic, anything constituted by them will have an intrinsic aspect as well. Such intrinsic aspect is determined by the particular distribution of intrinsic properties. When intrinsic properties are arranged such that they constitute the right kind of high-level property, say, a given neural or cognitive property, we get a high-level property whose “inner being” or intrinsic aspect is phenomenal. This also explains why the intrinsic aspect of phenomenal properties is hidden from scientific inquiry. Such intrinsic aspect is determined by intrinsic properties that are, by definition, closed to science. To access the intrinsic aspect of high-level physical properties, says Brown, one has to be the being that possesses the property itself. In other words, one is directly *acquainted* with the intrinsic aspect or the relevant property by instantiating the property itself.

In this way, RP helps us understand how soggy grey matter could have an intrinsic aspect or “inner being”. Of course, this may be somewhat unsatisfying, for nothing really explains why it has the particular “what it is like” aspect that it has. But, nevertheless, the appeal to these properties, even if we lack a substantive understanding of their nature, allows for an explanation of the aforementioned hallmark features of phenomenal properties. Furthermore, Brown, like Pereboom (2014), thinks that introspection reveals that phenomenal properties are not only intrinsic but *absolutely* intrinsic. That is, phenomenal properties do not entirely depend on more fundamental properties that are extrinsic/structural (2021, p.5). If phenomenal properties are indeed absolutely intrinsic then the Russellian is also in a privileged position to account for such a feature, for the intrinsic properties they postulate are absolutely intrinsic too.¹⁶

Unfortunately, Type-Bs do not need the tenets of RP to explain (or explain away) *ineffability*, *irreducibility* and *intrinsicness/absolute intrinsicness*. Appealing to the PCS, they can easily explain *ineffability*. On the constitutional account of phenomenal concepts introduced above, these concepts work by presenting or involving the experience itself and, therefore, one cannot possess these concepts from the third-person perspective without having undergone the relevant experience. Similarly, cognitive isolation accounts for *irreducibility*. We cannot bridge the epistemic gap because our phenomenal concepts are isolated from, and cannot be entailed by, physical concepts. With regard to these two features, RP is, therefore, unnecessary.

It comes down to whether RP can explain the apparent intrinsicness of phenomenal properties. In this regard, I have two short comments to make. First, in my view, all that we learn from introspection is that the “what is likeness” of pain is *essential* to being in pain. And I see no reason why this essential feature of pain cannot be fully grounded on structural properties. Brown and Pereboom think that introspection also reveals that phenomenal properties are *absolutely* intrinsic. But again, as far as I can tell from introspection, it is surely an open question whether these properties are or not absolutely intrinsic. For while I agree that phenomenal properties are not presented *as grounded* on structural properties (at all), I deny that they are presented *as not entirely grounded* on structural properties. We need some extra justification to move from the former to the latter.¹⁷ Introspection alone cannot tell us whether a property is or not dependent on some other property, and if it did, all metaphysicians would be out of a job.¹⁸ Second, as mentioned above, according to Brown, the relationship between the subject and the intrinsic aspect of consciousness is one of

¹⁶ Above I mentioned that Pereboom claims that RP can preserve the causal efficacy of phenomenal properties qua phenomenal. But I will not be commenting on this feature. First, others have argued that RP faces serious causal exclusion problems (Howell, 2015; Chan, 2021). Second, even if RP can overcome these difficulties (Alter & Coleman, 2021; Brown, 2021), doing so is not an advantage of Russellians over standard physicalists. Even if some non-reductive version of physicalism may face causal exclusion problems (Kim, 1998), reductive type-B physicalism can easily secure the casual efficacy qua phenomenal (if pain is C-fiber firings and C-fiber firings cause avoidance behaviour then pain causes avoidance behaviour).

¹⁷ Otherwise, as Diaz-Leon (2020) points out, we are at risk of fallacious reasoning akin to that motivated by the “headless woman” illusion, where we move from not seeing that the woman has a head to perceiving her as headless when in reality her head is hidden under a magician artefact.

¹⁸ See Stoljar (2015) for a similar but more in-depth exchange on this issue.

acquaintance, we access or are aware of the otherwise hidden nature of high-level physical properties merely by being. But acquaintance is just as mysterious and problematic as the very features of phenomenology it aims to explain. In a recent paper against panpsychism, Frankish (2021) challenges panpsychist to explain “how could simply being something be sufficient for anything remotely like awareness?” (p. 66). This challenge can be raised against RP as well. Indeed, how can the cognitive mechanism of introspection be aware of, or be sensitive to, the nature of intrinsic properties when, according to RP, only their effects, and not what they are in themselves, are physically registrable? We, like any conceivable physical system, have only access to (and can only be affected by) what matter *does*, for, quoting Frankish one last time, “evolution could no more design such mechanisms than a human engineer could” (2021, p.67). Thus, appealing to inscrutable intrinsic properties to explain how high-level physical properties could have an essential qualitative nature creates a deeper problem than it can solve for we have no physically acceptable explanation as to how we come to know about such nature.

In short, type-Bs do not need any of the tenets of RP to explain the aforementioned features of consciousness. Nonetheless, I am sympathetic to this sort of hybrid approach. Elsewhere I argue that there are problem intuitions that type-Bs, appealing to the PCS, cannot explain (Botin, 2022). Perhaps RP can help with these intuitions. But until we get a convincing argument for the need to appeal to intrinsic properties, we should restrain from making unnecessary fundamental posits.

5 Conclusion

RP is becoming increasingly popular because it promises to deliver what everybody wants, realism and physicalism about consciousness. But RP is not the first to swear on “the promise”, standard type-B physicalism is a less fanciful view that also claims to give everything and take nothing. In this paper, I have argued that our hopes should not be placed on RP because, unlike type-B physicalism, it cannot defeat the charge from revelation without weakening its physicalist or realist credentials. RM is either committed to an anti-realist and self-defeating view of phenomenal concepts or it is physically unacceptable.

Furthermore, I have argued that standard type-B physicalism does not need any of the tenets of RP to explain hallmark features of consciousness. The urge to make controversial fundamental posits stems, ironically, from the very mistake Russellians warn us against, namely, that of underestimating the physical. Standard physical properties are, in my view, perfectly apt to account for our conscious experiences.

Acknowledgements I thank Esa Diaz-Leon, Markel Kortabarria and Genoveva Martí for comments, discussion and encouragement while writing this paper. An earlier draft was presented at the LOGOS graduate reading group and I thank the PhD students for their valuable feedback. Lastly, I would like to thank two anonymous reviewers for helpful comments. This work has been supported by an FPI grant (Code: 2019PIDPID-107667GB-I00).

Funding Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Alter, T., & Coleman, S. (2021). Russellian monism and mental causation. *Noûs*, 55(2), 409–425.
- Alter, T., & Nagasawa, Y. (2012). What is Russellian Monism? *Journal of Consciousness Studies*, 19(9–10), 67–95.
- Balog, K. (2012). In defence of the phenomenal concept strategy. *Philosophy and Phenomenological Research*, 84(1), 1–23.
- Block, N. (2007). Consciousness, accessibility, and the mesh between psychology and neuroscience. *Behavioral and brain sciences*, 30(5–6), 481–499.
- Botin, M. (2022). The phenomenal concept strategy cannot explain problem intuitions. *Journal of Consciousness Studies*, 29(7–8), 7–31.
- Brown, C. D. (2017). A properly physical Russellian physicalism. *Journal of Consciousness Studies*, 24(11–12), 31–50.
- Brown, C. D. (2021). Consciousness and Categorical Properties. *Erkenntnis*, 1–23.
- Chalmers, D. (2003). Consciousness and its place in nature. In S. Stich, & T. Warfield (Eds.), *Guide to the philosophy of mind*. Oxford: Blackwell.
- Chalmers, D. (2006). Phenomenal concepts and the explanatory gap. In T. Alter, & S. Walter (Eds.), *Phenomenal concepts and phenomenal knowledge: New essays on consciousness and physicalism*. Oxford: Oxford University Press.
- Chalmers, D. (2015). Panpsychism and panprotopsychism. In T. Alter, & Y. Nagasawa (Eds.), *Consciousness in the Physical World: Perspectives on Russellian Monism* (pp. 246–276). New York: Oxford University Press.
- Chalmers, D. (2018). The meta-problem of consciousness. *Journal of Consciousness Studies*, 25(910), 6–61.
- Chan, L. C. (2021). Russellian physicalism and its dilemma. *Philosophical Studies*, 178(6), 2043–2062.
- Coleman, S. (2015). Neuro-cosmology. In P. Coates, & S. Coleman (Eds.), *Phenomenal qualities: Sense, perception, and consciousness*. Oxford: Oxford University Press.
- Coleman, S. (2017). Panpsychism and neutral monism. How too make up one's mind. In J. Brüntrup (eds) *Panpsychism. Contemporary perspectives*. New York: OUP.
- Cutter, B. (2019). Against the middle ground: Why russellian monism is unstable. *Analytic Philosophy*, 60(2), 109–129.
- Diaz-Leon, E. (2014). Do a posteriori physicalists get our phenomenal concepts wrong? *Ratio*, 27(1), 1–16.
- Diaz-Leon, E. (2020). The meta-problem of consciousness and the phenomenal concept strategy. *Journal of Consciousness Studies*, 27(5–6), 62–73.
- Elpidorou, A. (2016). A posteriori physicalism and introspection. *Pacific Philosophical Quarterly*, 97(4), 474–500.
- Frankish, K. (2021). Panpsychism and the depsychologization of consciousness. *Aristotelian Society Supplementary Volume*, 95(1), 51–70.
- Goff, P. (2011). A posteriori physicalists get our phenomenal concepts wrong. *Australasian Journal of Philosophy*, 89(2), 191–209.
- Goff, P. (2017). *Consciousness and fundamental reality*. Oxford University Press.
- Goff, P. (2019). *Galileo's error: Foundations for a new science of consciousness*. Vintage.
- Goff, P., & Coleman, S. (2020). Russellian Monism. *The Oxford Handbook of the philosophy of consciousness* (pp. 301–327). Oxford: Oxford University Press.

- Howell, R. J. (2015). The russellian monist's problems with mental causation. *Philosophical Quarterly*, 65, 22–39.
- Kammerer, F. (2018). Can you believe it? Illusionism and the illusion meta-problem. *Philosophical Psychology*, 31(1), 44–67.
- Kim, J. (1998). *Mind in a physical world: An essay on the mind-body problem and mental causation*. MIT press.
- Kind, A. (2015). Pessimism about Russellian monism. *Consciousness in the physical world: Perspectives on russellian monism*, (401–42). Oxford: Oxford University Press.
- Levin, J. (2019). Once more unto the breach: type-B physicalism, phenomenal concepts, and the epistemic gap. *Australasian Journal of Philosophy*, 97(1), 57–71.
- Levine, J. (2006). Phenomenal concepts and the materialist constraint. In T. Alter, & S. Walter (Eds.), *Phenomenal concepts and phenomenal knowledge: New essays on consciousness and physicalism* (pp. 145–166). Oxford: Oxford University Press.
- Liu, M. (2021). Revelation and the intuition of dualism. *Synthese*, 199(3), 11491–11515.
- McClelland, T. (2013). The neo-russellian ignorance hypothesis a hybrid account of phenomenal consciousness. *Journal of Consciousness Studies*, 20(3–4), 125–151.
- Montero, B. (2010). A Russellian response to the structural argument against Physicalism. *Journal of Consciousness Studies*, 17, 70–83.
- Montero, B. (2015). Russellian physicalism. In T. Alter, & Y. Nagasawa (Eds.), *Consciousness in the physical world: Perspectives on russellian monism* (pp. 209–223). Oxford: Oxford University Press.
- Montero, B., & Papineau, D. (2005). A defense of the via negativa argument for physicalism. *Analysis*, 65(287), 233–237.
- Mørch, H. H. (2014). *Panpsychism and Causation: A New Argument and a Solution to the Combination Problem* (Doctoral Dissertation), Department of Philosophy, Classics, History of Art and Ideas, University of Oslo, Oslo.
- Morris, K. (2016). Russellian physicalism, bare structure, and swapped inscrutables. *Journal of Consciousness Studies*, 23(9–10), 180–198.
- Nida-Rümelin, M. (2007). Grasping Phenomenal Properties. In T. Alter, & S. Walter (Eds.), *Phenomenal concepts and phenomenal knowledge: New Essays on consciousness and physicalism* (pp. 307–338). Oxford: Oxford University Press.
- Papineau, D. (2002). *Thinking about consciousness*. Oxford University Press.
- Papineau, D. (2019). Response to Chalmers' 'The Meta-problem of consciousness. *Journal of Consciousness Studies*, 26(9–10), 173–181.
- Papineau, D., & Spurrett, D. (1999). A note on the completeness of physics. *Analysis*, 59(1), 25–29.
- Pereboom, D. (2011). *Consciousness and the prospects of Physicalism*. Oxford University Press.
- Pereboom, D. (2014). Russellian Monism and absolutely intrinsic Properties. In U. Kriegel (Ed.), *Current controversies in philosophy of mind* (pp. 40–69). London: Routledge.
- Pereboom, D. (2019). Russellian monism, introspective inaccuracy, and the illusion meta-problem of consciousness. *Journal of Consciousness Studies*, 26(9–10), 182–193.
- Russell, B. (1927). *The analysis of Matter*. Dover Publications.
- Schroer, R. (2010). Where's the beef? Phenomenal concepts as both demonstrative and substantial. *Australasian Journal of Philosophy*, 88(3), 505–522.
- Stoljar, D. (2001). Two conceptions on the physical. *Philosophy and Phenomenological Research*, 62(2), 253–281.
- Stoljar, D. (2006). *Ignorance and imagination*. Oxford University Press.
- Stoljar, D. (2015). "Russellian monism or Nagelian monism?". In Torin Alter & Yujin Nagasawa (eds) *Consciousness in the Physical World: Perspectives on Russellian Monism*, (324–345). New York, NY, USA.
- Strawson, G. (2006). Realistic monism: Why Physicalism entails panpsychism. *Journal of Consciousness Studies*, 13, 3–31.
- Strawson, G. (2019). Underestimating the physical. *Journal of Consciousness Studies*, 26(9–10), 228–240.
- Tononi, G., & Koch, C. (2015). "Consciousness: here, there and everywhere?". *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 370(1668).
- Trogdon, K. (2017). Revelation and physicalism. *Synthese*, 194(7), 2345–2366.
- Tye, M. (1999). *Phenomenal consciousness: The explanatory gap as a cognitive illusion* (108 vol., pp. 705–725). Mind.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.