ORIGINAL RESEARCH



Does Panpsychism Explain Mental Causation?

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Abstract

In the contemporary literature on panpsychism, one often finds the claim that a Russellian-monist version of panpsychism, i.e., *Russellian panpsychism*, is a superior view compared to alternative non-physicalist theories. The argument for this claim is that while Russellian panpsychism can integrate consciousness in the causal order and explain mental causation, alternative theories fail to do so. If this is correct, panpsychism deserves its place as a main contender in solving the mind-body problem. In this paper, I argue that Russellian panpsychism's superiority in explaining mental causation over competing accounts is illusory. On one reading, the proposed explanation is not an explanation of the phenomenon that is at stake in the mental causation debate. On an alternative reading, it is an explanation of the right phenomenon, but analogous explanations are available to competing accounts with less counterintuitive commitments. While there may be other considerations supporting panpsychism, explaining mental causation is not one.

Panpsychism—the view that consciousness is a *fundamental* and *ubiquitous* feature of reality—is enjoying a notable resurgence.¹ Here, the relevant kind of consciousness is *phenomenal* consciousness: a being is phenomenally conscious just in case there is something it is like to be it; a state (or a property) is phenomenally conscious just in case there is something it is like to be in that state (or instantiate that property). Understood this way, panpsychism is interpreted to imply that 'all members of some fundamental physical types (all photons for example) have [conscious] mental states' (Chalmers, 2015, p. 246). So, if panpsychism is true, 'there is something it is like to

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¹ See, e.g., Strawson (2006), Chalmers (2015), Goff (2017), Roelofs (2019), Mørch (2020), Seager (2020).

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be a quark or a photon or a member of some other fundamental physical type' (ibid., p. 246-7).

By taking consciousness to be a fundamental feature of reality, panpsychists depart from physicalism. By taking it to be ubiquitous, they depart from common sense. Even its proponents admit that panpsychism clashes with common-sense intuitions. Yet, they argue that the view possesses theoretical advantages over competing accounts. In this paper, I examine an argument for panpsychism which appeals to one such theoretical advantage: in explaining mental causation, panpsychism, in its Russellian form (to be explained shortly), is better equipped than other non-physicalist theories. Assuming that physicalism is false, panpsychism becomes the most credible view in explaining consciousness and solving the mind-body problem. I shall refer to this as 'the causal argument for panpsychism' (or simply, 'the causal argument').²

If the causal argument can be made to work, panpsychism deserves its place as a main contender in solving the mind-body problem. But as we shall see, the causal argument faces several problems. Even if we grant that physicalism is false—an assumption that I shall not question—panpsychism does no better than competing non-physicalist theories in explaining mental causation. While there may be other considerations supporting panpsychism, explaining mental causation is not one.

1 Russellian Panpsychism and Mental Causation

Attributing consciousness to fundamental physical entities is compatible with a variety of views. For example, panpsychism is compatible with a form of *dualism* on which fundamental physical entities have conscious states *over and above* their physical properties. Perhaps, an electron has physical properties *and* distinct mental properties. But the sort of panpsychism that has received much attention in the contemporary literature rejects this dualist interpretation and examples of this sort, and it falls in the group of theories known as *Russellian monism*.

I understand Russellian monism to be the view that both consciousness and dispositional/relational/structural³ aspects of concrete reality as described by physics are

³Discussions of Russellian monism often treats the terms 'dispositional', 'relational', and 'structural' under one rubric. On this point, see Morris (2016, p. 180). Although this might be found problematic, I will sidestep this, as my arguments will only focus on the 'dispositional' part of this cluster.



²What I call 'the causal argument' may also be seen as one part of a bigger argument, formulated by Chalmers as the 'Hegelian argument for panpsychism' (2015). Chalmers's Hegelian argument is that panpsychism is the most natural *synthesis* of the *thesis* of physicalism and the *anti-thesis* of dualism. While physicalism is successful in explaining mental causation, it suffers from failing to explain phenomenal consciousness. Similarly, while dualism is successful in explaining phenomenal consciousness, it suffers from not being able to account for mental causation. According to the Hegelian argument, panpsychism, especially in its Russellian form, is best of both worlds, so to speak, as it can explain both phenomenal consciousness and mental causation. The causal argument is part of this bigger argument because it is the causal argument that attempts to show that while dualism cannot explain mental causation, panpsychism can. Throughout this paper, I will assume that physicalism is false, hence will not engage with the other part of the Hegelian argument.

grounded in instances of properties that belong to one fundamental kind. Following one philosopher writing on this topic, I will call properties of this fundamental kind *RM-properties* (where 'RM' is short for 'Russellian monist'). An RM-property is meant to be a *categorical* property: there is more to its nature than being merely a function from some triggering condition to some manifestation—i.e., it is not a dispositional property. Inspired by the view Russell defended in *Analysis of Matter* (1927), Russellian monists hold that RM-properties are not within the purview of physics. Physics can at best discover and explicate the dispositional aspects of reality, but RM-properties are not dispositional properties. Nevertheless, RM-properties are responsible for the dispositional aspects of reality by grounding them. Russellian monism is presented by its proponents as a promising solution to the mind-body problem, as it postulates one fundamental kind of property to explain phenomenal and causal aspects of the physical world at once.

Among Russellian monists, the nature of RM-properties is disputed. According to the version of Russellian monism that is relevant for our purposes, RM-properties are *phenomenal* properties—i.e., there is something it is like to instantiate an RM-property. It is this understanding of RM-properties that, if endorsed, makes Russellian monism a version of panpsychism. Hence, we have *Russellian panpsychism*. According to Russellian panpsychism, phenomenal properties of fundamental physical objects are responsible for both dispositional properties of such objects and phenomenal properties of ordinary bearers of conscious mental states, such as pains and colour experiences of creatures like us. So, while phenomenal RM-properties ground the dispositional properties of their bearers, they also ground our conscious experiences. Given that RM-properties are fundamental and ubiquitous, in taking RM-properties to be phenomenal properties, proponents of this view subscribe to the main tenet of panpsychism that consciousness is a fundamental and ubiquitous feature of reality.

In general, a strong appeal of panpsychism is that it offers a solution to the puzzle of explaining how creatures like us have subjective experiences. The puzzle is the

⁸Two occurrences of the word 'ground' in this sentence may or may not refer to instances of the same type of grounding (or grounding-like) relation, depending on the version of the theory. I shall visit this issue in sec. 3.3.



⁴For different ways of formulating Russellian monism, see Stoljar (2001), Alter and Nagasawa (2012), Kind (2015).

⁵ See Howell (2015). RM-properties are sometimes called *o-physical properties* (Stoljar, 2001), *inscrutables* (Montero, 2010; Alter & Nagasawa, 2012), *deep natures* (Goff, 2017) or *quiddities* (Alter & Coleman, 2021).

⁶Throughout the paper, I will assume the "standard" view that a categorical property is not a dispositional property (and a dispositional property is not a categorical property), hence assume, without argument, that views on which dispositional properties are identical with categorical properties (or views on which fundamental properties are both categorical and dispositional at once) are false. For views of this latter kind, see Martin and Heil (1998) and notes 21 and 23 below.

⁷ See Goff (2017). Others think that RM-properties are ultimately physical properties (see Stoljar, 2001; Pereboom, 2011), which leads to a physicalist version of Russellian monism. I also set aside the view that RM-properties are *proto-phenomenal*, as my arguments in this paper will not directly address this view. See Chalmers (2015) and Goff and Coleman (2020) for discussions of differences between such a view and panpsychism.

difficulty—and perhaps the impossibility—of explaining how purely physical and non-experiential bits of matter that constitute a creature's nervous system could bring about subjective experiences. Now, if panpsychism is true, these bits of matter are also bearers of conscious experiences (albeit very different and probably very simple ones), so the fact that they constitute the nervous system of a phenomenally conscious creature does not pose a special metaphysical problem9---or so argue some panpsychists. The idea is that 'basic material entities have a very simple experiential nature, from which the complex experience of humans and animals is somehow derived' (Goff, 2015, p. 19). 10

However, this apparently powerful solution is met with an equally powerful 'incredulous stare', as panpsychist philosophers openly admit. For example, Goff says that '[t]he incredulous stare panpsychists sometimes receive may not be an argument but it is a powerful force nonetheless' (in Goff & Coleman, 2020, p. 306; see also Goff, 2015, pp. 253–254). Likewise, Chalmers notes that the panpsychist solution to the mind-body problem is sometimes dismissed as 'crazy' (2015, p. 247). However, both Goff and Chalmers argue that the initial incredibility of panpsychism is counterbalanced by its theoretical benefits, specifically in its Russellian form. As Chalmers points out, 'there are indirect reasons, of a broadly theoretical character, for taking the view seriously' (ibid.). Likewise, Goff writes: '[a]t the end of the day, good arguments and the theoretical advantages of a theory ought to be taken more seriously than common-sense intuition' (in Goff & Coleman, 2020, p. 306).

What is the theoretical advantage of panpsychism in its Russellian form which enables panpsychists to overcome the incredulous stare? Its proponents argue that Russellian panpsychism integrates consciousness in causation in the physical world, hence accommodates mental causation—a challenge that other non-physicalist theories cannot meet. Here, the relevant non-physicalist position that is contrasted with panpsychism is *dualism* in its *substance*-dualist and *property*-dualist versions. In what follows, my focus will be on property dualism (and its varieties). ¹¹

That Russellian panpsychism offers a solution to the problem mental causation is echoed by many participants to the debate on panpsychism and Russellian monism. In his 'Panpsychist Manifesto', Seager says that 'panpsychism promises to integrate our scientific and "personal" view of the world and do so in a way that respects ... the completeness of the physical picture of the causal structure of the world' (2020, p. 8). According to Mørch, 'unlike dualism, [Russellian panpsychism] ... offers phenomenal properties an explanatory role in the physical world compatible with physical causal closure' (2020, p. 1073). Goff says that 'the Russellian panpsychist avoids the dualist's difficulties reconciling the efficaciousness of consciousness with the causal closure of the physical world' (in Goff & Coleman, 2020, p. 304; see also Goff, 2017, p. 18–19). In a similar vein, Chalmers says that while 'dualism has the familiar prob-

¹¹By 'dualism', henceforth, I will only mean the non-panpsychist variety of dualism.



⁹ Barring 'the combination problem'; see Seager (1995). I will revisit the combination problem in sec. 3.3 below.

¹⁰ Exactly how such derivation is meant to work is also a matter of dispute, its consideration leads to further bifurcations, and is linked to the combination problem (see note 9 above). See Goff (2017) and Roelofs (2019) for sophisticated treatments of this issue.

lem of mental causation, ... panpsychism [does] not suffer from [this]. ... [O]n this picture, phenomenal properties are integrated into the causal order' (2015, p. 269).

Integrating consciousness into the causal order is taken to be a feature of Russellian monism *simpliciter*, not only of Russellian panpsychism. Thus, proponents of Russellian monism more generally make similar remarks. For example, Alter and Nagasawa argue that 'Russellian monism allows consciousness to be integrated into nature in a much more substantial way than does ... dualism' (2012, p. 88). As Howell puts it, 'the beauty is that this causal relevance doesn't involve contradicting the claims of the physical sciences by positing mysterious causal powers injected into the physical system' (2015, p. 25). ¹²

In what follows, I will raise problems for the reasoning behind these claims. More specifically, I will argue that *either* the Russellian panpsychist's explanation of mental causation is not really an explanation of the phenomenon that is at stake in the mental causation debate, *or* if it is, then analogous explanations are available to alternative non-physicalist theories too. But first, let me briefly address why dualism is taken to have a problem of mental causation. This is important to clarify, as the assumptions that are required to illustrate this problem for dualism generate puzzles for Russellian panpsychism too, which ultimately undermines the Russellian panpsychist explanation of mental causation.

2 Dualism and Causal Exclusion

As should be clear from the claims of Russellian panpsychists (as quoted in sec. 1), the causal argument relies on the idea that dualism, which is the mainstream non-physicalist position regarding the mind-body problem, fails to make room for mental causes without contradicting the claims of the physical sciences. ¹³ Interestingly, this point is traditionally raised by physicalists, who argue that if mental properties are causally efficacious in relation to physical effects, they must be physically reducible, for otherwise mental causation would violate 'the causal closure/completeness of the physical' (henceforth *Closure*). ¹⁴

Converted into an argument, the problem for dualism can be presented as follows:

Closure Every event that has a cause at a time t has a sufficient physical cause at t.

Distinctness If dualism is true, then mental properties are distinct from physical properties.



¹² Howell goes on to present problems for Russellian monism; see sec. 3.2 below.

¹³ At the time of writing, dualism is the mainstream non-physicalist position in the mainstream analytical philosophy in the English-speaking world. See David Bourget and David Chalmers, 'Philosophers on Philosophy: The 2020 PhilPapers survey', November 2021, p. 13 (URL: https://philarchive.org/archive/BOUPOP-3.)

¹⁴ See, e.g., Kim (1998) and Papineau (2001, 2002, Ch. 1).

Exclusion No effect has more than one simultaneous sufficient cause unless it is a case of causal overdetermination, and cases of mental causation are not cases of causal overdetermination.

Therefore, if dualism is true, mental properties are not causally relevant to physical effects.

This is known as 'the exclusion argument', suggesting that those who hold that mental properties are distinct from physical properties must be committed to *epiphenomenalism*, the view that some or all mental properties are causally irrelevant to physical effects.¹⁵ When Russellian panpsychists argue that their view is superior to dualism in accommodating mental causes in the physical world, they rely on the conclusion of the exclusion argument. This also presupposes that *epiphenomenalist dualism—i.e.*, the kind of dualism that rejects mental causation—is more implausible than the panpsychist thesis that there is something it is like to a be a photon or a quark.

That the proponents of the causal argument rely on the exclusion argument for their claim that dualism cannot explain mental causation is evident. First, *Distinctness* is a conditional claim that all parties to this debate must accept—it falls out of the definition of dualism—so attributing this premise to the proponents of the causal argument should not be objectionable. Second, as we have seen (in sec. 1), the proponents of the causal argument explicitly refer to the causal closure/completeness of the physical, which is the claim that is expressed in *Closure*. It is also clear that they must accept *Closure*, as without it, they lack the resources to dismiss *interactionist dualism—i.e.*, the kind of dualism that can accommodate mental causes by rejecting *Closure*. After all, if *Closure* is false, interactionist dualism should have no problem of mental causation. Third, they do (and indeed must) accept *Exclusion*. This is because *Closure* on its own does not commit dualism to epiphenomenalism. Without *Exclusion*, mental causes and physical causes can in principle causally overdetermine their effects. It is exactly this kind of overdetermination that is ruled out by *Exclusion*.

For these reasons, I will henceforth assume that Russellian panpsychists who endorse the causal argument for panpsychism accept both *Closure* and *Exclusion*, and moreover that they rule out epiphenomenalism as a viable option. These points will be important for my arguments in sec. 3 that *Closure* and *Exclusion* generate objections to Russellian panpsychism that are analogous to the causal exclusion argument against dualism, suggesting that Russellian panpsychism may be committed to

¹⁵ It is worth noting that Kim (1998) thinks that *non-reductive* varieties of physicalism also suffer from this problem, because these views accept *Closure* (in virtue of subscribing to physicalism) and they reject the identity of mental properties with physical properties (in virtue of subscribing to non-reductionism). Papineau's position is less clearcut on this point, as he is of two minds about whether views of this kind imply epiphenomenalism or not (2002, p. 35). If, say, *being in pain*, is *not* identical with a physical property but is instead identical with some higher-order property of having some (physical) property (or other) which satisfies a causal condition, the property that plays the relevant causal role would not be *being in pain* - it would be the (physical) property that satisfies the causal condition. Since in this paper I am assuming (for the sake of argument) that physicalism is false, I will not delve into this issue other than stating my own view that non-reductive physicalists have the resources to simply reject *Exclusion*, which is a promising strategy for solving this problem. See Baysan (2021) for further discussion.



epiphenomenalism just as dualism is said to be. While Russellian panpsychists can in principle evade these problems, the same routes are available to dualists.

3 How does Russellian Panpsychism Explain Mental Causation?

Having clarified why the proponents of the causal argument find dualism problematic (and which principles must be assumed in order to show that there is indeed a problem for dualism), let's examine how Russellian panpsychists attempt to explain mental causation.

As far as I can see, Russellian panpsychists—and Russellian monists more generally—have the following strategy. Utilising what I shall call *the basing claim*, they argue that consciousness has a place in physical causation because some phenomenally conscious properties are the categorical bases of the causal powers of their bearers. While the basing claim may be useful in showing that consciousness has some causal role, I will argue that it does not go far enough to give our conscious experiences a causal role. Russellian panpsychists have however met such a shortfall by supplementing the basing claim with what I shall call *the inheritance claim*, according to which our conscious properties inherit their causal efficacy from causally efficacious RM-properties. But does this give consciousness the causal power that it needs? I will argue that it does not: problems also arise for the role that the inheritance claim plays in the causal argument for panpsychism.

3.1 The Basing Claim

Giving a causal role to consciousness by appealing to RM-properties may go as follows. RM-properties are phenomenal properties, and they are also the properties that base, or categorically ground, the dispositions of elementary physical particles. That is, it is the instantiation of an RM-property by an object that explains the dispositions of that object, partially thanks to background conditions and causal laws that link categorical properties to dispositions. The requirement for such laws in the background conditions comes from the categoricalist commitments of this account, where categoricalism can simply be understood as the view that fundamental properties are categorical properties (and not dispositional properties). On standard accounts of categoricalism, since categorical properties are not dispositional properties, their conferment of dispositions on their bearers requires certain causal laws to hold. 16 Given that the manifestation of a disposition is a causal process, on this view, phenomenal properties have a role in causation: they confer dispositions on their bearers. Thus, Russellian panpsychism 'is designed to accord consciousness a crucial role in ... physical causation: the role of categorically grounding physical, dispositional properties' (Alter & Coleman, 2020, p. 230).

Here is an initial worry with what has been said so far. As we have seen in sec. 2, the proponents of the causal argument find epiphenomenalist dualism unacceptable.

¹⁶Typically, such laws are taken to be metaphysically contingent. See Armstrong (1997) for a canonical version of categoricalism along these lines and Baysan (2017) for further discussion.



While there are several arguments against the cogency of epiphenomenalism¹⁷, arguably the most powerful intuition that renders epiphenomenalist dualism unacceptable—i.e., the intuition that makes mental causation a *desideratum* in philosophy of mind—is the one that says that *our* mental properties are relevant to our behaviour: *my* pain causes *me* to flinch or say 'ouch'; *your* thirst causes *you* to drink water.¹⁸ But as far as the basing claim goes, the properties relevant to causation are not any of these properties; they are RM-properties, which are properties of fundamental physical entities like elementary physical particles. So read this way, Russellian panpsychist's explanation of mental causation is not superior to that dualism—or to any other theory for that matter.

Note that property dualism comes in two general varieties: epiphenomenalist dualism and interactionist dualism (and the latter may come in different varieties, depending on the mechanism of mental causation that is proposed). On the one hand, if Russellian panpsychist's comparison is with epiphenomenalist dualism, it appears that Russellian panpsychists and dualists might as well be in full agreement that our mental properties are causally inefficacious—at least, as far as the basing claim goes. Some mental properties—namely phenomenal RM-properties—may be causally efficacious. This might be very good news for photons and quarks! But it is not clear how this is good news for ordinary subjects of experience like us. The fact that phenomenal RM-properties are the bases of the causal powers of photons, quarks or any other elementary particles does not *ipso facto* give our phenomenal properties any causal powers. If they do give them causal powers, that requires an explanation. ¹⁹

On the other hand, if the Russellian panpsychist's comparison is with interactionist dualism, then dualism is superior to Russellian panpsychism when it comes to satisfying the non-epiphenomenalist intuition that our mental properties are causally relevant and non-redundant. Suppose that the relevant interactionist dualist is an *emergentist* and holds that the phenomenal properties of creatures like us are emergent properties: they are instantiated only at relatively high levels of complexity, but they are fundamental properties in the sense that they figure in fundamental psycho-physical laws that govern their causal relations. Such a view—if it is to be believed—can explain the causal efficacy of phenomenal properties like human pain or thirst by giving exactly *those* phenomenal properties indispensable roles in causa-

²⁰The kind of emergentism that I have in mind is the one defended by Broad (1925). The kind of property dualism that Chalmers famously defends in *The Conscious Mind* (1996) is similar to Broad's emergentism to the extent that the latter also requires fundamental psycho-physical laws. However, while Chalmers remains uncommitted to interactionism (or epiphenomenalism, for that matter), Broad's view can be interpreted as interactionist due to its departure from *Closure*. See McLaughlin (1992) for an interpretation of Broad's (and Broad's contemporaries') view as a departure from *Closure*: some higher-level properties 'influence motion in ways unanticipated by laws governing less complex kinds and conditions concerning the arrangements of particles' (McLaughlin, 1992, p. 51). For a recent account of emergence as a framework that explains mental causation by rejecting *Closure* see Wilson (2015). For a defence of the viability of such an account, see Baysan and Wilson (2017).



¹⁷ See Baysan (2021) for a discussion of various arguments against epiphenomenalism.

¹⁸See Robinson (2018), for similar remarks regarding Russellian monism. Note that Robinson does not share this intuition.

¹⁹ The inheritance claim, which is the topic of the next subsection can be seen as an explanation of exactly this. I reserve my thoughts about the shortcomings of the inheritance claim for that section.

tion and causal laws. Of course, at the end of the day, the emergentist's proposal that there are such laws and emergent properties in this specific sense may be rejected. But this is beside the point, as the panpsychist proposal that elementary physical particles have phenomenal properties may be rejected too. What is important is that when interactionist dualists and Russellian panpsychists are explaining mental causation, they seem to be explaining different phenomena, at least as far as the utilisation of the basing claim is concerned. While the phenomenon that dualists explain is *macro*-level mental causation, the phenomenon that the basing claim is supposed to explain is *micro*-level mental causation—if there is such a thing, of course.

It is easy to run into difficulties when trying to fix this problem. If our explanation of *macro*-level mental causation is going to involve phenomenal RM-properties, and this explanation works through their grounding of dispositions of *micro*-level entities (as the basing claim suggests) there should be a tight and intelligible connection between micro-level causation and macro-level causation. However, the interplay between this tight and intelligible inter-level connection and the role of RM-properties leads to a new worry, motivated by a modified version of the exclusion argument.

As we have seen in sec. 1–2, proponents of the causal argument accept *Closure*. When this principle is conjoined with the claim that fundamental physical properties are phenomenal RM-properties, it is reasonable to attribute something along the following lines to Russellian panpsychists who employ the causal argument for panpsychism:

Panpsychist Closure Every physical event that has a cause has a phenomenal RM-property instance (or a micro-arrangement thereof) as a sufficient cause.

This is a reasonable interpretation of the overall Russellian panpsychist metaphysical framework. Phenomenal RM-properties are the fundamental categorical properties that ground physical dispositions whose manifestations are *all there is to physical causation*. They are all there is to physical causation because they include instances of *micro-level physical causation* by default, and instances of *macro-level physical causation* thanks to the presumed tight connection between micro-level and macro-level causation. But, in this picture, once *Exclusion* is accepted (see sec. 2 above), it becomes mysterious how *my* pain can have any causal role in bringing out my pain behaviour (or any other physical effect for that matter). The causal powers that we would normally associate with my pain are eventually replaced with, or excluded by, the causal powers that phenomenal RM-properties have. Thus, appealing to the same 'exclusionist' idea that is employed against dualism, we can show that, according to Russellian panpsychism, phenomenal RM-properties causally exclude our phenomenal properties. If (macro-level) epiphenomenalism is problematic for dualism, it is not clear why it should be acceptable for Russellian panpsychism.

3.2 The Inheritance Claim

Given the obvious limitations of the basing claim in not saying much about how our mental properties are causally efficacious, it is natural to interpret the Russellian panpsychist strategy to invoke a supplementary claim: the causal efficacy of our



phenomenal properties—henceforth, *macrophenomenal properties—is* vindicated because macrophenomenal properties *inherit* their causal efficacy from the phenomenal RM-properties that ground them. The assumption of this supplementary claim is evident in some expositions of the causal argument, for example, in Goff and Coleman's claim that 'by grounding physical dispositional properties, [RM-properties] directly relevant to the grounding of consciousness, and thus *macro-level consciousness itself*, gets intimately involved in physical causation' (2020, p. 303, emphasis added). It is also evident in Alter and Coleman's recent paper on Russellian monism: 'properties that constitute macrophenomenal properties are the same as those that ground physical dispositions. *Macrophenomenal properties inherit physical efficacy* from that of the quiddities [i.e., RM-properties] that constitute them, and consciousness is thereby integrated into physical causation' (2021, p. 411, emphasis added).

Clearly, if the inheritance claim is true, then the worries I raised in sec. 3.1 can be answered. However, I think this claim runs into problems. If *Exclusion* is true, then, as I argued above, it is hard to see how our conscious mental properties have any causal efficacy on top of the causal efficacy of the phenomenal RM-properties (henceforth *microphenomenal properties*). And if *Exclusion* is false, the Russellian panpsychist is no longer in a position to dismiss dualism on the basis of the problem of mental causation.

Russellian panpsychists will likely complain that I am missing the point: macrophenomenal properties are causally efficacious because they inherit such efficacy from the microphenomenal properties that ground them! But there is a deeper dialectical problem here: if the panpsychist's macrophenomenal properties can inherit causal efficacy from microphenomenal properties (despite Exclusion), then, presumably the emergentist/interactionist dualist's macrophenomenal properties can inherit causal efficacy from the physical properties and the psycho-physical laws that they arise from. The appeal to the inheritance relation in these two strategies is the same even though the base-level facts that are appealed to are different. While the Russellian panpsychist is appealing to distributions of RM-properties as base-level facts, emergentist/interactionist dualist is appealing to distribution of micro-physical properties and the obtaining of psycho-physical laws as base-level facts. The addition of laws in the latter story does not necessarily change the ideological commitments of these explanations. After all, Russellian panpsychists will also have to acknowledge some laws (e.g., fundamental laws of physics) in the background conditions for their explanation, not to the mention the categoricalist requirement that disposition conferral is explained partly in terms of causal laws.²¹

Alter and Coleman have more to say on these matters. The details of their position become clearer when we consider how they deal with yet another version of

²¹ It is important to acknowledge that those who do not want to posit laws (of any kind) in their ontology may resist this argument. As an anonymous reviewer correctly points out, "philosophers sometimes adopt a dispositionalist ontology precisely to escape what is perceived to be problematic about laws", and adopting a view on which fundamental properties are both categorical and dispositional at once may be a convenient option for the Russellian panpsychist to dispense with laws. Discussing the merits of such a view is beyond the scope of this paper, but it is worth stating (for the record) that I believe that categoricalists have the resources to respond to worries about what is perceived to be problematic about laws; see Baysan (2017, 2019) for further discussion.



the exclusion argument (presented against Russellian monism). I will call this 'the revised exclusion argument'.²² I should clarify that I do not endorse the revised exclusion argument, but I find the way Alter and Coleman respond to it instructive for understanding their overall metaphysical picture.

The revised exclusion argument goes as follows. Suppose that microphenomenal properties ground dispositional properties. Crucially, since microphenomenal properties are RM-properties, they are categorical properties, in which case the relationship between microphenomenal properties and the dispositions they ground is a contingent relation. This is because it is part of the concept of a categorical property that it is not a dispositional one²³, hence if a categorical property is the ground of a disposition, its grounding that disposition cannot be underwritten by a metaphysically necessary connection.²⁴ But if this relationship is a contingent one, then the world could have been causally indiscernible from how it actually is regardless of which microphenomenal properties ground which dispositions. Then, the argument goes, microphenomenal properties are causally irrelevant to the manifestations of the dispositions they ground.

I will pass no judgment on the cogency of the revised exclusion argument. I am primarily interested in how Alter and Coleman respond to it. It appears that their response—or at least one of their responses—is to reject the link from the contingency of the categorical grounding relation between microphenomenal properties and dispositions to the causal irrelevance microphenomenal properties. According to this response, from the fact that this relationship is metaphysically contingent, it does not follow that microphenomenal properties are causally irrelevant. They argue that the revised exclusion argument presupposes a *necessitarian* view according to which causal relations and the causal powers of properties are underwritten by metaphysically necessary connections. Accordingly, the Russellian panpsychist can respond to the revised exclusion argument 'by appealing to the doctrine that causation is metaphysically contingent' (2021, p. 417). Insofar as the link between microphenomenal properties and the dispositions they ground is *nomologically* necessary, the revised exclusion argument does not go through. More specifically, they say:

[T]hat physical event A causes physical event B does not entail that A metaphysically necessitates B. Perhaps A causes B in virtue of metaphysically contingent causal laws. A parallel point holds for the role of categorical grounding

²⁴For this reason, 'ground' might not be the best word for categorical properties here, for the concept of 'grounding' often has a necessitarian connotation. This is mainly a terminological issue and it can be remedied by using the modifiers 'categorical' and 'non-categorical' (before 'grounding') where the difference matters. Henceforth, I adopt this practice.



²² Although Alter and Coleman respond to a specific version of the exclusion argument given by Howell (2015), they open their discussion with a more generic version of the exclusion argument against Russellian monism. It is this more generic version that I shall discuss here.

²³Though, see Martin and Heil (1998), Strawson (2008), Mørch (2018) for qualms about this claim. I acknowledge that Mørch's case is relevant, as she argues for a view on which phenomenal properties are *powerful qualities* (along the lines of the view about properties defended by Martin and Heil). Her argument for this is that phenomenal properties like pain have their dispositional profiles essentially (hence they are powers), but she also agrees with the Russellian monists that there is more to the deep nature of phenomenal properties than their dispositional profiles (hence they are categorical properties, or qualities).

in physical causation. Suppose property C grounds physical disposition D. Plausibly, C is thereby physically efficacious if D is: if D has some physical effect E then, by grounding D, C helps D cause E. (ibid., p. 413)

I agree with the main content of this passage. Where I disagree with Alter and Coleman is how these claims relate to their bigger picture. A similar strategy enables dualists to accommodate the causal efficacy of macrophenomenal properties without any obvious cost. On the relevant kinds of dualism, base-level physical properties do not metaphysically necessitate macrophenomenal properties; macrophenomenal properties supervene on their physical bases with nomological necessity, suggesting that the psycho-physical laws that connect macrophenomenal properties with their physical bases are contingent laws. But if contingent laws are strong enough to vindicate the causal efficacy of a property, then dualists can argue that macrophenomenal properties inherit causal efficacy from the causally efficacious physical properties that they nomologically supervene on. Therefore, if Alter and Coleman's response to the revised exclusion argument works, a similar strategy should help dualists solve their exclusion problem too.

3.3 The Many Faces of Exclusionism

One might object to the arguments of the last two subsections (sec. 3.1–3.2), suggesting that I am conflating (at least) two different problems of causal exclusion, and that I am wrong in thinking that Alter and Coleman's response to the revised exclusion argument helps dualists in solving their exclusion problem. Let me expand on this point.

On the one hand, we seem to have an exclusion problem concerning the causal competition between macrophenomenal properties and their phenomenal categorical grounds (microphenomenal properties). This is the problem which suggests that the microphenomenal properties that Russellian panpsychists posit causally exclude macrophenomenal properties. Call this 'the micro-macro phenomenal exclusion problem'. One the other hand, we seem to have an exclusion problem that concerns the causal competition between dispositional properties and their categorical grounds (which are microphenomenal properties if Russellian panpsychism is true). And this latter problem also has two different versions. In one version, dispositional properties are threatened to be causally excluded by their microphenomenal categorical grounds. Call this 'the categorical exclusion problem'. In the other version, microphenomenal properties are threatened to be causally excluded by the dispositions they categorically ground. Call this latter problem 'the dispositional exclusion problem'.

What I called in sec. 3.2 'the revised exclusion argument' concerns the dispositional exclusion problem. That argument was meant to show that microphenomenal properties are irrelevant to the causal profiles of the dispositional properties they categorically ground because the relationship between the microphenomenal and the dispositional is a contingent relation. The response by Alter and Coleman—which I find plausible—is that the fact that this relationship is metaphysically contingent does not undermine the causal efficacy of the microphenomenal, because this relationship is nomologically necessary. However, the problem that is generated by *Panpsychist*



Closure (see sec. 3.1 above) is an instance of the micro-macro phenomenal exclusion problem. And in fact, the original exclusion problem that dualists face is structurally identical to the micro-macro phenomenal exclusion problem (not to the dispositional exclusion problem). Then it may be questioned whether Alter and Coleman's solution to the dispositional exclusion problem should translate into a solution to the original exclusion problem that the dualist faces.

It is true that these are separate problems. However, from this, it does not follow that the solutions to these problems must be separate too. For example, rejecting the main exclusionist idea which motivates each of these problems would be an efficient way of solving all these problems at once. Nevertheless, for the sake of responding to this objection, let's grant that these problems require different solutions, and further suppose that while a (merely) nomologically necessary connection between the microphenomenal and the dispositional can solve the dispositional exclusion problem, a similarly strong connection between the physical and the mental will not solve the dualist's exclusion problem.

However, note that if a (merely) nomologically necessary connection between the physical and the mental cannot solve the dualist's exclusion problem, then a (merely) nomologically necessary connection between the microphenomenal and the macrophenomenal cannot solve the Russellian panpsychist's micro-macro phenomenal exclusion problem. But then, what might solve this latter problem? An obvious answer is that a stronger connection, for example a metaphysically necessary connection, can do the job. In fact, some proponents of Russellian panpsychism defend what is sometimes called 'constitutive Russellian panpsychism' in holding that the relationship between the microphenomenal and the macrophenomenal is an especially tight constitution relation.²⁵ Perhaps, this is the way forward in solving the micromacro phenomenal exclusion problem, and such a solution is arguably not available to the dualist who thinks that the relationship between the physical and the mental is not as tight as constitution. If we accept all of this, the explanation seems to be this:

- (i) Fundamental categorical properties are phenomenal properties; they are microphenomenal properties.
- (ii) Fundamental categorical properties are causally efficacious because they ground micro-level dispositions.
- (iii) So, some phenomenal properties, namely microphenomenal properties, are causally efficacious.
- (iv) There is a constitutive relation between microphenomenal properties and macrophenomenal properties.
- (v) So, macrophenomenal properties are causally efficacious too.

²⁵ See Roelofs (2019) for a recent defence of this brand of panpsychism. Some endorsements of the Russellian panpsychist strategy for explaining mental causation are explicit in the fact that this relation is meant to be a constitutive one. Chalmers, for example, says that '[g]iven that microexperience is causally relevant (as Russellian panpsychism suggests), and that microexperience *constitutes* macroexperience (as *constitutive* panpsychism suggests), we can expect that macroexperience will be causally relevant too' (2015).



There are two immediate problems with this as an explanation. First, suppose that (iii) is true and microphenomenal properties are causally efficacious. We should ask: In relation to what are they causally efficacious? In other words, what kinds of effects can they bring about? Presumably, they are causally efficacious in relation to *microlevel physical effects*, as they are meant to be categorical grounds of the dispositions of micro-level entities. Now, let's say that (v) is true and macrophenomenal properties are causally efficacious too. Again, we can ask: In relation to what are they causally efficacious? If this is an account of mental causation that is worth having (i.e., an explanation of the kind of phenomenon that is at stake in the mental causation debate), the relevant effects must be *macro-level physical effects* (e.g., water-drinking behaviour upon feeling thirsty). However, unless macro-level physical effects and micro-level effects are identical, there is a gap in this explanation. That is, (iii) gives us efficacy for micro-level effects, but (v) is a claim about efficacy for macro-level effects.

Second, there is a sense in which the posit of the constitution relation in (iv) that is doing the heavy work in this explanation is unsatisfactory. To appreciate this, let's consider what kind of a relation this constitution relation might be. It cannot be *identity*: microphenomenal properties are *not* macrophenomenal properties. After all, panpsychists maintain that the conscious experiences of the elementary particles are very different from our conscious experiences. ²⁶ If identity is not an option, another candidate is non-categorical grounding: microphenomenal properties non-categorically ground macrophenomenal properties. While microphenomenal properties *categorically* ground the dispositions of their bearers (i.e., elementary physical particles), at the same time, they *non-categorically* ground macrophenomenal properties of ordinary creatures like us. The proposal is that this non-categorical grounding relation gives the desired causal efficacy to the macrophenomenal.

My worry with the non-categorical-grounding version of constitutive Russellian panpsychism is that while, *per impossibile*, identity would have done the job in a way that would favour Russellian panpsychism over dualism, a non-categorical grounding relation in question does not have this capacity. This is because emergentist/interactionist dualists do (at least) as well as this in their explanation of mental causation. When they explain mental causation, they postulate psycho-physical laws that give a direct role to macrophenomenal properties. Critics may argue that this is not an overwhelmingly satisfying explanation of mental causation. But by the same token, I think dualists have every reason to argue that Russellian panpsychists' explanation is not very satisfying either. In any case, while dualists posit brute psycho-physical laws, Russellian panpsychists posit brute constitution relations.

One might respond: Russellian panpsychists are not positing constitution as an additional *sui generis* relation. We have reasons to think that there is such a relation and that its instances are ubiquitous (statutes are constituted by lumps, houses are constituted by bricks, molecules are constituted by atoms, etc.). But by the same token, dualists are not positing laws as an additional category to our ontology just to explain mental causation. We have reasons to think that there are laws, and they are

²⁶ See Goff (2017, p. 19). Of course, on the assumption that constitution is not identity, my point is even more obvious. I remain uncommitted to this assumption (or its denial).



ubiquitous. For what it is worth, the categoricalist component of their view means that Russellian panpsychists cannot dispute this. So, at best (i.e., if all of the problems I raised above can be solved), Russellian panpsychism and dualism are on a par in explaining mental causation.

Another objection might go as follows. The non-categorical grounding relation that constitutive Russellian panpsychism posits is meant to be intelligible. After all, if microphenomenal properties non-categorically ground macrophenomenal properties, there is no gap, so to speak between microphenomenal properties and macrophenomenal properties. But note that if this is true for non-categorical grounding, it is also true for psycho-physical laws: appealing to such laws leaves no gap. In fact, explanation by laws is a paradigmatic form of explanation. In any case, as I have highlighted above, the framework of categoricalism (that the Russellian panpsychist is committed to simply by taking microphenomenal properties to be categorical properties) is friendly to explanation in terms of laws. Now, the fact that there are psycho-physical laws may be brute—which is the main claim of the emergentist brand of dualism after all.²⁷ But likewise, the fact that there are non-categorical grounding relations between certain entities may also be seen as brute. This does not mean that there is any problem with explaining something by appealing to a non-categorical grounding relation. But likewise, there is nothing wrong with explaining something by appealing to laws. Thus, both constitutive Russellian panpsychism and the emergentist brand of property dualism have unexplained explainers, and all else being equal, if one works, there is no reason to think that the other should not.

That said, there is still something unsatisfactory about the proposal that microphenomenal properties non-categorically ground macrophenomenal properties in such a way that macrophenomenal facts should be completely transparent to someone who possesses the knowledge of all the microphenomenal facts. Now, one might complain that I am merely restating the so-called combination problem: How do conscious experiences of elementary particles combine to yield the conscious experiences of ordinary creatures like us? In other words, the problem is not really the problem of explaining mental causation or not; the problem is the combination problem, and panpsychists are very much aware of this problem.²⁸

However, this complaint is not warranted. I am not *merely* restating the combination problem. Traditionally, the combination problem is acknowledged as a problem for panpsychism *after* the fact that panpsychism has already been presented as a promising solution to the mind-body problem. In the case of Russellian panpsychism, the official narrative is that this theory is a promising theory partially because it offers us an intelligible explanation of mental causation. Then it is acknowledged that panpsychism suffers from the combination problem. That is, it is as if a theoretical advantage of panpsychism is that it explains mental causation, while a disadvantage is that it suffers from the combination problem. I do not know how to keep the score, but one might say that the advantages and the disadvantages work towards cancelling each other out in this narrative (or perhaps, the advantages might outweigh the disadvantages). But note that if I am right, this narrative is mistaken. The success of the



²⁷ See, for example, Alexander (1920, p. 46), and Broad (1925, p. 59).

²⁸ See notes 9 and 10 above.

explanation of mental causation in question, i.e., the alleged advantage of Russellian panpsychism, is *already* threatened by the combination problem, in which case there is not a theoretical advantage of panpsychism to begin with. Thus, Russellian panpsychists cannot separate the combination problem from their explanation of mental causation

4 Concluding Remarks

The arguments of this paper leave the proponents of the causal argument for panpsychism with a dilemma: *either* the explanation of mental causation that Russellian panpsychists offer is not an explanation of the right kind of phenomenon that is at stake in the mental causation debate (because it explains micro-level mental causation, not macro-level mental causation), *or* it is an explanation of the right kind of phenomenon, but (at least) equally satisfactory explanations are available to dualists too. Either way, we are not given an account of mental causation that puts panpsychism in a more credible position than that of dualism.²⁹

Declarations

Conflict of Interest The author has no conflicts of interest to disclose.

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