

Russellian Physicalism and Protophenomenal Properties

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1. Introduction

According to Russellian monism, phenomenal consciousness is constituted by *inscrutables* (Montero 2010): intrinsic properties that categorically ground dispositional properties described by fundamental physics (Alter and Nagasawa 2012, Chalmers 2013, Alter and Pereboom 2019). Lately, Russellian monism has attracted considerable interest. This is partly because it is thought to have distinctive theoretical benefits with respect to both the hard problem of consciousness and thorny issues concerning mental causation (Chalmers 2013).¹ The recent interest is also partly due to the fact that the theory comes in a physicalist variety (Stoljar 2001, Pereboom 2011, Coleman 2015, 2016, Montero 2015). On *Russellian physicalism* (Chalmers 2013, Montero 2015), *inscrutables* are *physical* properties. The hope is that Russellian physicalism might eventually provide a more satisfying physicalist picture of the place of consciousness in nature than traditional physicalist views do.

However, Kevin Morris (2016) and Christopher Devlin Brown (2017) see a problem lurking. For Russellian monists, *inscrutables* are among the world's fundamental properties (at least, they are no less fundamental than any other properties).² For physicalists, no fundamental property can be 'experience specific', where a property P is *experience specific* if P's relationship to experience individuates P, that is, if that relationship makes P the property it is (Morris 2016;

¹ But see, for example, Howell 2015, Kind 2015, Ney 2015.

² Henceforth we will assume that some properties are fundamental. But see Schaffer 2003.

cf. Wilson 2006). Following Barbara Gail Montero (2015), Morris and Brown contend that any theory that posits experience-specific fundamental properties is not what she calls a ‘full-blooded form of physicalism’ (Morris 2016, p. 183; Montero 2015, p. 210) — or as we will put it, no such theory is *genuinely physicalist*. And, according to Morris and Brown, inscrutables threaten to be experience specific. There thus seems to be a problem for theorists who wish to combine Russellian monism with physicalism. Russellian monists posit inscrutables. But if inscrutables are experience specific, then positing them is incompatible with genuine physicalism.³

We will argue that the problem Morris and Brown see is illusory. The alleged problem traces to an assumption that Russellian physicalists can and should reject: the assumption that inscrutables must be individuated by their grounding roles, that is, by their roles in constituting phenomenal properties or categorically grounding dispositional properties.⁴ If our argument is sound, then the promise of Russellian physicalism remains undiminished.

2. *The Morris–Brown Argument*

Why do Morris and Brown think that inscrutables threaten to be experience specific? Russellian physicalists construe inscrutables as *protophenomenal* properties, which David J. Chalmers characterizes as follows:

³ Morris 2016 and Brown 2017 are largely responses to Montero 2015.

⁴ We follow Morris 2016 in using ‘grounding’ for both of these roles, despite the differences between property constitution and categorical grounding.

...*protophenomenal* properties are special properties that are not phenomenal (there is nothing it is like to have a single protophenomenal property) but that can collectively constitute phenomenal properties, perhaps when arranged in the right structure. (Chalmers 2013: 259; italics in original).

Because protophenomenal properties are non-phenomenal, they might not seem to be experience specific. But according to Morris and Brown, the experience specificity of protophenomenal properties is entailed by certain possibilities that Russellian monists standardly accept, namely:

...the possibility of ‘bare structure’ (worlds with the same dispositional and relational character as the actual world, but with no inscrutables grounding that structure) as well as the possibility of what might be called ‘swapped inscrutables’ (worlds with the same dispositional and relational character as the actual world, but with a different distribution of experience — including worlds without any experience — in virtue of instantiating different inscrutables).⁵ (Morris 2016: 184)

Morris argues for the entailment as follows. Consider first a world of bare structure. The possibility of such a world shows that protophenomenal inscrutables are not needed to ground

⁵ The sort of possibility Morris (2016: 187, fn. 11) and Brown (2017: 35) have in mind is *metaphysical* possibility, that is, possibility *tout court* (Kripke 1972).

the actual world's 'dispositional and relational character', that is, its structure. Rather, such inscrutables are needed only to ground experience. Morris writes,

...if the structure of the world could exist as it is ungrounded, the inscrutables are needed specifically to ground experience in the actual world, and...it is in this capacity that they differentiate our world from the world of bare structure. (Morris 2016: 186)

Thus, although protophenomenal inscrutables would, in the actual world, ground both experience and structural properties, the possibility of a bare-structure scenario implies that their role in grounding structural properties is contingent and therefore not individuating (Morris 2016: 186–87). By contrast, their role in grounding experience is indispensable, and hence individuating, as the same possibility indicates.

Morris supports his reasoning with a Kripkean (1972) creation metaphor:

...[W]hy should God have created the inscrutables that are instantiated in the actual world? If worlds of bare physical structure are possible, God did not need to create the inscrutables in order to create the entire dispositional and relational character of the world... Rather, the answer appears to be experience-relevance: God created a world with the inscrutables because without them the world would be devoid of experience. In this sense, if worlds of bare structure are possible, the inscrutables in the actual world are experience-specific, despite grounding the structure of the world... (Morris 2016: 186)

Morris's argument concerning swapped-inscrutable scenarios parallels his argument concerning bare-structure scenarios. Thus, according to Morris, if worlds of bare structure or swapped inscrutables are possible, then protophenomenal inscrutables are experience specific. And if protophenomenal inscrutables are experience specific, then Russellian physicalism is not a genuinely physicalist view.

Brown endorses Morris's reasoning and adds complimentary points. In particular, he argues that the Russellian physicalist faces a dilemma. The protophenomenal properties she posits are either experience specific or they are not. If they are experience specific, then any theory that posits them is not genuinely physicalist. But if they are not experience specific, then the Russellian physicalist is unable to give the familiar Russellian-physicalist response to the conceivability argument (Chalmers 2002) — a damning result, since enabling that familiar response is widely considered one of Russellian physicalist's principal advantages over non-Russellian versions of physicalism. Let us explain.

The first horn of Brown's dilemma is not a new move: all genuinely physicalist theories reject experience-specific fundamental properties. But the second horn needs elaboration. The conceivability argument employs something like the following premiss:

(CZ) Zombie worlds — consciousness-free worlds that are physical duplicates of the actual world — are ideally conceivable.

The familiar Russellian physicalist response to the conceivability argument is to reject (CZ), by arguing as follows:

Consciousness-free words that are mere *structural* duplicates of the actual world might well be ideally conceivable. But consider what a complete *physical* duplicate of the actual world would entail. Such a world would duplicate not only the actual world's structural features, but its protophenomenal features as well. And on Russellian physicalism, it follows that such a duplicate world *would* contain consciousness if the actual world does. So, (CZ) is false.

According to Brown, the Russellian physicalist can give that response only if protophenomenal properties are individuated by their role in grounding consciousness, thus rendering them experience specific. His reasoning could be stated as follows. Suppose protophenomenal inscrutables are not individuated by their role in grounding consciousness: although protophenomenal inscrutables happen to ground consciousness, doing so does not make them the properties they are. In that case, there is no guarantee that a world duplicating all actual protophenomenal-and-structural properties would contain consciousness, even assuming Russellian physicalism is true. That is, if protophenomenal inscrutables are not individuated by their consciousness-grounding role, then a world that duplicated not only the actual world's structural properties but its protophenomenal inscrutables as well might lack consciousness, unlike the actual world (as the Russellian physicalist envisages it). For if protophenomenal inscrutables are not individuated by their consciousness-grounding role, then they could be instantiated in worlds where they do not ground consciousness. But in that case the familiar Russellian physicalist response to the conceivability argument would be unavailable. Thus, Brown

concludes, if the Russellian physicalist construes inscrutables as protophenomenal properties, then either her theory is not genuinely physicalist or she cannot give the familiar Russellian physicalist answer to the conceivability argument, thus sacrificing one of the theory's main purported advantages.

3. *Individuating Protophenomenal Inscrutables*

The move in the Morris–Brown argument we wish to question concerns the inference from the possibility of bare-structure or swapped-inscrutables worlds to the experience specificity of protophenomenal inscrutables (we will return to Brown's reflections on the conceivability argument subsequently). That reasoning seems to involve the following steps. First, those possibilities entail that protophenomenal inscrutables ground the actual world's structure only contingently (if at all) and thus such inscrutables are not individuated by that grounding role. Second, therefore protophenomenal inscrutables are individuated by their role in grounding experience. But what justifies that second step?

Morris and Brown suggest that the possibility of bare-structure or swapped-inscrutables worlds shows that protophenomenal inscrutables play an indispensable role in grounding experience. But it is hard to see why that indispensability claim, by itself, would justify the second step in their reasoning. The claim that protophenomenal inscrutables are indispensable when it comes to grounding experience might justify a conclusion regarding how *experiences* are individuated, namely, that it is part of what experiences are to be protophenomenally grounded. But the second step in Morris and Brown's reasoning concerns how *protophenomenal inscrutables*, not experiences, are individuated. And, generally, pointing out that property *x* is

indispensable to the instantiation of property *y* does not show that it is part of what *x* is, part of what individuates *x*, that *x* grounds *y*. So, there is a lacuna in Morris and Brown's reasoning. To fill that gap, Morris and Brown would seem to be assuming something like the following claim:

(G) Protophenomenal inscrutables are individuated by one or both of the grounding roles Russellian physicalists ascribe to them, that is, by their roles in grounding experience, structure, or both experience and structure.

If true, (G) would justify the second step in Morris and Brown's reasoning, of moving from 'protophenomenal inscrutables are not individuated by their role in grounding structure' to 'protophenomenal inscrutables are individuated by their role in grounding experience.'

However, (G) is doubtful. This is so even if the reference of 'protophenomenal' is fixed by one (or both) of the grounding roles (G) mentions, as Chalmers seems to do in the passage quoted above. For comparison, consider that even if Leverrier fixed the reference of 'Neptune' by Neptune's role in causing perturbations in Uranus's orbit, it does not follow that having such effects is part of what *individuates* Neptune (Kripke 1972). This is the key point: protophenomenal inscrutables need not be individuated by *any* roles they play, let alone by the grounding roles mentioned in (G). Instead, they might be individuated just by what they are in themselves, that is, by their intrinsic natures — natures that might be physical and not experience specific.

Rejecting (G) is not an *ad hoc* maneuver. On the contrary, the assumption that inscrutables must be individuated by their grounding roles is *antithetical* to Russellian monism.

It is central to Russellian monism that inscrutables are not simply role players, at least not in the way that (G) suggests (Alter and Nagasawa 2012, Chalmers 2013, Coleman 2015, Alter and Pereboom 2019). This is true no less for Russellian physicalism than for non-physicalist varieties of Russellian monism. And importantly, the point applies equally to both of the grounding roles protophenomenal inscrutables are said to play. Russellian physicalists should reject the claim that protophenomenal inscrutables are individuated by their experience-constituting roles not just because they are *physicalists* but also because they are *Russellian monists*. On Russellian monism, inscrutables are not individuated by their grounding roles, period, including not only their role in grounding structure but also their role in grounding experience.

There is no consensus among Russellian physicalists on what exactly the intrinsic natures of protophenomenal inscrutables are or how exactly those inscrutables ground experience or structure (that is, on how protophenomenal inscrutables collectively constitute phenomenal properties or on how they categorically ground physical dispositions). But two points should be noted. First, on Russellian physicalism, it is *in virtue of* those intrinsic natures, whatever they turn out to be, that inscrutables play their grounding roles.⁶ Second, on the proposals Russellian physicalists have actually made regarding those intrinsic natures, protophenomenal inscrutables are not individuated by their grounding roles. Consider two examples. Derk Pereboom (2011, pp.

⁶ Morris (2016: 188-89) and Brown (2017: 39, 41) seem to lose sight of this point when they compare protophenomenal properties to Howell's 'schmairs', which 'are just like chairs, except that when zombies sit in them they are suddenly conscious. This is just a brute disposition of schmairs' (Howell 2009: 93-4). Positing such a brute disposition is anathema to Russellian physicalists, who posit protophenomenal properties partly to *explain* how consciousness arises from physical phenomena.

97–100), suggests that a protophenomenal inscrutable might be *perfect solidity*, the categorical basis for the dispositional property of impenetrability (a view he finds in Locke’s writings).⁷ Sam Coleman (2015, 2016) suggests that protophenomenal inscrutables might be identified with the *qualities* posited by panqualityism: such qualities are akin to those we perceive, such as redness, but are not themselves phenomenal properties (panqualityism’s qualities resemble what Chalmers (2006) calls *Edenic* properties). Although on both proposals protophenomenal inscrutables are ascribed roles in grounding structure and experience, on neither proposal are protophenomenal inscrutables individuated by those roles — they are individuated by what they are in themselves. Both proposals are compatible with protophenomenal inscrutables playing the grounding roles they do only contingently. For example, even if in the actual world perfect solidity—whatever that property turns out to be intrinsically — grounds impenetrability, perhaps there are possible worlds in which perfect solidity does not play that particular grounding role. Perhaps there are possible worlds in which perfect solidity does not play any grounding role at all. At least, such combinations of views do not seem inconsistent.

We are not suggesting that the Russellian physicalist *must* maintain that protophenomenal inscrutables could be instantiated without grounding structure or experience, but only that she *can* do so. She can do so because, on her view, protophenomenal inscrutables are individuated by their intrinsic natures, not by their grounding roles. And if such inscrutables could be instantiated without grounding experience, then grounding experience clearly does not individuate them. Individuating physical inscrutables by their intrinsic natures, rather than their

⁷ Morris (2016: 184, fn. 9) mentions Pereboom’s proposal.

grounding roles, requires a somewhat expansive notion of the physical. But the Russellian physicalist would not regard that consequence as a drawback. On the contrary, from her perspective traditional physicalist theories err precisely in limiting the physical to properties that can be fully explicated by roles they play in causal spatiotemporal structure (Stoljar 2001).

We could summarize our criticism by saying that the Morris–Brown argument rests on a false dilemma: assuming protophenomenal inscrutables must be individuated either by their role in grounding experience or by their role in grounding structure. A third alternative, of individuating protophenomenal inscrutables by their intrinsic, non-phenomenal natures, is a natural one for the Russellian physicalist to take. Indeed, it seems misleading to describe that alternative account as merely optional: it is arguably a core part of the view (Pereboom 2011: 110, Alter and Pereboom: section 4.3). In any case, if the view is so understood, then it faces no threat from the claim that inscrutable-swapping scenarios or bare-structure scenarios are metaphysically possible, at least no threat of the sort Morris and Brown develop. Those possibilities might well entail that protophenomenal inscrutables are not individuated by the roles they play in grounding physical structure. But the possibilities do not entail, or even suggest, that protophenomenal inscrutables must be individuated by their role in grounding experience. Instead, they can be individuated by their intrinsic natures, which might be genuinely physical.

The same point undercuts Brown's contention that construing inscrutables as protophenomenal properties enables Russellian physicalists to answer the conceivability argument only if those protophenomenal inscrutables are experience specific. It is true that the Russellian physicalist's response to the conceivability argument (her rejection of (CZ) above) depends on her claim that in the actual world protophenomenal inscrutables collectively

constitute phenomenal properties, perhaps when appropriately structured. But she need not add to that claim that playing that role, of constituting phenomenality, *individuates* protophenomenal properties. She can reject that individuation claim in favor of the sort of approach that Russellian physicalists actually take: individuating protophenomenal inscrutables not by their grounding roles but instead by their intrinsic natures.

Morris and Brown refer to the ‘purpose’ of the Russellian physicalist’s inscrutables, and Morris refers to why they are ‘needed’ as posits (Morris 2016, 186–87, Brown 2017, 38–40). One could formulate their main concern as the claim that protophenomenal inscrutables are experience specific because they have a consciousness-related purpose (though neither Morris nor Brown do so). But we can distinguish two claims that could be expressed by the sentence, ‘Protophenomenal inscrutables have a consciousness-related purpose’: (i) it is built into the nature of protophenomenal inscrutables, i.e. it is part of their individuation conditions, that they play a consciousness-grounding role; and (ii) the Russellian physicalist posits protophenomenal inscrutables with the theoretical goal of accounting for consciousness. Although (i) entails that protophenomenal inscrutables are experience specific, (ii) does not. And the Russellian physicalist is committed only to (ii).

4. *Conclusion*

Thus, the Morris–Brown argument fails. The possibility of bare-structure or swapped-inscrutable worlds does not indicate that protophenomenal inscrutables are experience specific. For all Morris and Brown say, the Russellian physicalist can construe inscrutables as protophenomenal properties without undermining the physicalist credentials of her theory. Notably, neither Morris

nor Brown regards the problem they allege for Russellian physicalism as insoluble. Indeed, both suggest possible solutions. Morris (2016: 195–96) suggests that Russellian physicalists might conceive of inscrutables and physical structure as being related by metaphysical necessity. Brown suggests that,

...physical inscrutables must be apt for the generation of higher-level subjectivity, but *not at all uniquely apt*. They must be equally apt to generate all other higher-level properties, for instance solidity or opacity. (Brown 2017: 41–42)

Though intriguing, both suggestions still reflect the assumption that physical inscrutables must be individuated by some or other grounding role they play, either in the actual world or across other possible worlds—an assumption that, we have argued, Russellian physicalists can and should reject.⁸

References

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