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Russellian Physicalism Barbara Gail Montero

According to David Chalmers (1996, 2002, 2010) the conceivability argument against physicalism is, by and large, successful. In outline, this argument asks us to first conceive of a world that, although just like ours at the level of fundamental physics, lacks consciousness. It goes on to claim that a world matching this conception is logically possible and concludes that consciousness is not physical. Most accept that if it is possible for there to be a world that duplicates the fundamental properties of physics without duplicating consciousness, then consciousness is not physical. And many accept that we can in some sense conceive of such a world. The controversial part of the argument is the move from conceivability to possibility. Yet, according to Chalmers, when we are very careful about what is to count as conceivability, this move also is valid. Physicalism about consciousness, then, says Chalmers, must be rejected.

Or rather, it must *almost* be rejected. This qualification arises because "Russellian monism," characterized roughly by Chalmers (2002, p. 265) as the view that "consciousness is constituted by the intrinsic properties of fundamental physical entities" falls through a loophole in the antiphysicalist conceivability argument. For it may be, he thinks, that when we conceive of the fundamental physical world we fail to conceive of its intrinsic properties. Yet if Russellian monism is true, consciousness depends on these intrinsic properties, and because of this, a world that duplicates our fundamental physics

without duplicating these properties may be a world without consciousness. The most, then, that even the best conceivability argument can conclude, Chalmers tells us, is either physicalism is false or Russellian monism is true (2010).

Is this good news for the physicalist? One might think so, but not Chalmers. Although he thinks that Russellian monism "may ultimately provide the best integration of the physical and the phenomenal within the natural world" and that "there appears to be no strong reasons to reject the view," he argues that it "has much in common with property dualism, and that many physicalists will want to reject [it]" (2010). He suggests that "while the view arguably fits the letter of materialism, it shares the spirit of antimaterialism" (2002, p. 265).

I aim to show that this escape clause in the conceivability argument is more significant than Chalmers indicates since there is a variation of Russellian monism, what I refer to as "Russellian physicalism," that falls through the loophole yet is fully physicalistic.¹

Of course, physicalists who never saw conceivability arguments as bad news in the first place may have little interest in the prospects of Russellian physicalism. As they see it, not even the most careful type of conceivability can result in knowledge of (or even very good evidence for) the possibility of worlds that duplicate our physics, yet lack consciousness (e.g. Churchland 1996). But, still, these physicalists should take heed of Russellian physicalism since even if the conceivability of worlds that duplicate our physics yet lack consciousness, or what I shall refer to as "zombie worlds," is not a guide

¹ Cf. Montero (2010).

to their possibility, such worlds may be possible nonetheless.² Or at least, to show that they are not possible is a great deal more difficult than to show that conceivability provides neither knowledge of nor good evidence for them. Yet Russellian physicalism can be consistently maintained, even if some of these physicalists' worst zombie-riddled nightmares depict a possibility.

I shall begin with a general description of Russellian monism that, although differing from Chalmers' description in some points, remains neutral as to whether the view is antiphysicalistic in spirit. I go on to explain why this view escapes the conceivability argument (even assuming that conceivability implies possibility) and then argue that when the details of Russellian monism are filled in in a certain way, the view throws off its antiphysicalistic clothing and turns into a full-blooded form of physicalism: Russellian physicalism. In preview, I argue that since Russellian physicalism takes the fundamental grounds of everything to be neither mental nor specifically for the purpose of generating mentality it should rightly count as a form of physicalism.

I. Russellian monism

As Chalmers tells us, Russellian monism takes its inspiration from Bertrand Russell's view that fundamental physics tells us only about the structure of the world, about the abstract relations between things but not about the things themselves. In Chalmers' words, "current physics characterizes its underlying properties (such as mass and charge) in terms of abstract structures and relations, but it leaves open their intrinsic natures" (2002, p. 259). From physics we learn how mass behaves—we learn that a body

² My use of the phrase "zombie worlds," is atypical, as it usually means worlds that are identical to ours in every respect save for their lack of consciousness. I shall say a bit about zombie worlds in this other sense towards the end of section III.

with greater mass has more inertia, that the mass of a body does not vary with changes in gravity and so forth—but not what mass is apart from a set of behaviors. From physics we learn that opposite charges attract each other, that like charges repel, that the net charge of any isolated system never varies, but we do not learn what charge is, itself, apart from what it does. Form physics we come to understand the nomological or causal role of properties, but not the nature of properties themselves. Russell (1959/1995) puts the view thus: "All that physics gives us is certain equations giving abstract properties of their changes. But as to what it is that changes, and what it changes from and to—as to this, physics is silent" (p. 18). Or as Galileo famously said, the book of nature is written in the language of mathematics.

According to the Russellian monist, however, nature itself consists of more than abstract relations; for in addition to the relations, there are the things that stand in relation to each other. Besides laws, says the Russellian monist, there is something for the laws to describe. It is difficult to say much about these first order properties, the properties of nature itself, since it is not just in physics, but in all arenas, that we explain things in terms of their relations to other things. To explain something is to describe what it does, how it affects us, and how it is related to other things. If you ask me what, say, a cantelever bridge is, I shall tell you that it is a bridge that juts out on each side from a support on that side. As opposed to a suspension bridge, or a beam bridge, it would not fall down if you were to cut it in half in the middle, and so on. But although the properties that concern the Russellian do something—according to the Russellian they form the determination base for consciousness— there is more to them than what they do. They not only do something, they also are something.

But what are they? Chalmers and others refer to them as the intrinsic properties of fundamental physical entities, but I am hesitant to use this terminology. What is an intrinsic property? Many understand the notion along Lewisian lines whereby "an intrinsic property of *a*" is a property *a* would have whether or not anything else besides *a* existed (Langton and Lewis, 1998). But, arguably, physics tells us about intrinsic properties. For example, a positively charged particle existing all alone in an empty universe has the property of being such that if it were in a world with physical laws x, y, and z, (where x, y, and z describe the laws of our world) and with entities and properties u, v, w (where u, v and w describe the other entities and properties of our world), it would be attracted to a negatively charged particle. This property counts as intrinsic on the Lewisian definition yet, arguably, is revealed by physics.

Chalmers tells us, however, that by "intrinsic properties" he means "the categorical bases of fundamental physical dispositions." On the simple conditional interpretation of dispositions, when we learn of an object's dispositional properties we learn about what an object will do in various circumstances. For example, when we find out that a sugar cube is soluble, we learn that it has the property of being such that if it were placed in water (of a certain temperature for a certain amount of time) it would dissolve.³ Categorical properties ground dispositional properties and, presumably, for the Russellian, the categorical properties of the fundamental dispositional properties of physics ground consciousness.

But I am also hesitant to rely on the categorical/dispositional distinction to clarify the Russellian position since, if "categorical" is supposed to imply not

³ For an argument that this understanding of dispositions is inadequate, see Martin (1994). As I am ultimately not going to rely on the dispositional/categorical distinction, I leave the question of how to understand these notions correctly to the side.

dispositional, it is unclear whether there are any categorical properties. For example, the purported categorical property that is supposed to ground, say, the top quark's mass, would seem to be *disposed* to give it this mass and the fundamental dispositional properties of physics, which according to the Russellian ground consciousness, would seem to be *disposed* to do so.

Though no doubt much more could be said in defense of relying on either the notion of intrinsicality or categoricty in formulating a Russellian view, these notions, as I see it, are not needed since what is significant for the Russellian monist is that there is some aspect of the fundamental world—that is, some aspect of the fundamental properties given to us by physics—that grounds consciousness, yet about which physics is silent (perhaps not permanently, but for the foreseeable future). So to highlight this, let me call the properties of the fundamental world, which, according to the Russellian, are not revealed by physics yet ground consciousness (perhaps as well as other things), "inscrutables." Chalmers seems to accept both the Russellian picture of physics and the idea that consciousness may be determined (in part) by inscrutables. But, as I shall go on to argue, once he does this, he has admitted that physicalism, both letter and spirit, might be true.

II. How Russellian Monism Slips Through the Loophole

As Chalmers (2002, 2010) points out, how a Russellian monist avoids the conceivability argument obviously depends on how we understand the argument. Recall that the conceivability argument moves from the conceivability of worlds that duplicate our physics yet lack consciousness to the possibility of such worlds and then concludes

that because such worlds are possible, physicalism is false. The possibility of a world that duplicates our physics yet lacks consciousness is taken as inconsistent with physicalism since "upward determination" is thought of as a necessary condition for physicalism, where upward determination guarantees that any world that duplicates all the fundamental properties of physics of our world also duplicates all properties of our world.⁴ A physicalist view that is consistent with the failure of upward determination thus would escape this argument.

Whether Russellian monism is consistent with the failure of upward determination turns on what we count as the fundamental properties physics. On the one hand, they can be thought of as only the structural properties given to us by microphysics, while on the other hand, they can be thought of as such properties as well as that which is structured (that is, as well as the inscrutables). Only in the former sense is Russellian monism consistent with the failure upward determination; and it is only in the latter sense, according to Chalmers, that Russellian monism "fits the letter of materialism," (2002, p. 265). This latter picture of the fundamental properties of physics results in a Russellian view that wiggles through the antiphysicalist conceivability argument by explaining away the intuition that the failure of upward determination seems possible. The Russellian monist of this stripe may argue that although a world duplicating our physics yet lacking consciousness seems conceivable, this is only because we do not imagine the full story of fundamental physics; if we did (perhaps per impossible) we would see that such a world would contain consciousness as well. On the former view, the intuition need not be explained away; rather it can be accepted as veridical.

⁴ See, however, Montero (2013) for an argument that physicalism does not entail upward determination.

One further clarification of the former view is needed, however, to see why this is so. All Russellian monists think that structure alone does not suffice for consciousness. And all accept that consciousness exists and its existence is determined, at least in part, by what I am calling "inscrutables." But Russellians can differ as to how they understand the relation between inscrutables and the structural properties of physics. A Russellian can think of the fundamental properties of physics as either requiring inscrutables or not requiring them. And the type of Russellian monism that is consistent with the possibility of worlds that duplicate our physics (as thought of as duplicating only the structural properties) yet lack consciousness is the type that does not require consciousnessgenerating inscrutables. In contrast, a Russellian who holds that the structural properties of physics require consciousness-grounding inscrutables explains away the intuition that zombie worlds are possible: the failure of upward determination of consciousness by physics is conceivable, she says, one might conceive of a world which duplicates our physics yet lacks consciousness if one fails to imagine everything that follows from duplicating our physics. (On Chalmers' way of thinking about the issue, the failure of upward determination is conceivable, for this stripe of Russellian monist, because we are conceiving of only the primary intention of the world of physics, that is to say, the structure but not that which is structured.)

In each case, the Russellian has a response to the conceivability argument. However, I would like to highlight the Russellian view that not only has a response to the conceivability argument but also is consistent with the failure of upward determination. That is, I would like to lay out a view that is compatible with the conceivability argument, even assuming that the conceivability of worlds that duplicate our physics yet

lack consciousness implies the possibility of such worlds. Thus, by "the fundamental physical properties," I shall mean just the structural properties of fundamental physics, and I shall assume that these properties do not require consciousness-generating inscrutables.

III. From Monism to Physicalism

So we have a position that Chalmers admits avoids antiphysicalist conceivability arguments. Yet, why does Chalmers, one of philosophy's most eminent antiphysicalists, remain undaunted? The reason is that Russellian monism, as Chalmers sees it, isn't *really* physicalism; it can be called "physicalism," he seems to think, but it isn't the sort of physicalism most purebred physicalists would accept. The issue here, then, at least in his eyes (and in mine too) is not purely terminological: philosophers engaged in the debate over whether consciousness is physical—just like those engaged in debates over whether certain actions are morally acceptable—typically think that there is something at stake over and above our choice of words. And Chalmers, by making a distinction between the letter and spirit of materialism, is, in effect, telling us that merely applying the term "physicalism" to this view is not enough to turn it into the type of physicalism that is worthy of the name.⁵

Russellian monism, according to Chalmers would not be to most physicalists' taste because it, "acknowledges phenomenal or protophenomenal properties as ontologically basic" (2002, p. 265). If inscrutables are themselves phenomenal, Russellian monism turns into a kind of panpsychism, imbuing the fundamental entities of

⁵ One way to understand the debate over physicalism is as a debate over the whether mentality resides at the most fundamental level of reality. (See, for example, Montero 2009, 2001, and 1999 and Montero and Papineau 2005).

physics with mentality. In this case, I agree with Chalmers that this results in a position that is at least in spirit antiphysicalist.⁶

The protophenomenal version of the view, as it does not posit that the fundamental entities are imbued with mentality, does not result in panpsychism. So why should this view be unacceptable to physicalists? Chalmers reasons that even in its protophenomenal form the view, "can be seen as a sort of dualism" since it acknowledges "protophenomenal properties as ontologically fundamental, and it retains an underlying duality between structural-dispositional properties (those directly characterized in physical theory) and intrinsic protophenomenal properties (those responsible for consciousness)" (2002, p. 265). Moreover, he claims that the protophenomenal version of the view retains some of the "strangeness" of the phenomenal version of the view since "it seems that any properties responsible for constituting consciousness must be strange and unusual properties, of a sort that we might not expect to find in microphysical reality" (2002, p. 266).

So as Chalmers sees it, the view should not be to a physicalist's liking since 1) it posits fundamental protophenomenal properties, 2) it is a form of dualism and 3) protophenomenal properties are strange and unusual and not the type of thing we would expect to find in microphysical reality. I think that these last two points can be addressed

⁶ Some see panpsychism as a type of physicalism (Strawson 2006). It is also sometimes said that the Russellian view must be, or at least is best thought of as a version of panpsychism. Daniel Stoljar (2006) argues against this. He tells us that people have thought that Russellian monism entails or at least suggests panpsychism because we derive our concept of categoricity from phenomenal concepts. He then goes on to argue, that even if this is so, it doesn't follow that categorical properties are phenomenal. Citing an example of Kripke's, he says that one might acquire the concept of a duck from seeing ducks in central park, but our concept of a duck need not be limited to ducks in central park. And so it could be, Stoljar claims, with categoricity. Moreover, Stoljar argues, it is unclear that we do derive our idea of categoricity from phenomenality. If a categorical property just is, as he assumes, "a nondispositional property on which dispositional properties supervene," then the notion of categoricity does not suggest phenomenality (2006, p. 119). This seems correct to me and would seem to apply to the concept of "inscrutability" just as well as categoricity. (I argue against thinking of panpsychism as a form of physicalism in Montero 2009, as well as in other papers.)

rather quickly. I do not see dualism, in the sense that there are two fundamentally different sorts of substances or properties, as necessarily antiphysicalistic. If, say, dark matter turned out to be composed of something entirely different from ordinary matter, there would be two fundamentally different sorts of things, but this, I would think, should not pose a counterexample to physicalism. And I think that a physicalist should not reject a view merely because it posits strange and unusual properties of a sort that we would not expect to find in microphysical reality; each new revolution in physics itself brings with it such properties yet these revolutions have not overturned physicalism. The first point, however, is rather more vexing.

Does the protophenomenal version of Russellian monism posit fundamental protophenomenal properties? This turns on what is to count as "protophenomenal." If the protophenomenal is just whatever it is that serves as a dependence base for the phenomenal, then certainly the view does posit such properties. But all forms of nonreductive physicalism hold that consciousness is ultimately determined by nonconscious properties, and so this alone should not make the view physicalistically suspect. On the other hand, if the protophenomenal is supposed to be tainted with the phenomenal, the view may not be to the physicalist's liking, but such a position is more in line with the panpsychist version of the view than the protophenomenal version.

If, however, Russellian monism posits that these nonconscious properties that form the dependence base for consciousness have no other role than that of determining consciousness, Chalmers' suspicions that the view is antiphysicalistic in spirit might seem better grounded. These properties would be protophenomenal because they specifically ground the phenomenal. Typical non-reductive physicalist views are not this

like this. For the typical nonreductivist, the fundamental physical world is the dependence base for everything including consciousness. Yet the Russellian monist, understood in this way, sees the fundamental properties of physics as the dependence base for rocks, trees, chairs, and tables, indeed, everything except for consciousness and sees inscrutables (perhaps combined with the properties of physics) as forming the dependence base for consciousness. Is Russellian monism physicalism manqué after all?

When we understand the position as positing inscrutables that have the sole purpose of grounding consciousness, I think that the answer is not entirely clear. Perhaps if consciousness were merely the result of, say, inscrutables reaching a threshold of complexity, there would seem to be nothing to worry the physicalist. Still, Russellian monism, understood in this way, might be thought of as a borderline case of physicalism, or by some not even as a form of physicalism at all. However, Russellian monism need not be understood as positing specifically consciousness grounding inscrutables. That is, it need not be understood as protophenomenal in the sense of grounding only the phenomenal. Rather, the Russellian can hold that inscrutables form the dependence base for the entire concrete world, only a very small portion of which is mental. The Russellian view of physics leaves us with a highly abstract picture of the world: "Our knowledge of the physical world [i.e. the world described by physics]" Russell tells us, "is only abstract and mathematical" (1946/2004, p.274). Yet, arguably, the world is more than equations; arguably, God, with her infinite wisdom, is not only a pure mathematician but an applied one as well. And on this understanding the Russellian view, inscrutables ground the applications.

If inscrutables are in this way the substance of the world, if they are, to use Stephen Hawking's words, what "breathes fire into the equations [of any possible grad unified theory of physics] and makes a universe for them to describe," they are not uniquely important to the mental and so a world with them should be perfectly acceptable to a physicalist (1988, p. 174). I think that this view—that is, the view that everything, including the mind, is determined in part by inscrutables—is no longer physicalism manqué, but the real McCoy.

This physicalistic version of Russellian monism, the view I call "Russellian physicalism," is consistent with the failure of upward determination of physics since it holds that duplicating just the fundamental physics of our world, which we are assuming is entirely structural, duplicates only more structure and not consciousness. If Russellian physicalism were true, a world that duplicates our fundamental physics yet lacks consciousness would either have inscrutables that differ from those in our world and do not ground consciousness or, perhaps, no inscrutables at all.⁷ These possibilities notwithstanding, Russellian physicalism, I claim, is still a version of physicalism.

Although there is widespread disagreement about how to formulate physicalism, most more or less agree that it entails that all higher-level features of the world are, in some sense, nothing over and above the fundamental features of the world and that all fundamental features of the world are physical. Being nothing over and above is usually explained in terms of a supervenience or determination relation, though finding one such relation that is both necessary and sufficient for physicalism has proved to be no easy

⁷ Is an entirely abstract world possible? I am not sure, but some think it is not only possible, but also actual. See, for example, Laydyman *et. al.* (2007).

task.⁸ However, since the reasons for thinking that the Russellian view is antiphysicalistic have nothing to do with the supervenience or determination relation it employs, but rather concerns the ontological status of inscrutables, let me merely stipulate that the Russellian who accepts Russellian physicalism, holds that all higherlevel properties stand in some relation to inscrutables and structurals such that if inscrutables and structurals were physical, Russellian physicalism would be a veritable physicalism. Structurals, we are assuming, are physicalistically acceptable. But what about inscrutables?

I have said that inscrutables are neither mental, nor for the sole purpose of creating mentality, and so Chalmers' worry that they are either phenomenal or protophenomenal (in any problematic sense) does not arise.⁹ But perhaps there are other reasons for thinking that they pose a threat to physicalism. It may be that some would say that since inscrutables are fundamental features of the world that are not capable of being fully explained by physics, they should not count as physical. To be sure, inscrutables, as I have defined them, are inscrutable, as it were, to physics. But they are inscrutable to a physics that tells us about only the purely structural features of the world. Yet the physicalist who thinks that everything must be explainable by physics is not

⁸ For example, one particularly pressing problem is how to formulate a viable thesis of physicalism that is inconsistent with such things as a necessarily existing god and ontological emergence. For a proposed solution to this problem see Wilson (1999). Another, problem is how to formulate physicalism if there are no fundamental properties. Brown and Ladyman (2009) and Montero (2006) address this issue.
⁹ Why should certain properties, such as fundamental properties that are mental or fundamental properties that are for the sole purpose of creating mentality, count as nonphysical? It may be that certain properties have been deemed physically unacceptable because they hint at a world that was created with us in mind. If mental phenomena were fundamental, being, for example, part of the original brew that was set in motion in the big bang or as emerging as something extra along the way, mentality would have a place of prominence in the world. And this, I think, for many suggests that the existence of a God who was looking out for us. This hint, however, is not an implication and antiphysicalists can be atheists. However, I think that nonphysical properties have gotten their "bad" reputation because on many accounts of God, these are the sorts of properties that would exist, if She were to exist. And the reputation remains, even when its origin is forgotten.

beholden to this notion of physics. Perhaps it is reasonable to think that all physics can and ever will do is provide a structural account of the world. However, given that physics has changed in ways that would have been inconceivable to earlier generations, it seems we should leave open the possibility that physics could, someday in the unforeseeable future, explain both structural and non-structural features of the world. Inscrutables, then, as understood as features of the world that are opaque to a physics that investigates only the purely structural features of the world, may not be opaque to physics understood more broadly as investigating the fundamental aspects of the world, whatever they may be.

Apart from this, it is not even clear that being accountable for by physics, even in this broad sense, should be a necessary condition for counting as physical. Physics is a human endeavor and there seems to be little reason for why a physicalist must think that the physical world is understandable, even in principle, to humans.

Still, someone might object, inscrutables are much more important to explaining consciousness than to explaining tables and chairs, which are fairly well accounted for structurally. Because of this, the objection goes, inscrutables are protophenomenal, after all, since they exist (almost) for the sole purpose of accounting for consciousness. Related to this, perhaps one might even say that that consciousness is the only phenomenon in the world that is dependant only on inscrutables, which clearly makes for special relationship between consciousness and inscrutables. Do these objections bring dualism back into the picture?

I don't think that they do. First of all, it seems reasonable to think that a full account of consciousness is going to involve some structural claims. We want to know,

for example, how consciousness is affected by various anesthetics; we want to know what types of actions, consciousness facilitates, and so on. So I don't think this latter objection poses a problem for a physicalistic Russellian monist. But what about the former? Does a structural account of the world provide a good explanation of tables and so forth? On the account I have limned, it does not. It captures how things stand in relation to tables, but not tables themselves. On this account, a world without inscrutables, would be a purely abstract world, a very thin world, indeed. Of course, it seems to us that our structural explanations are very successful in the nonmental realm; it seems to us once the structure of the world is set, tables come along for free. But this could be simply because it is so obvious to us that tables are concrete objects, we do not even seek to explanation this. Nonetheless, it might be that their being concrete objects is a central feature of their tablehood that cannot be explained structurally.¹⁰

Of course, it is true that most physicalists would reject the idea that protophenomenal inscrutables of this stripe ground consciousness. But they would not do so based on their contention that such inscrutable are nonphysical. Rather, they would reject this idea because most physicalists accept other responses to the conceivability argument (for example, they may think that a clear understanding of the properties of physics would show that consciousness is determined by the properties of physics or they may think that conceivability is not a guide to possibility). However, I have argued that these same physicalists should not say that physicalism is false, if it were somehow shown that Russellian physicalism were true.

If I am correct, there is a version of Russellian monism that is physicalistic through and through. But is this version of Russellian monism also consistent with the

¹⁰ A purely structural explanation would leave a table, one might say, inscru-table.

possibility of zombie worlds? If we equate zombie worlds, as I did earlier, with worlds that duplicate our physics yet lack consciousness, we have just seen that the answer is "yes." Sometimes, however, zombie worlds are thought of as not just duplicating the fundamental properties of physics, but as duplicating everything about our world save for consciousness. Russellian physicalism is not consistent with zombie worlds as such and neither is Russellian monism (of the panprotophenomenal form) since both views hold that once you've duplicated all the properties of the world at a lower level than consciousness (that is, for example, the inscrutable properties, the structural properties, the chemical, biological and neural properties) consciousness comes along for free. However, the Russellian of either of these stripes can explain why we might think that such worlds are possible. According to the panprotophenomenal Russellian monist, when we think that there could be a world just like our world but without consciousness, we are actually imagining a world just like ours yet without protopsychic-inscrutables. If Russellian monism were true, such a world would be possible. The Russellian physicalist has a slightly different response: when we imagine the possibility of worlds that duplicate everything but consciousness, we are actually imagining a world without inscrutables (of the Russellian physicalist stripe) and mistakenly thinking that they are not necessary for tables, chairs, bodies and brains

So it seems that Chalmers' reasons for why we should think that Russellian monism is antiphysicalistic in spirit are either not forceful, as with the accusation that it is a strange view and a form of dualism, or do not apply to Russellian physicalism, as with the accusation that it posits protophenomenal properties that have sole the purpose of grounding consciousness. The version of Russellian monism I have presented does not

posit protophenomenal properties in the sense of properties that have the sole, or even almost the sole purpose of grounding consciousness, but rather posits that consciousness is grounded in the same sort of nonmental phenomena that ground rocks, tables, robots and rockets. Moreover, there seem to be no other pressing reasons for not counting this version of Russellian monism as a version of physicalism. As such, the view is not only in name, but also in spirit physicalistic.

IV But why be a Russellian Physicalist?

I have tried to lay out a physicalistic view of consciousness that is consistent with the conceivability argument in its strongest form. Yet why should anyone accept the view, especially since the question of how inscrutables ground consciousness (as well as everything else) remains. Part of the motivation to accept a panpsychist Russellian view is that it is thought to solve, or at least go a long way toward solving what Chalmers refers to as "the hard problem of consciousness," that is, the problem of explaining how it is possible for creatures like us to be conscious.¹¹ When it is assumed that our fundamental nature is nonconscious this problem is especially pressing, for how can, as Colin McGinn (1989) once put it, "technicolor phenomenology arise out of soggy grey matter."¹² Panpsychism appeals to some because it implies that this soggy gray matter is, at bottom, itself technicolor. There is still the problem of explaining how little bits of

¹¹ Not everyone thinks that panpsychism has this advantage over physicalist solutions to the mind-body problem. (See for example, Block 1980 and Stoljar 2006). I address the question of whether it does in "What Combination Problem?" (forthcoming). But whether it does or not, it still is the case that some are drawn to Russellian monism in its panpsychic clothes because they see it as alleviating the hard problem. ¹² We, of course, now have an answer to this question: Technicolor phenomenology can't arise out of soggy grey matter anymore because the intensive three-strip Technicolor coloring processes that used to be popular is now deemed too expensive.

phenomenality combine to produce the rich unified type of experience that we have, panpsychists see this problem as tractable.

Russellian physicalism does not have panpsychism's advantage of alleviating the hard problem. Rather, it claims that the world is such that we cannot, at least currently, see the solution, for according to Russellian physicalism, consciousness depends on inscrutables, yet inscrutables are just that: inscrutable. As such, Russellian physicalism leaves the explanatory gap wide open. Nonetheless, it has the advantage of not needing to posit consciousness at the ground level, for the explanatory task is only easier for the panpsychist if we can make sense of what this means for fundamental particles to have a conscious aspect.

But why should we accept the view at all? My aim in this paper has been, not to convince you that Russellian physicalism is true, but rather to show that there is version of physicalism that is consistent with the central antiphysicalist intuition that the failure of upward determination is possible. But, in fact, if you accept that the failure of upward determination is possible yet also think that physicalism of one sort or another must be true, I have also presented an argument for the view since Russellian physicalism is, among the current panoply of solutions to the mind-body problem, the only view that allows you to do both.

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