Abstract: In this paper, I propose a way to modify panpsychism in order to avoid its notorious combination problem.

In this paper, I propose a way to modify panpsychism so it avoids the so-called combination problem. In section 1, I present a simplified version of what I take to be the most plausible form of traditional panpsychism; in section 2, I present the combination problem for this version of panpsychism; in section 3, I present a way to modify panpsychism so as to avoid this combination problem; and in section 4, I discuss the proposed solution. Though I present and discuss only one simplified version of traditional panpsychism and its combination problem, the type of modification I propose is generally applicable to more nuanced and complicated versions. In other words, complicating things to make them more realistic does nothing to block my suggestion. Importantly, the main motivations for traditional panpsychism are preserved under my modification.¹

1. Panpsychism

Let’s for simplicity start out by assuming reality is more or less as represented in standard first-order predicate logic:² there are objects and n-place properties, and whenever n objects instantiate an n-place property, that amounts to an atomic fact. Let’s call sub-factual objects or properties (metaphysically) basic just in case their being or instantiations, respectively, have no full metaphysical explanation. Let’s further assume a notion of grounding such that any non-

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¹ See Chalmers (2013) and Goff (2017:6.2.4) for the various versions of panpsychism.
² For simplicity, I ignore quantified facts. Nothing hinges on this.
fundamental fact is ultimately grounded in some fundamental facts, and that a fact is (metaphysically) fundamental just in case it has no ground.  

Let physicalism be the claim that all fundamental facts are physical facts, and that all non-fundamental facts, especially those involving consciousness, are grounded in fundamental physical facts. Physical facts are facts all of whose constituents are physical things, and physical things are things (objects and properties) given to us through contemporary physics not too far down or off its current road.  

Let dualism be the claim that there are both fundamental physical facts and fundamental consciousness facts, where consciousness facts are facts involving consciousness properties, where consciousness properties are properties of experiencing what it's like to be in a state ("qualia"), properties categorically distinct from physical properties.  

Let panpsychism be the claim that all (or just some kind of) basic objects have both basic physical and basic consciousness properties. Perhaps their basic physical properties deal with their extrinsic or relational features and their basic consciousness properties deal with their intrinsic features. Perhaps, in themselves, so to speak, the basic objects are neither solely physical nor solely conscious, but both. This version of panpsychism is thus a form of dualism, but my suggestion below does not hinge on this particular version of panpsychism.  

Note also that all the above assumptions and claims are simplified, but though they will be a bit more complicated further down the road they will do for present purposes. I'm also here only concerned with suggesting a way to  

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3 On the notion of grounding in play, see Fine (2001, 2012), and especially Rosen (2010); for further critical references, and a general discussion of grounding, see Bliss & Trogdon (2014) and Raven (2015). On fundamentality/well-foundedness, see Schaffer (2009); Dixon, (2016); Rabin & Rabern (2016). The need for fundamental facts will be given up at the end of the paper (cf. Bohn, 2018).  

4 There are problems with defining physicalism, especially what it means for something to be physical (see e.g. Crane & Mellor, 1990), but fortunately nothing hinges on this here.  

5 On consciousness properties, see Chalmers (1996:ch.1). Feel free to substitute ‘subjects’ for ‘consciousness properties’ in what follows. Nothing hinges on this.  

6 For different versions of, and arguments for panpsychism, see Nagel (1979), Strawson (2006), Chalmers (2013) and Goff (2017). Note that if, say, my body is a basic object, the above panpsychism becomes less interesting. But let’s here assume my body is not a basic object.
avoid the combination problem on behalf of panpsychism, or on behalf of something close enough to it. I am not concerned with reasons to believe panpsychism or something close enough to it (nor dualism or physicalism) to begin with. However, it's important to note that the main motivations for panpsychism are preserved, namely to place genuine consciousness properties in an otherwise physical reality, to solve for conscious-physical interaction, to do so in a simple way not too far off the naturalistic path, and without invoking the notion of emergence (see below). My suggestion below aims to preserve these motivations (and others), which is important for it to be a viable modification (or sufficiently close relative) of panpsychism, rather than a change of topic.

2. The combination problem
Assume panpsychism is true. Presumably, the basic objects don’t have our kind of consciousness properties, but some simpler ones, so it must be a combination of instantiations of their consciousness properties that ground the instantiations of our kind of consciousness properties. But then the question immediately arises: why do some such combinations of simple consciousness properties ground our kind of consciousness properties, but no other such combinations? Answering this question seems close to as hard as answering how something physical can ground something conscious, and as such it is unclear how much progress we have made by moving from physicalism to panpsychism.7

3. A solution to the combination problem
My proposed solution to the combination problem is simply to avoid it by extending our assumption of reality being more or less as represented in standard first-order predicate logic to reality being more or less as represented in standard first-order plural predicate logic.8 That means, in addition to having the singular facts and sub-factual things (objects and properties) of first-order

7 There are many different versions of the combination problem, none much easier to solve than the others. My modification below avoids them all in one big sweep, including the subject-summing version (Goff, 2017:ch.7). For more on the combination problem, see e.g. Seager (1995), Coleman (2014), Hassel-Mørch (2014), Chalmers (2016), and Goff (2017: ch.7-8).

8 Again, for simplicity, I ignore quantified facts. Nothing hinges on this. For first-order plural logic, see Boolos (1984) and Oliver & Smiley (2013).
predicate logic, reality also contains plural properties and plural facts, where a plural property is a property holding of a plurality of (one or more) objects, and a plural atomic fact is n pluralities (each plurality containing one or more objects) instantiating an n-place plural property. The simplest case is one plurality of n objects instantiating a monadic plural property. So, while in first-order predicate logic we say that an object instantiates a property, in first-order plural logic we say that a plurality (of one or more objects) instantiates a plural property. For example, while it is said in first-order logic that an apple instantiates the property of being on the table, it is said in first-order plural logic that some (one or more) apples instantiate the plural property of being on the table. Just like in singular logic it is on the table, in plural logic they are on the table.

In addition, and importantly for what follows, plural properties can be had in two different ways, namely distributively and collectively. A plurality has a plural property distributively if it holds not only of all of the members of the plurality, but also of each one of them. So, for example, the apples are on the table, all of them and each one of them. A plurality has a plural property collectively if it holds of all of them, but not of any one of them. For example, the apples surround the orange together but no one of them does it alone.

My proposed way to avoid the combination problem is to not treat a basic consciousness property as a property of each one of all (or some) basic objects, and thus face the problem of having to explain how some but not other combinations of them can ground our kind of consciousness properties. Instead, I suggest, treat a basic consciousness property as a basic plural collective property of a plurality of basic objects, namely the plurality of basic objects whose being ground the being of the composite object with our kind of consciousness properties. On this picture, the combination problem does not even arise because the basic consciousness properties instantiated by us are not

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9 I take a plurality of objects to be nothing but those objects.
10 There is also a middle-position here, namely that a plurality has a plural property such that all of them have it together, but not each one of them, and leaving it open whether some of them have it individually, or whether some proper sub-plurality has it (and in what way). I will henceforth ignore this complication. Nothing important hinges on it.
in any way results of but are rather ultimately identical with basic plural collective properties instantiated by pluralities of the basic objects whose being ground our being. More precisely, formally, and in general: if x has a consciousness property M, and the being of x is grounded in the being of yy, then yy collectively has M.\textsuperscript{11} The closest one gets to the combination problem on such a picture is the question why some pluralities instantiate these consciousness properties while others don’t. But since the objects are basic and the consciousness properties are basic that is not only a very different kind of question, but not a very fruitful question, to put it mildly. It is like asking why some basic objects have negative charge while others don’t. There is not much to say, since it is a metaphysically fundamental fact (but more on this below).

I call the proposed solution pluralized panpsychism. Pluralized panpsychism is in many ways a mere restriction on more traditional panpsychism, but to avoid some potential misunderstandings, let me stress what pluralized panpsychism is not.

Pluralized panpsychism is not the combinatorial infusion view of Seager (2010), according to which, roughly, our kind of conscious states are grounded in conscious states of basic objects, but somehow “absorb” those basic states rather than emerge from them.\textsuperscript{12} First of all, according to pluralized panpsychism, there is no such absorption of anything, but rather just a basic (plural collective) property of some basic objects. Second, according to the combinatorial infusion view, consciousness properties are most fundamentally properties of singular objects, not pluralities of objects, but according to pluralized panpsychism, consciousness properties are most fundamentally properties of pluralities of objects, not singular objects.

Pluralized panpsychism is also not any one of the versions of identity panpsychism discussed in Chalmers (2016: 5.3). According to the most empirically informed version of identity panpsychism, the version Chalmers finds the most plausible, namely quantum holism, the objects having consciousness properties most fundamentally are quantum mechanically

\textsuperscript{11} The property M is thus a multigrade property that can take both singular and plural subjects.

\textsuperscript{12} See also Hassel-Mørch (2014).
entangled systems of basic parts of our bodies (the parts relevant for our mentality). But pluralized panpsychism does not claim that the objects instantiating consciousness properties most fundamentally come from the quantum mechanically entangled states of physical particles; it only claims that the objects instantiating basic consciousness properties are most fundamentally pluralities of basic objects. Pluralized panpsychism as such is not taking a stand on the exact plurality of basic objects that instantiate the consciousness properties (more on this below). So, Chalmers’ objections to quantum holism based on empirical and theoretical aspects of quantum mechanics, and his objection to quantum holism based on a mismatch between the structures of quantum entangled states and the structures of our consciousness properties, have little bite here. Pluralized panpsychism simply makes no claim as to quantum mechanically entangled states being the basic objects instantiating consciousness properties; it is simply not an attempt to solve the general problem of the physical correlate of consciousness, which is everyone’s problem. As far as panpsychism is concerned, quantum mechanically entangled states might very well fail to provide the metaphysically basic objects that have the metaphysically basic consciousness properties (though entangled states might be physically basic nonetheless).

4. Discussion
Before we consider some potential objections it's worth noting that pluralized panpsychism preserves the main motivations of panpsychism, namely to place consciousness properties in an otherwise physical reality, solve for conscious-physical interaction, to do so in a simple way not too far off the naturalistic path, and without invoking the notion of emergence. In short, to provide a simple and unified picture of the conscious-physical interaction, without rejecting either consciousness or the physical. Pluralized panpsychism places consciousness properties at the very bottom of reality, as basic properties instantiated by basic objects, just as panpsychism does, so to the extent that the latter succeeds in placing them in nature, the former does too. Likewise, to the extent that panpsychism succeeds in solving for conscious-physical interaction by placing consciousness properties in nature as just mentioned, so does pluralized
panpsychism; and to the extent panpsychism succeeds in doing so in a simple way not too far off the naturalistic path, and without invoking emergence, so does pluralized panpsychism. There is no principled difference here; or so I’ll now argue.\footnote{13 Again, I am only trying to show that pluralized panpsychism is at least as good a theory as panpsychism.}

A plausible way for panpsychism to place consciousness in an otherwise physical nature, in a way that preserves conscious-physical interaction, is to treat physical properties as structural properties, and treat consciousness properties as intrinsic singular properties of individual basic things (cf. Chalmers, 2013; 2016). Then the conscious things can behave physically, so to speak, without violating any laws of physics. Physics simply describe and predict the behavior of the conscious things. But likewise, a plausible way for pluralized panpsychism to place consciousness in an otherwise physical nature, in a way that preserves conscious-physical interaction, is to treat physical properties as structural or relational properties and treat consciousness properties as intrinsic plural collective properties of pluralities of basic things. (Note that just like there are intrinsic singular properties of individual things, so there are intrinsic plural properties of pluralities of things. I’m simply asking you to take this seriously at the basic level as well.) Then, on to this picture, just like according to the more traditional panpsychist picture, the conscious things can behave physically, so to speak, without violating any laws of physics. Physics simply describe and predict the behavior of the conscious things.

With respect to panpsychism, one might worry that consciousness becomes unnecessary in the final description of the world, since physics seems to describe all its behavior whether or not it’s ultimately conscious. But that is forgetting the fact that there is consciousness in the world too, and that it needs to be accounted for in our final theory! The same holds with respect to pluralized panpsychism. One might worry that consciousness becomes unnecessary in the final description of the world, since physics seems to describe all its behavior whether or not it’s ultimately conscious. But, again, that is forgetting the fact that there is consciousness in the world too, and that it needs to be accounted for in our final theory!
While panpsychism seems empirically unfalsifiable, is pluralized panpsychism empirically falsifiable? If it turns out that the pluralities that are supposed to be conscious have in the end no work to be done that isn’t accounted for by their members and their relations to each other, then it might seem their consciousness is empirically redundant, and as such empirically “falsifiable” (in the sense of being unnecessary postulates). But I take it that is a good thing, to be to some extent empirically falsifiable. If it turns out that there is no empirically explanatory need for any pluralities (of two or more things), i.e. our complete empirical story of the world can be told on the grounds of basic individual things and their interrelations, then I think that provides a good reason to move from pluralized panpsychism back to more traditional panpsychism. But note that there might in fact be good empirical reasons to think that *life* is a non-linear property (see Boden, 1996, for some classics), plausibly meaning that it is a plural collective property. But if *life* might be a plural collective property, then plausibly *consciousness* might be so too. In any case, I see pluralized panpsychism’s possible empirical bearings as a virtue rather than a vice.

Some might object that plural properties, unlike singular properties, cannot endow anything with causal powers. But here we need to be careful. Panpsychism does not postulate that consciousness as such causes some physical behavior. That would simply recreate the traditional problem of mental causation as faced by dualism. Rather, the idea is that physical behavior is performed by something conscious in a way that keep them both in the more or less naturalistic picture, i.e. it makes their interaction comprehensible. But with that said, there is also no reason to think that plural properties cannot endow anything with causal powers, especially not plural *collective* properties. Plural collective properties, like singular properties, can be intrinsic, albeit intrinsic to a plurality. They hold of all the members in the plurality together, but don’t hold of any one of them alone (except in the degenerate case of a singleton-plurality), so they can endow the plurality (collectively) with causal powers, but not any one of them alone with (at least not the same) causal powers. There is no relevant and problematic difference here from the singular case. If an intrinsic singular
property can endow an individual with causal powers, then an intrinsic plural property can endow a plurality with causal powers.\textsuperscript{14}

One might object that any basic plural collective property must be an \textit{emergent} property of the whole. But that is just false by definition. The solution proposed on behalf of panpsychism involves basic plural collective properties instantiated by some basic objects. Any such instantiated property is a property instantiated by \textit{those basic objects together}, not a property instantiated by a whole composed of those objects. Importantly, a plurality is just some objects, not a plural object; at least according to pluralized panpsychism.\textsuperscript{15} An emergent property on the other hand is a property whose instantiations have no further metaphysical explanation whatsoever, but whose instantiators' being have a ground, i.e. it is first and foremost instantiated by objects whose being has a ground (cf. Barnes, 2012).\textsuperscript{16} That is just not the case with pluralized panpsychism.

A basic plural collective property is thus simply by definition not an emergent property. But still, in my experience of having presented and discussed pluralized panpsychism on several occasions, even after having been shown that much some nonetheless insist that it is a form of emergence, or at least closer to emergence than non-emergence.\textsuperscript{17} Why? The most sense I have been able to make of it is this. If the members of a plurality are somehow prior to the plurality, then the members must be in place prior to the plurality, and if so, then the plural collective property of the plurality must be posterior to the singular properties of the members. And if so, it is in some sense emergent. But, as already seen, pluralized panpsychism (as well as traditional irreducible plural logic) denies the very first assumption, namely that the members of a plurality are somehow prior to the plurality. A plurality \textit{just is} its members. A plurality and its members (collectively) are just two sides of the same coin. So, a plural

\textsuperscript{14} In any case, the relata of causation are usually taken to be events, not individuals or pluralities of individuals.
\textsuperscript{15} See Boolos (1984).
\textsuperscript{16} Obviously, I am here discussing ontological (and strong) emergence, not epistemic (or weak) emergence. Cf. Wilson, 2015.
\textsuperscript{17} An anonymous referee also insisted on this.
collective property of a plurality just is a plural collective property of the members, and vice versa.

In the much-used picture of creation: when God creates the world, God creates the basic things and their basic properties and relations; the rest comes for free. In the case of panpsychism, this means that God creates the basic things at least some of which has basic singular intrinsic consciousness (among other things); the rest comes for free. In the case of pluralized panpsychism, this means that God creates the basic things at least some of which collectively has basic intrinsic consciousness (among other things); the rest comes for free. The only difference is that in the case of pluralized panpsychism, God needs to think collectively as well as individually when creating the basic things and properties; the rest comes for free.\footnote{Note that a plural collective consciousness thus need be no more emergent than a relation need be. Of course, relations are very different from plural collective properties, and I take it that consciousness cannot simply be a relation.}

For anyone still insisting on pluralized panpsychism being a case of emergent consciousness, I thus have nothing but an incredulous stare to offer at this point.\footnote{Plus introductory literature on irreducibly plural logic; e.g. Boolos (1984) and Oliver & Smiley (2013). In fact, I suspect many objections are due to the objector still not being too familiar with irreducible plural logic, not taking it seriously at the fundamental level, as I am suggesting in this paper (as well as in Bohn, 2012, forthcoming).}

Some might instead object that plural properties cannot be basic. But there is no reason to think that is true. Entangled states in quantum mechanics might even give us an actual case of a basic plural collective \textit{physical} property,\footnote{I’m \textit{not} here saying that consciousness properties are grounded in (or themselves ground, for that matter) entangled states. I’m \textit{only} saying that entangled states might give us an actual case of a metaphysically basic plural collective \textit{physical} property.} so why can there not be basic plural collective \textit{consciousness} properties as well? A claim to the contrary rests on metaphysical prejudices. I think it is about time we take seriously the idea that plural collective properties might be metaphysically basic (see Bohn, 2012).
One might object that pluralized panpsychism is a misnomer, since though it is pluralized it’s not really *pan*, so to speak. Presumably, it’s only the plurality of basic objects that ground a composite object with consciousness properties that have the plural collective consciousness properties, not *any* plurality of basic objects. But if you think it’s a misnomer, call it *psychism*. What’s in a name? Nothing philosophically important hinges on this. But hardly any panpsychist claims that *all* kinds of things have consciousness properties; rather, they claim, at most, that all or just some kinds of basic concrete objects have consciousness properties (cf. Nagel, 1979; Strawson, 2006; Chalmers, 2013). Non-basic concrete objects (e.g. a table) are often not claimed to have consciousness properties; nor do basic abstract objects (e.g. the empty set).

How is pluralized panpsychism different from more traditional accounts of property dualism? Pluralized panpsychism is a version of property dualism, but it is a version that bans emergence, so the two kinds of properties must occur at the metaphysically basic level, on pain of not occurring anywhere at all. That’s what makes it a sufficiently interesting close relative to panpsychism, somewhat worthy of its name.

Pluralized panpsychism seems to entail an unacceptable brute fact of reality as to which pluralities instantiate a basic consciousness property and which don’t. Whence the difference between the two kinds of pluralities? Is it not as objectionably brute a fact of reality as emergent consciousness properties would be? No. The difference between the two kinds of pluralities is *less* of an objectionably brute fact of reality than emergent consciousness properties would be. The bruteness of some basic objects instantiating some basic property is the least objectionable bruteness of all because both things, the objects and the properties, are *basic*; i.e. they have no further full (metaphysical) explanation. In the case of an emergent property there is a non-basic object instantiating a basic property, which immediately raises the question of why the property is instantiated by a *non*-basic object, and why it has no further explanation in terms of some basic objects. No such questions arise in the case of a basic property being instantiated by a basic object.
One might still object that consciousness properties “cry out” for an explanation and claiming that they are plural collective basic properties instantiated by some pluralities of basic objects does nothing to stop that. But note that panpsychism too postulates basic consciousness properties without any further explanation and promises to explain our consciousness properties in terms of those basic ones. They then face the combination problem. Pluralized panpsychism avoids the combination problem altogether by directly postulating our kind of consciousness properties as basic, instead of some we-don’t-know-what kind of conscious properties that are supposed to explain our kind of consciousness properties. Both panpsychism and pluralized panpsychism thus postulate basic consciousness properties; neither of which “cries out” for explanation more loudly than the other.

With respect to these last two worries – the bruteness worry and the “crying out” worry – it’s important to keep in mind what pluralized panpsychism is and isn’t trying to explain. It is trying to explain why our bodies have consciousness properties. It is not trying to explain why there are consciousness properties in reality to begin with. According to pluralized panpsychism, my body has some basic consciousness properties because the objects whose being ground the being of my body has those very same consciousness properties. So, it gives an explanation of why my body has those consciousness properties. On that score, it does better than emergence. But it does not and does not try to explain why there are consciousness properties in reality to begin with; hence its (unobjectionable) bruteness. Again, they are postulated as basic to begin with precisely because they have no further metaphysical explanation!

So far, we have only been concerned with a synchronic explanation of consciousness properties, but there are also potential diachronic worries in the neighborhood. Most generally, one might ask why consciousness arose in the history of the universe, but neither panpsychism nor pluralized panpsychism is trying to answer that question. Both are merely observing that consciousness has in fact arisen and on the basis of that try to explain how consciousness can fit in among all else we know. So, this is no objection to pluralized panpsychism as such. More particularly, one might ask when consciousness arose, and why at that point in time. Panpsychism claims, or at least it should claim that there has
always been some kind of simple consciousness or other around at the basic level, and then try to tackle the combination problem in order to answer when and why more complex consciousness like ours arose. But what should pluralized panpsychism say here? Perhaps most particularly, the question is: why is a basic plurality (e.g. the one that grounds my body right now) sometimes collectively conscious (right now) and sometimes collectively not conscious (before I was born, when it was wildly scattered around)? This might seem all too close to a diachronic version of the combination problem, and if so, it is not clear that pluralized panpsychism has made much progress beyond the original combination problem.

Diachronic issues deserve a follow-up paper of its own but let me here briefly sketch why I don't think it is as problematic for pluralized panpsychism as the original combination problem is for panpsychism. First of all, it is not a problem about emergence, as is the case with the combination problem. Even if the fact that some pluralities are sometimes conscious and sometimes not conscious were a brute fact of the history of the world, it would still not be a fact of emergence, since it would always be a case of basic properties being instantiated by basic objects, which is by definition not emergence.

Second, since this is not a problem of emergence, the where and when of consciousness being a brute fact about the history of the world is arguably not a real problem for pluralized panpsychism. Recall, earlier I claimed that the synchronic question of why some pluralities but not others were conscious had no answer, like why some particles but not others are electrons. It is a fundamental fact about the world, i.e. a matter of basic objects instantiating basic properties. I would likewise claim that the diachronic question of why a plurality is at some times but not at other times collectively conscious most likely also has no answer, like why a plurality of electrons are entangled at some times but not at other times. It is a fundamental fact about the world, i.e. a matter of basic objects instantiating basic (plural collective) properties.

It's here important to keep in mind that the synchronic question and the diachronic question are crucially different questions. While the synchronic question can fixate on a plurality at a time and say of it that it is conscious at that time, the diachronic question cannot fixate on a plurality over time and say of it
that it is conscious across time, because there is most likely no one unique plurality that is conscious across time. For example, our bodies are constantly changing fundamental particles all the time, so consciousness has to be more like a *dynamic process* never depending on one unique plurality for longer than one point in time than a property whose instantiation tracks one unique plurality across points in time.

By analogy, consciousness is more like a dynamic tornado than a static plurality of things. For any point in time you can find a plurality and say of it whether it is a tornado or not at that time, but there is no guarantee that the same plurality will be a tornado at other times; the tornado might have attached to another plurality, so to speak. The same goes for consciousness, though with this difference: being conscious, unlike being a tornado, is at any time a basic property that is attached to basic objects. But consciousness is always an intrinsic collective property of a plurality, in accordance with the initial motivations for panpsychism.

I cannot discuss the many diachronic questions of pluralized panpsychism in this paper, but there is some such story as above to be told that shows that pluralized panpsychism is no worse off than panpsychism in diachronic regards; in fact, I think it’s probably better off. Panpsychism claims (or at least should claim) that some simple kind of consciousness has always been around, which says nothing about when more complex kinds of consciousness like ours come around. Pluralized panpsychism claims (or at least should claim) that complex kinds of consciousness like ours is a fundamental (processual) fact about the history of the world, which also says nothing about when complex kinds of consciousness like ours come around. But the important difference is that in order to legitimately place our kinds of consciousness in the world, panpsychism faces the combination problem while pluralized panpsychism does not.

Some might still object that pluralized panpsychism is *overall* more complicated than panpsychism. But, given all I have said so far, why and how is that so? The most I can make of it is that pluralized panpsychism has yet no physical correlate of consciousness. But who does? I guess we have to wait and see at the end of inquiry which theory is the simplest overall.
Two more things are worth noting before we close up. First, I have not said anything about what kinds of pluralities are conscious and what kinds aren’t. Of course, human beings are not the only kind of creatures that are conscious, many animals are conscious as well; perhaps some plants are too. In fact, it might be that any plurality that is alive is conscious. I wish not to dismiss that idea. It is made somewhat plausible by the fact that life seems to be a plural collective property in virtue of being a non-linear property, as mentioned earlier. That might in turn point us towards the physical correlate of consciousness: life. But pluralized panpsychism does not rest on this idea, which of course at this point is more or less pure speculation. Second, I take consciousness to be a natural kind, a property that carves out a real natural joint in nature. A consciousness property is, I take it, not any kind of mental property that we can have, but a natural kind of property of subjective experience. The taste of an apple is different from the taste of an orange, but what it’s like to experience the taste of an apple versus what it’s like to experience the taste of an orange nonetheless have something in common. I believe such a picture gives consciousness the place in nature it deserves. But, though it perhaps makes things simpler overall, pluralized panpsychism does not rest on any such idea.

Finally, what if there are no basic objects, but just more and more basic objects ad infinitum, without end (cf. Schaffer, 2003; Bliss, 2013; Bohn, 2018)? Then no basic objects could instantiate any consciousness properties because there wouldn’t be any (absolutely) basic objects; so pluralized panpsychism is false, by definition. This objection is perhaps formally correct, but philosophically off track. There is still an interesting version of pluralized panpsychism (and ordinary panpsychism for that matter) in the neighborhood, namely a view we might call gunky pluralized panpsychism. Consider the following instance of a more general principle, which I call the trickling-down principle (TDP; see Bohn, forthcoming), and which I for one find very plausible by virtue of grounding
being a complete and constitutive metaphysical explanation of the being (or obtaining) of something:\textsuperscript{21}

(TDP,): If x has a consciousness property and the being of x is grounded in the being of yy, then yy have that same consciousness property collectively.

If the grounding chain of the being of x has an end (is metaphysically well-founded), then we get pluralized panpsychism as above. If it has no end (is metaphysically non-well-founded), then the consciousness property trickles all the way down \textit{ad infinitum}, without end. In my mind, such a view is at least as plausible as pluralized panpsychism (see Bohn, 2018). In both cases there are consciousness properties all the way down, in the spirit of panpsychism. In neither case is there a combination problem.

Nagasawa & Wager (2016) argues that the possibility of \textit{gunk}, i.e. that everything has a proper part, pushes us in the direction of \textit{priority cosmopsychism}, the view according to which it is the whole cosmos that is basic and conscious.\textsuperscript{22} But, as just pointed out, there is no incoherence in the idea that there is consciousness all the way down. And, in any case, priority cosmopsychism faces the analogous problem of the possibility of \textit{junk}, i.e. that everything is a proper part (see Bohn, 2009a,b; 2012). In such a world, there is no top-level, but consciousness all the way up, \textit{ad infinitum}, without end. Obviously, if there is a problem with there being consciousness all the way down, there is an analogous problem with there being consciousness all the way up. But this discussion must be left for another occasion.\textsuperscript{23}

\textbf{Bibliography}

\textsuperscript{21} I find the general principle plausible for all metaphysically basic properties in place for ‘conscious’ in TDP, not necessarily for all properties whatsoever. See Bohn (forthcoming) for a more detailed discussion of this principle.

\textsuperscript{22} See also Goff (2017: ch.9).

\textsuperscript{23} Thanks to Ben Caplan, David Chalmers, Torfinn Huvenes, Ole Koksvik, Ole Martin Moen, Hedda Hassel Mørch, Michael Rieppel, Sebastian Watzl, audiences at the University of Oslo and Syracuse University, and two anonymous referees.
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