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The Decombination Problem for Cosmopsychism is not the Heterogeneity Problem for Priority Monism

Abstract: In this paper I look at a recent proposal from Yujin Nagasawa and Khai Wager to avoid the decombination problem for the view called ‘cosmopsychism’. The pair suggest that the decombination problem can be solved in the same way that the problem of heterogeneity for Schaffer’s priority monism can be solved. I suggest that this is not the case. They are not the same problem and the solutions to the heterogeneity problem do not work for the decombination problem.

1. Introduction

Panpsychism is the view that ‘all things have a mind or a mind-like nature’ (Skrbina, 2007). In the contemporary literature ‘all’ has been taken to denote (i) fundamental microphysical objects and (ii) correctly structured macrophysical objects; namely, the properly-functioning brains of animals. ‘Mind’ or ‘mind-like’ has been taken to refer to phenomenal consciousness — the ‘what-it’s-likeness’ of consciousness (Nagel, 1974). Panpsychism faces a handful of ‘combination problems’: how can subjects and their experiences be composed of other subjects and their experiences? Faced with this difficulty, many panpsychists are turning to alternatives.
The main alternative to panpsychism is a view that has recently been labelled ‘cosmopsychism’. This view follows the panpsychist creed that ‘all things have a mind’, but instead contemporary cosmopsychists take ‘all’ to refer to (i) the fundamental physical cosmos-as-a-whole and (ii) correctly structured macrophysical objects, *viz.* properly functioning brains. The difference between panpsychism and cosmopsychism is simply a difference in what it is they consider to be the *fundamental entities* of the universe. The panpsychist operates with the assumption of ‘priority atomism’ (the fundamental entities are the microphysical parts of the cosmos) and the cosmopsychist operates with the assumption of ‘priority monism’ (the fundamental entity is the whole cosmos itself) (Schaffer, 2010).

Cosmopsychists have their own combination problem but turned on its head — the decombination problem: how can a subject and its experience decompose into other subjects and their experiences? There has not been a sustained effort to address this problem in the way that there has been to address the panpsychist combination problem, but one such attempt to address it comes from Yujin Nagasawa and Khai Wager (2016).¹

Nagasawa and Wager suggest that the cosmopsychist’s decombination problem can be responded to in the same way that Jonathan Schaffer (2010) responds to the heterogeneity problem for priority monism (if the world is ‘one’, then why is it so heterogeneous in nature). This is because cosmopsychism is simply the conjunction of priority monism and the claim that the fundamental entity is a conscious subject. Because of this, Nagasawa and Wager suggest the responses to the heterogeneity problem for priority monism will work as responses to the decombination problem for cosmopsychism. In this paper I will argue that this is not the case — they are not the same problem and cannot be responded to in the same way.

To do this I will first outline the heterogeneity argument against priority monism, along with the two justifications for the first premise of the argument, Schaffer’s responses to these justifications, and Schaffer’s positive proposals for accounting the heterogeneity of the world. We can think of this as the ‘Schafferian blueprint’ for how the cosmopsychist will respond.

¹ Nagasawa and Wager are not the only cosmopsychists that suggest this method: Philip Goff (2017) in his recent book *Consciousness and Fundamental Reality* also suggests that he may appeal to Schaffer’s method too.
Following this I shall then turn to Nagasawa and Wager’s solution to the problem. I will show that the analogous heterogeneity argument against cosmopsychism fails to disambiguate at least two notions of heterogeneity/homogeneity (amongst other notions relevant to the combination problem), which ultimately renders the two problems (heterogeneity for priority monists and decombination for cosmopsychists) dissimilar. In addition to this, it means that the putative solution turns out not to be a solution after all. Whilst the first version of heterogeneity can be accounted for in the same way that Schaffer suggests, the second version cannot (let alone any others).

2. The ‘False Target’ of the Heterogeneity Problem

Nagasawa and Wager (2016, pp. 120–4) respond to the decombination problem by appealing to Schaffer’s own response to the ‘heterogeneity problem’ for priority monism. Their reasoning is that because cosmopsychism and priority monism are structurally identical, then so too should the problem be, and so too should the solution be. For example, they make claims like the following:

Schaffer (2010, 57) offers a number of possible solutions to the [heterogeneity] problem for priority monism and the same responses can be adapted to answer the derivation problem for priority cosmopsychism. As such, priority cosmopsychism can offer accounts of how the derivation problem might be resolved. (ibid., p. 122)

As a result of priority cosmopsychism sharing a parallel structure with priority monism, we might adopt these strategies in response to the derivation problem for priority cosmopsychism. A version of all three accounts could be given to explain the heterogeneity of the cosmic consciousness. (ibid., p. 123)

This is, unfortunately, mistaken.²

Schaffer’s account has two aspects:

(i) respond to the problem of heterogeneity;
(ii) supply a positive account of heterogeneity.

I will explain both of these aspects, which will constitute the Schafferian blueprint for the cosmopsychist’s analogous response.

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² A note on terminology: Nagasawa and Wager mean the decombination problem by ‘the derivation problem’.
Following this I will outline the analogous problem for the cosmopsychist, but in doing so highlight that the argument fails to disambiguate at least two notions of heterogeneity/homogeneity (among others): qualitative vs. structural. I shall then explain the difference between these two notions in phenomenal terms relevant to cosmopsychism.

2.1. The heterogeneity problem for priority monism

The heterogeneity problem for priority monism is the problem of accounting for the heterogeneity which the cosmos exhibits: if there is one basic thing, how can it be so variegated? Schaffer (2010) formulates the problem in the following way:

**Heterogeneity Argument Against Monism:**

(1) Fundamental objects must be homogeneous.
(2) If the cosmos were fundamental, then the cosmos would be homogeneous.
(3) The cosmos is not homogeneous (it is heterogeneous).
(4) Therefore, the cosmos is not fundamental and priority monism is false.

Given the validity of the argument, Schaffer simply questions why we should think (1) in the first place.

Schaffer suggests that there are typically two bad justifications for (1):

(a) The claim that a basic entity that was heterogeneous would ‘differ from itself’.

(b) The claim that heterogeneity demands metaphysical explanation in terms of an arrangement of homogeneous entities.

Let us call (a) the ‘difference claim’ and let us call (b) the ‘arrangement claim’. Each of these fails according to Schaffer.3

The difference claim is bad for two reasons. Firstly, because if ‘differing from itself’ were objectionable then it would apply to the priority pluralist’s (smallest) derivative entities too, all the mid-level dry goods would also differ from themselves. This objection, claims Schaffer, ‘does not succeed in picking out anything special about

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3 I mention these two bad justifications because, as we shall see, they reappear in Section 3.2 as good justifications.
basic objects that requires them to be homogeneous’ (ibid., p. 58). In short, if non-fundamental entities can differ from themselves, then so too can fundamental ones. Let us call this the ‘nothing special’ response to the difference claim.

Secondly, the difference claim is bad because it conflates qualitative and numerical difference. As Schaffer says: ‘What is true is that nothing can be nonidentical to itself. What is false is that nothing can be internally qualitatively variegated’ (ibid.). In other words, it is true that a fundamental entity cannot be numerically distinct from itself, but not true that it can’t be qualitatively variegated. Moreover, the qualitative variegation of the fundamental entity does not entail its numerical distinctness from itself. Let us call this the ‘conflation response’ to the difference claim.

The arrangement claim, according to Schaffer, is bad because it begs the question. Instead, argues Schaffer, ‘[i]f there is to be an objection to Monism in the offing, there must be an argument against the prospect of explaining heterogeneity by starting from a fundamental heterogeneous whole’ (ibid., p. 59). Let us call this the ‘question-begging response’ to the arrangement claim.

Having shown this heterogeneity argument is unsound, Schaffer gives the following three proposals as methods for accounting for the heterogeneity of the cosmos:

(i) **Distributional properties:** an object may be heterogeneous by instantiating distributional properties, e.g. ‘being polka-dotted’ or ‘being striped’.

(ii) **Regionalized properties:** ostensible monadic properties can be treated as having an additional argument place for a region. So, instantiations of heterogeneity by the world become ‘the world bearing the redness relation to here, and the yellowness relation to there’.

(iii) **Regionalized instantiations:** instead of regionalizing the property, this is regionalizing the instantiation of it: the world is ‘instantiating-here’ red, or ‘instantiating-there’ yellow.

I will now show that these responses do not work when it comes to priority cosmopsychism. To do so I will recreate the structurally analogous argument and show that the analogous responses fail.

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4 I shall assume that Schaffer’s response and positive proposals hold water when it comes to priority monism because doing so does not undermine the arguments in this paper.
2.2. The heterogeneity problem for cosmopsychism

Consider the heterogeneity argument reformulated for cosmopsychism. This is the argument which Nagasawa and Wager suggest is the decombination problem for cosmopsychists and which can be responded to as easily as the heterogeneity problem for priority monism (Nagasawa and Wager, 2016, p. 122). We can formulate the argument in the following way:

**Heterogeneity Argument Against Cosmopsychism:**

(1*) Fundamental subjects must be homogeneous.
(2*) If cosmopsychism is true, then the fundamental cosmos-subject must be homogeneous.
(3*) The cosmos-subject is not homogeneous (it is heterogeneous).
(4*) Therefore, the cosmos-subject is not fundamental and priority cosmopsychism is false.

This is the equivalent argument against cosmopsychism, and we can now apply Schaffer’s blueprint.

Again, because the argument is valid, we can assume that the cosmopsychist — analogously to Schaffer — will question premise (1*). We can assume that if (a) the difference claim and (b) the arrangement claim are given in support of (1*), then the cosmopsychist will respond with the nothing special response, the conflation response, and the question-begging response.

In addition to questioning premise (1*) of this argument, we can then assume that the cosmopsychist will try to appeal to one of Schaffer’s positive proposals, (i)–(iii), as their positive account of the heterogeneity/decombination of subjects in the world.

I want to suggest that neither of these can be done: the cosmopsychist cannot simply question premise (1*) in the same way and on the same grounds, and neither can they simply propose (i)–(iii) as positive proposals to account for the heterogeneity/decombination of conscious subjects in the world.

The reason that the cosmopsychist can do neither of these things (at least without qualification) is because homogeneity/heterogeneity are very broad categories. For the Nagasawa and Wager responses to work, all the relevant features which motivate the decombination problem would have to be subsumed by these categories, i.e. we must be able to make sense of all of the relevant phenomenal facts in terms of homogeneity/heterogeneity. In addition, the Schafferian blueprint would then also have to actually succeed for each feature, i.e. the
rejection of \((1*)\) using the responses and then positive proposals would have to work for each. I do not think things are so easy.

To show why, let us consider the example that there are at least two distinct notions of homogeneity/heterogeneity that are relevant. The argument so far does not disambiguate these two senses of homogeneity/heterogeneity (let alone any others), and because of this the cosmopsychist responses fail to work too. The two notions relevant here are:

(i) Phenomenal qualitative homogeneity/heterogeneity.
(ii) Phenomenal structural homogeneity/heterogeneity.

I shall explain these notions in the next section and why the failure to disambiguate them means the cosmopsychist cannot simply question \((1*)\) and employ the positive proposals (i)–(iii).

2.2.1. Qualitative and structural phenomenal homogeneity/heterogeneity

The qualitative homogeneity/heterogeneity of consciousness simply denotes the \textit{qualitative character} of phenomenal consciousness and its homogeneity/heterogeneity. For example: my experience of a sustained middle C note or of a dull and persistent toothache are qualitatively homogeneous, whereas the experience composed of these two experiences is not: it contains two completely different qualities and is therefore heterogeneous.\(^5\)

One form of structural homogeneity/heterogeneity of consciousness, we can say, denotes the phenomenal unity and disunity of consciousness.\(^6\) Like the quality of phenomenal consciousness, we are acquainted with the unity of consciousness directly. Two conscious states are phenomenally unified when there is something it is like to have them together. That is, when they have a \textit{conjoint phenomenology}. Consider eating a smoked salmon bagel and listening to BBC Radio 4: there is something it is like to hear the music and there is something it is like to taste the salmon, but there is also something it is

\(^{5}\) I am not denying the possibility of apparently simple experiences actually being complex. I am simply highlighting the distinction with a familiar or commonplace example. Many panpsychist types do indeed think that our familiar and apparently simple experiences are in fact complex (\textit{cf.} Coleman, 2016; Roelofs, 2019, Sections 4.1.1 and 4.4), and so too do non-panpsychist types (\textit{cf.} Dennett, 1991, pp. 49–50).

\(^{6}\) There may be other interesting structural features of consciousness, but this one is my focus because it shows that Nagasawa and Wager’s method does not work.
like to taste the salmon *whilst* hearing the music. Structural homogeneity is phenomenal unity.

Structural heterogeneity of consciousness is the converse of this — phenomenal disunity. Phenomenal disunity is the failure of phenomenal unity, it is the lack of a conjoint phenomenology between experiences. Two experiences are disunified, we can say, if there is not something it is like to have them together. Consider Zoë’s experience of the feeling of awe whilst looking at the stars, and David’s experience of hunger whilst waiting for the BBQ: there is something it is like to have each of these experiences but there is not something it is like to have them together. Gregg Rosenberg expresses this idea in the following way:

> [T]he phenomenal field has boundaries. Not every feeling is part of my phenomenal field because I do not feel the pains produced by damage to your body. The unity and boundedness of the phenomenal field stand together. (Rosenberg, 2004, p. 80)

Let us say then that Zoë’s experiences and David’s experiences are phenomenally bounded and that their consciousnesses have a phenomenal boundary. This is because there is no phenomenal unity between their experiences.7

Why does the qualitative and structural distinction matter? It matters because we now evidently have at least two heterogeneity problems and therefore two heterogeneity arguments: a qualitative heterogeneity problem, and a structural heterogeneity problem. This means that the decombination problem for cosmopsychism is not simply the heterogeneity problem for priority monism because, as I will go on to show, they cannot simply be responded to in the same way. The decombination problem is more pernicious than the heterogeneity problem.

The reason that it matters is because a decombination problem grounded in the unity and boundary of consciousness will demand of the cosmopsychist that they get many bounded macro-sized conscious subjects from, and specifically as proper parts of, a unified cosmos-subject. What the cosmopsychist needs is for there to be a *structural heterogeneity* of phenomenal boundaries within the cosmos. They

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7 The disunity of human subjects is something which is *almost* universally accepted: Roelofs’ monograph *Combining Minds* suggests that phenomenal unity may well be pervasive of the universe (Roelofs, 2019, chapter 3.3.1), Goff (when not endorsing cosmopsychism) argues for unrestricted phenomenal composition (2016), and so too does Miller (2018). However, Dainton (2011) suggests that human subjects have experiences which are ‘clearly not mutually co-conscious’ (p. 257).
need (i)–(iii) to generate distinct boundaries of consciousness throughout the cosmos-subject. But they precisely cannot do this is. Consider first their analogous questioning of premise (1) of the heterogeneity argument.

3. Rejecting (1*): Fundamental Subjects Must Be Homogeneous

Let us look then at the two justifications for upholding (1*) — (a) the difference claim and (b) the arrangement claim — and consequently why the cosmopsychist would reject those justifications for premise (1*) — the nothing special response, the conflation response, and the question-begging response. However, now we have disentangled the structural and qualitative notions, let us also do so for both versions of premise (1*):

(1*Q) Fundamental subjects must be qualitatively homogeneous.
(1*S) Fundamental subjects must be structurally homogeneous.

3.1. (1*Q) Fundamental subjects must be qualitatively homogeneous

When it comes to (1*Q), the (a) difference claim and the (b) arrangement claim can be rebutted by the Schafferian responses.

Consider first the difference claim. Why, for instance, would a qualitatively heterogeneous non-fundamental subject not be as equally threatened by the difference claim as a qualitatively heterogeneous fundamental subject. In other words, there is still nothing special here about the fundamentality of the conscious subject which requires it to have a qualitatively homogeneous consciousness so that it does not differ from itself. Moreover, that a fundamental subject has a consciousness which is qualitatively heterogeneous does not appear to entail that that subject differs from itself. To say that this was the case would be to conflate qualitative and numerical difference. It is true that something, especially fundamental subjects, cannot be numerically distinct from themselves, but it is not true that they cannot have qualitatively heterogeneous experiences.

Consider also the arrangement claim. To say that the qualitative heterogeneity that we find between subjects like ourselves, and also internally between each of our individual experiences, must be explained by fundamental subjects which are qualitatively homogeneous is simply to insist on a certain type of explanation. An
objection to cosmopsychism must show that a qualitatively heterogeneous cosmos-subject cannot go on to explain qualitatively heterogeneous organic subjects (like us).

The difference claim and the arrangement claim do not work to justify premise (1*Q), and the three Schafferian responses work to successfully rebut them. Let’s turn now to the next form of the argument.

3.2. (1*S) Fundamental subjects must be structurally homogeneous

When it comes to (1*S), matters are significantly different from (1*Q). None of the three responses — the nothing special response, the conflation response, and the question-begging response — will work against the (a) the difference claim and the (b) arrangement claim.

Consider first the difference claim in support of (1*S). It seems to be the case if the cosmos-subject did have a structurally heterogeneous consciousness, then it would indeed differ from itself. This is because we appear to take the unity and boundedness of consciousness to individuate conscious subjects, such that where we have unified and bounded consciousnesses we have different subjects. In short, the difference claim for (1*S) seems to be justified by the typical ways in which we conceive of conscious subjects as phenomenal unities.8

The nothing special response misses its target when it comes to structural homogeneity. It is true that the difference claim fails to pick out something special about fundamental subjects, but this does not matter. The difference claim applies to all subjects, fundamental or otherwise — that is the point. There is not something special about fundamental subjects which means they must be phenomenally unified, but something general about all subjects which means they must.

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8 This claim would be contested by animalists, for they would say that the conditions which individuate subjects are the conditions under which the activity of some simples constitute an animal life. They could then say that one animal has two discrete phenomenal streams and thereby that one subject has two totally disunified conscious streams. This view of subjects is one in which consciousness is inessential to their nature: when we hold views in which subjects are essentially conscious, then it is much harder for us to conceive of them as not being individuated by phenomenal unity. Typically, panpsychists and cosmopsychists conceive of subjects as essentially conscious.
The conflation response also does not work here. If a putative fundamental subject has a consciousness which we describe as structurally heterogeneous, then it would differ from itself numerically. There is no conflation of structural and numerical distinctness here, for it is the structural distinctness of phenomenal unity and disunity which equates to the numerical distinctness of subjects. In short, if the ‘cosmos-subject’ had a disunified consciousness, then it would not be a single subject but would be two or more conscious subjects, and cosmopsychism would thereby be false.

Consider now the arrangement claim. To say that the structural heterogeneity that we find between subjects like ourselves must be explained by a structurally homogeneous cosmos-subject is not to insist upon a type of explanation. Rather, it is simply to assert that subjects, including the cosmos-subject, cannot be structurally heterogeneous. An objection to cosmopsychism must show that a structurally heterogeneous cosmos-subject cannot go on to explain structurally heterogeneous organic subjects (like us). This is precisely what the argument shows, for a structurally heterogeneous subject cannot exist. To claim that \textit{this} is question-begging is to miss the force of the argument. If we were to suppose, as the cosmopsychist would suggest, that we need to assume structural heterogeneity of our basic subject and formulate an argument against deriving structural heterogeneity from it, then they would be giving up their assumption of cosmopsychism: if the cosmos as a whole is a subject, then it cannot be structurally heterogeneous; if it were, then it would be more than \textit{one} basic subject.

As we have seen, unlike with (1*Q), the difference claim and arrangement claim are good justifications for (1*S). Neither of the three Schafferian responses work: nothing special, conflation, and question-begging.

4. Positive Proposals for Heterogeneity

We’ve seen that (1*S) is justified by the difference claim and the arrangement claim, because the unity and boundary of consciousness are fundamental for generating distinct subjects. Moreover, the three responses (the nothing special response, the conflation response, and the question-begging response) do not work here. The question is whether the positive proposals (i)–(iii) would allow the cosmopsychist
to account for the unity and boundary of consciousnesses like our own (as Nagasawa and Wager suggest).  

Unfortunately, they do not. The reasons that justify premise (1* S) mean that the proposals (i)–(iii) are blocked. Without questioning or rejecting these justifications, neither distributional properties, regionalized properties, nor regionalized instantiations help decombine the cosmos-subject into many subjects (like us). Only (i)–(iii) can get qualitative heterogeneity present within and between our consciousnesses. The failure to realize this means that these positive accounts fail to generate different subjects of experience within the cosmos-subject.

To test this, let us consider at least the first proposal: distributional properties. The cosmos-subject, in order to account for the boundaries between our consciousnesses, would have to instantiate the distributional property of being structurally phenomenally heterogeneous. But this cannot be done, because a subject cannot have a structurally heterogeneous consciousness. It is hard to see how a subject could have a consciousness that was structurally heterogeneous, let alone the massive degree of heterogeneity that would be required of the cosmos-subject.

5. Conclusion

The decombination problem is not the heterogeneity problem because heterogeneity is a broad category, and thus the heterogeneity problem is, at least, two or more decombination problems (amongst others). Moreover, the decombination problem is much more pernicious: whilst Schaffer’s responses to the heterogeneity problem work, their analogues do not. This is because they do not account for, at least, the structural heterogeneity within the cosmos, i.e. the fact that there are subjects with phenomenally unified and bounded consciousnesses.

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9 ‘A version of all three accounts could be given to explain the heterogeneity of the cosmic consciousness’ (Nagasawa and Wager, 2016, p. 122).

10 The inadequacy of (i)–(iii) can be highlighted by pointing out that the model that Nagasawa and Wager appeal to in order cash this idea out is a model of dividing our own consciousness into ‘less fundamental segments’. The problem is immediately obvious: if (i)–(iii) are intended to get the heterogeneity that occurs within my own conscious field, then this is merely qualitative and not structural. There are no phenomenal boundaries within my conscious field (and yours too, I presume), and neither could there be any such boundaries. In other words, the model they propose is disanalogous.
There also remain other phenomenal features that the Schafferian blueprint may also fail to work for, types which I have not looked at here. For example, can the Schafferian blueprint be used to account for the subjectivity/för-me-ness of non-fundamental subjects’ consciousnesses, and can a fundamental subject have a heterogeneous subjectivity?\textsuperscript{11} This leaves room for work further specifying these features of consciousness and testing them against the blueprint.

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_References_


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\textsuperscript{11} In Miller (2018) and Miller (ms) I investigate whether for-me-ness, me-ness, and mine-ness can be heterogeneous in a single subject in this way. Shani (2015) appears to hold that it can.

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