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Ratio (new series) XXXI 2 June 2018 0034-0006

CAN SUBJECTS BE PROPER PARTS OF SUBJECTS? THE DE-COMBINATION PROBLEM

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Abstract

Growing concern with the panpsychist's ostensive inability to solve the 'combination problem' has led some authors to adopt a view titled 'Cosmopsychism'. This position turns panpsychism on its head: rather than many tiny atomic minds, there is instead one cosmos-sized mind. It is supposed that this view voids the combination problem, however I argue that it does not. I argue that there is a 'de-combination problem' facing the cosmopsychist, which is equivalent to the combination problem as they are both concerned with subjects being proper parts of other subjects. I then propose two methods for both theorists to avoid the problem of subject-subject proper parthood relations: a distinction between absolute and relative phenomenal unity, and a modification of the essential nature of subjects. Of these two options, I find the latter option wanting and propose that the first should be adopted.

1. Introduction

Panpsychism – the view that consciousness is both fundamental and ubiquitous – is an ancient view, but one which has recently become somewhat fashionable and grown in popularity. One characteristic of panpsychism is that it operates with a background assumption of 'priority pluralism': the idea that the fundamental 'stuff' of reality exists at the micro-level. Whatever the tiny fundamental objects are, all other objects are grounded in, and determined by, these individuals and the relations between them. There are, however, panpsychists who have begun to jettison this priority-pluralist assumption: Philip Goff, Itay Shani, and Khai Wager & Yujin Nagasawa. ¹ This is

¹ Philip Goff, Consciousness and Fundamental Reality (Oxford University Press, forthcoming); Philip Goff, 'Micropsychism, Cosmopsychism, and the Grounding Relation', in The Routledge Handbook of Panpsychism, ed. by William E. Seager (Routledge, forthcoming), both available at [http://www.philipgoffphilosophy.com/publications.html]; Itay Shani, 'Cosmopsychism: A Holistic Approach to the Metaphysics of Experience', Philosophical Papers, 44.3 (2015), 389–437; Yujin Nagasawa and Khai Wager, 'Panpsychism and Priority Cosmopsychism', in Panpsychism, ed. by Godehard Bruntrup and Ludwig Jaskolla (Oxford University Press, 2016), pp. 113–29.

because they see it as the source of the now notorious 'combination problem': how can multitudes of atomic conscious minds add up to conscious minds like our own and those of other animals? Instead, these theorists have turned their focus to a view titled 'cosmopsychism'. Cosmopsychism, like panpsychism, sees consciousness as both fundamental and ubiquitous, not because each micro-level fundamental particle partakes in a conscious life, but because the cosmos *as a whole* partakes in a conscious life. Cosmopsychists believe that this view avoids the combination problem for panpsychism and is, therefore, the theoretically advantageous monist view.

Here I intend to put pressure on cosmopsychism by raising the converse of the combination problem, the 'de-combination problem': how can a single conscious mind break down into conscious minds like our own and those of other animals? My aim is to argue for the following conditional proposition: if the panpsychist cannot answer the combination problem, then the cosmopsychist cannot answer the de-combination problem. I will also offer a method of how both theories can try to avoid this mereological problem.

I shall first briefly outline what panpsychism and 'priority monism' are, and how their conjunction generates cosmopsychism.² Then I will look at a formulation of the combination problem grounded in the unity and boundedness of consciousness, and formulate the de-combination problem in light of it. Once the problem is formulated, I shall look at two responses I call 'reformulating unity/boundedness inconsistency (UBIT)' and 'modifying the subject essence thesis (SET)'. I find that the former method is advantageous: it respects our pretheoretical intuitions about both subjects and the unity of consciousness, whilst the latter option does neither.

2. Panpsychism and Cosmopsychism

Cosmopsychism is the conjunction of panpsychism and 'priority monism', a view that has recently been defended by Jonathan Schaffer. I shall briefly outline each and how they become fused.

Panpsychism is the view that consciousness is a fundamental and ubiquitous feature of the world, this can be summed up with the 'Conscious Ultimates Thesis':

J. Schaffer, 'Monism: The Priority of the Whole', Philosophical Review, 119.1 (2010), 31–76.

Conscious Ultimates Thesis (CUT): the fundamental physical 'ultimates are intrinsically experiential'.³

The most straightforward and well known argument for panpsychism is that forwarded by Nagel.⁴ Nagel argues that a commitment to the following four theses leads one to panpsychism, whilst the denial of any thesis by itself is far worse than accepting the conclusion. (1) realism about consciousness, i.e. consciousness is not a grand illusion. (2) natura non facit saltum (nature doesn't make leaps), this means that '[a]ll properties of complex systems that are not relations between it and something else derive from the properties of its constituents and their effects on each other when so combined'.⁵ (3) consciousness is not reducible to the non-conscious, i.e. no physical properties imply phenomenal properties. (4) material composition, i.e. any complex hunk of matter can be transformed into any other hunk of matter. If we hold each to be true, then we must accept that consciousness is a real, non-emergent property of all matter.⁶

Priority monism is the view that there exists only one 'basic' or fundamental concrete object: particles, planets, or any other proper parts of the world still exist. The view that only one object exists is 'existence monism'. The distinction between existence and priority monism can be paraphrased as being between a 'world-only' view and a 'world-first' view. The priority monist claims that the cosmos is that one basic thing: all the proper parts of the cosmos are ontologically dependent on it, and the cosmos, in being basic itself, depends on no other concrete thing. The priority pluralist, on the other hand, believes that the parts of the cosmos are ontologically prior to the whole, the cosmos-whole is dependent upon them, and they depend upon no other concrete things. The distinction here can be paraphrased as being between a

³ Galen Strawson, 'Realistic Monism: Why Physicalism Entails Panpsychism', in *Consciousness and Its Place in Nature: Does Physicalism Entail Panpsychism*?, ed. by Galen Strawson and Anthony Freeman (Exeter, UK; Charlottesville, Va: Imprint Academic, 2006), p. 25.

⁴ Thomas Nagel, *Mortal Questions* (Cambridge: Cambridge University Press, 1979).

Nagel, Mortal Questions, p. 182.

⁶ I do not want to question the soundness of Nagel's argument. I take it that it illustrates how panpsychists reach their position.

 $^{^{7}\,}$ J. Schaffer, 'The Internal Relatedness of All Things', $\it Mind, 119.474~(2010), 341-76~(p. 342).$

'whole-first' and a 'parts-first' view – the debate between the two is not about what exists, but about what is fundamental.

To formulate priority monism or pluralism one requires two broad assumptions: (i) that the world has a mereological structure of proper part and whole, and (ii) the world has a metaphysical structure of dependence relations. I shall take both assumptions for granted, but highlight what I mean.

for granted,⁸ but highlight what I mean.

By 'mereological structure' I simply mean the relation and partial ordering between parts and wholes, where proper parthood should be understood as a primitive irreflexive, transitive, and asymmetric relation. Readily graspable examples of this relation are: (1) the screen is a proper part of the laptop, (2) the milky way is a proper part of the cosmos, (3) the brick is a proper part of the wall. By 'dependence structure' I simply mean, that relation and partial ordering between objects and properties, where one obtains *in virtue of* or *because of* the other,⁹ and where this dependence relation is treated as irreflexive, transitive, asymmetrical, and well-founded. Graspable examples are: (1) the singleton set {Socrates} exists *in virtue of* the man himself existing, (2) her action was wrong *because* her intention was to cause harm, (3) the book cover is red *in virtue* of it being scarlet. Thus, we get a non-infinite and non-circular ordering from the concrete fundamentalia (or 'basic' entities) to the most derivative entities, where this dependence ordering maps onto the mereological structure of part to whole.

Hence, we get the choice between priority monism or priority

Hence, we get the choice between priority monism or priority pluralism, as they are mutually exclusive and exhaustive: either there is one basic concrete object which covers the world, or there is a multitude of basic concrete objects which together cover the world. From here it is a simple step to get standard pluralist panpsychism or cosmopsychism, they are merely the conjunction of the Conscious Ultimates Thesis (CUT) with priority pluralism or priority monism: ¹⁰

Panpsychism: all the ultimate micro-physical parts are 'micro-subjects' enjoying 'micro-experiences', and all other macro-

⁸ Others do not, see Schaffer, Monism, p. 34 for a discussion of this.

What is often called 'grounding', see Schaffer, Monism, p. 36–7 for a discussion of this.

¹⁰ Note that the cosmopsychist does not typically hold that microphysical objects are subjects of experience (Shani is the exception), but they *can* hold that they are. They simply cannot claim that they are *fundamental* subjects/objects. Likewise, the panpsychist can hold that the cosmos is a subject, but not that it is the *fundamental* subject.

physical objects and macro-subjects enjoying macro-experiences depend upon them for their nature and existence.

Cosmopsychism: the one ultimate concrete object, which is the cosmos, is a conscious 'cosmos-subject' having 'cosmos-experiences' and on which all other macro-physical objects and conscious macro-subjects like ourselves depend for their nature and existence.

As I suggested above, cosmopsychists have adopted this thesis because they believe that panpsychism fails to answer the combination problem. With the theories in hand, I want to argue that the cosmopsychist is in an equally bad position regarding their own analogous 'de-combination problem'.

In the following section I shall outline what I take to be the heart of the combination problem and formulate the decombination problem in light of this, also finding support from William James. In essence the problem is about subjects being proper parts of other subjects (the subject-subject proper parthood relation), hence the 'size' of the subjects in question does not matter. Because of this, both the panpsychist and the cosmopsychist suffer from essentially the same problem, and hence my conditional proposition is vindicated. 12

3. The Combination and De-Combination Problems: Size Does Not Matter

Generally speaking, the combination problem can be stated simply as it was above: how can atomic minds add up to animal minds? But this simple statement does not convey what is at stake and it does not get to the heart of the problem. Neither does the 'panpsychist zombie argument' get to the heart of the problem: it

As one can see, both theories are mereological theses about subject-subject proper parthood relations.

The following authors also recognise different formulations of the combination problem understood as mereological relations between subjects: Sam Coleman, 'Mental Chemistry: Combination for Panpsychists: Mental Chemistry: Combination for Panpsychists', *Dialectica*, 66.1 (2012), 137–66; Sam Coleman, 'The Real Combination Problem: Panpsychism, Micro-Subjects, and Emergence', *Erkenntnis*, 79.1 (2014), 19–44. Pierfrancesco Basile, 'It Must Be True – But How Can It Be? Some Remarks on Panpsychism and Mental Composition', *Royal Institute of Philosophy Supplement*, 67 (2010), 93–112; Pierfrancesco Basile, 'Is Mental Composition Impossible in Principle?', *Chromatikon: Annales de La Philosophie En procès/Yearbook of Philosophy in Process*, 4 (2008), 21–25. Goff, *Consciousness and Fundamental Reality*. Thomas Nagel, *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False* (Oxford University Press, 2012), p. 62.

merely tells us what seems to be at stake, namely the $a\ priori$ necessitation of subjects by other subjects. ¹³

I believe James sheds some light on the source of the problem in the following passages from *The Principles of Psychology*:

Take a hundred [feelings], shuffle them and pack them as close together as you can (whatever that may mean); still each remains the same feeling it always was, shut in its own skin, windowless, ignorant of what the other feelings are and mean... The private minds do not agglomerate into a higher compound mind. ^{f4}

and...

Neither contemporaneity, nor proximity in space, nor similarity of quality and content are able to fuse thoughts together which are sundered by this barrier of belonging to different personal minds. The breaches between such thoughts are the most absolute breaches in nature. Everyone will recognize this to be true, so long as the existence of something corresponding to the term 'personal mind' is all that is insisted on. ¹⁵

For James, the problem seems to be inexorably linked to the 'windowless', 'private', or 'shut in its own skin' nature of the experiencing subjects. But also, the problem seems to be linked to the 'absolute breaches' between subjects and the notion of 'personal mind'.16 I propose that we understand James' combination problem as one grounded in the structural features of consciousness that are its (i) unity and (ii) boundedness. Moreover, that these features are essential to the nature of subjects. The following definitions make precise the conditions in which synchronic unity and boundary occur:

Phenomenal Unity: a set of experiences $E_1 cdots E_n$ is phenomenally unified at time T_1 iff they have a conjoint phenomenology

¹³ David J. Chalmers, 'The Combination Problem for Panpsychism', in *Panpsychism*: Contemporary Perspectives, ed. by Godehard Bruntrup and Ludwig Jaskolla (Oxford University Press, 2016), pp. 179-214; Goff, Consciousness and Fundamental Reality; Philip Goff, 'Why Panpsychism Doesn't Help Us Explain Consciousness', Dialectica, 63.3 (2009), 289–

William James, The Principles of Psychology (New York: Dover., 1890), pp. 160-61, emphasis added.

James, Principles, p. 226, emphasis added.
 This 'private nature' should not be understood as the epistemic problem of privileged access, i.e. that I know my own mind in a manner that other subjects do not.

at T_1 , i.e. there is something which it is like to have them 'together' at T_1

Phenomenal Boundedness: a set of experiences $E_1 cdots E_n$ is phenomenally bound at time T_1 iff (i) they are phenomenally unified and (ii) not phenomenally unified with any other experience E_x beyond that set at T_1 .

Together these two definitions logically entail what I call the 'Unity/Boundedness Inconsistency Thesis':

Unity/Boundedness Inconsistency Thesis (UBIT): (i) phenomenal unity cannot extend beyond a bound phenomenal field, and (ii) phenomenal boundedness cannot occur within a unified phenomenal field.¹⁷

This thesis appears to be what James' concern is with when he discusses 'absolute breaches'. Such breaches are what result from unity and boundedness, and make minds private and windowless in the Jamesian sense. ¹⁸ Importantly though, James is also claiming that this must be true if we are to attach any meaning to 'personal mind'. In other words, phenomenal unity and boundedness are necessary for subjecthood. I articulate this idea with the following thesis:

Subject Essence Thesis (SET): Subjects are essentially phenomenally unified and bound.

Subject Essence simply means that subjects have experiences which are phenomenally unified and bound, such that if they were not, then the subjects would cease to exist. ¹⁹

We should then understand the combination problem as: how can a multitude of essentially bound micro-subjects and their consciousnesses make up an essentially unified macro-subject and its

By 'field' I mean nothing more than a set of unified experiences, a total consciousness. Field talk, so understood, occurs commonly in the unity literature: Timothy Bayne and David J. Chalmers, 'What Is the Unity of Consciousness?', in *The Unity of Consciousness*, ed. by Axel Cleeremans (Oxford University Press, 2003), p. 5. Timothy Bayne, *The Unity of Consciousness* (Oxford: Oxford University Press, 2010), p. 11. Barry Dainton, *The Phenomenal Self* (Oxford: Oxford University Press, 2008), p. 259.

¹⁸ See James on the claim that each thought belongs to a personal consciousness: 'In this room - this lecture-room, say - there are a multitude of thoughts, yours and mine, some of which cohere mutually, and some not' James, *Principles*, pp. 226–27.

¹⁹ See Dainton, Self, and Bayne, Unity, for similar theses and discussion of the essential unity of subjects.

consciousness? We should consider it as a problem of bridging between the most absolute *external* breaches in nature; bridging phenomenal boundaries with phenomenal unity.

In light of this, I propose the de-combination problem should be understood simply as the converse: how can a subject with an essentially bound consciousness come from a cosmos-subject with an essentially unified consciousness? We should consider it as the problem of generating conscious subjects with phenomenal fields exhibiting the most absolute *external* breaches in nature, within the unified field of a conscious subject which has no *internal* breaches.

Moreover, whilst contemporary panpsychists readily point to William James (specifically the *Principles*) as the source of the combination problem, most have overlooked him as formulating the de-combination problem in the same work. ²⁰ I propose that we can indeed cite James as giving us the source of the contemporary de-combination problem. James, in *The Principles*, gives us the following statement:

I can only define 'continuous' as that which is without breach, crack, or division. I have already said that the breach from one mind to another is perhaps the greatest breach in nature. The only breaches that can well be conceived to occur within the limits of a single mind would either be interruptions, time-gaps during which the consciousness went out altogether to come into existence again at a later moment; or they would be breaks in the quality, or content, of the thought, so abrupt that the segment that followed had no connection whatever with the one that went before.²¹

Here James' claim is that the only breaches that can occur within a subject's conscious field are either (i) temporal, e.g. between my morning and evening experiences, or (ii) qualitative, e.g. the difference between sense modalities. Absolute breaches, i.e. the breaches resulting from phenomenal boundedness, cannot occur within a

²⁰ See Miri Albahari, 'Beyond Cosmopsychism and the Great I Am: How the World Might Be Grounded in Universal "Advaitic" Consciousness', in *The Routledge Handbook of Panpsychism*, ed. by William E. Seager (Routledge, forthcoming), and Basile, 'It Must Be True – But How Can It Be?'; Basile, 'Is Mental Composition Impossible in Principle?' Both authors cite *A Pluralistic Universe* as their source. These authors are concerned with the *content or quality* of consciousness and not its structure, my focus is the structural features of consciousness. Gregg Rosenberg raises a similar problem, but for the diachronic correlation of consciousness to causal processes – see Gregg Rosenberg, *A Place for Consciousness: Probing the Deep Structure of the Natural World*, Philosophy of Mind Series (Oxford; New York: Oxford University Press, 2004).

²¹ James, *Principles*, p. 237 emphasis added.

single subject's consciousness. Here it is explicit that James is endorsing the Phenomenal Unity/Boundedness Inconsistence Thesis (UBIT) and the Subject Essence Thesis (SET).

With Subject Essence (ŠET) and Unity/Boundedness Inconsistency (UBIT) in hand, I want to formulate the following 'De-Combination' argument against Cosmopsychism:

The De-Combination Argument

- 1) **Cosmopsychism:** The cosmos is a single subject-whole and all macro-subjects are subject-proper parts of the single cosmos-subject.
- 2) **Unity/Boundedness Inconsistency Thesis (UBIT)**: (i) phenomenal unity cannot extend beyond a bound phenomenal field, and (ii) phenomenal boundedness cannot occur within a unified phenomenal field.
- 3) **Subject Essence (SET)**: Subjects are essentially phenomenally unified and bound.
- 4) The cosmos is essentially phenomenally unified and bound, and each of its macro-subject-proper parts is essentially unified and bound (from 1 and 3).
- 5) If the cosmos has phenomenal boundaries 'within' its phenomenally unified field, then it is not a subject, and, if phenomenal unity extends beyond the boundary of the subject-proper parts, then they are not subjects (from 2 and 3).
- 6) Hence, the cosmos is not a subject and its proper parts are not subjects (from 4 and 5)
- 7) Hence, cosmopsychism is false (from 1 and 6).

Although this argument shows the falsity of cosmopsychism, the panpsychist should not claim victory. The argument is a *reductio* of the subject-subject proper parthood relation, in virtue of the essential unity and boundedness of conscious subjects. ²² The 'size' of the putative subjects does not matter. To make it generic to subject-subject proper parthood all we would have to do is replace 'cosmos-subject' with 'subject-whole', and 'macro-subject' with 'subject-part' – for the sake of brevity I leave this task up to the reader. ²³

How should the cosmopsychist respond? There are only three underived premises, (2), (3), and (1), so, given that the argument

²² As fn.11 highlights, other authors formulate the combination problem in terms of mereological relations between subjects, but not grounded synchronic phenomenal unity.

Note that the nature of parthood involves overlap and hence the sharing of token experiences by part and whole.

is valid, the cosmopsychist must try to undermine at least one of these. There are four ways to do this: (i) attack the Unity/Boundary Inconsistency Thesis (UBIT), (ii) attack the Subject Essence Thesis (SET), (iii) 'subject denial' for either part or whole, or (iv) adopt submergent cosmopsychism (or emergent panpsychism).²⁴

I shall here rule out (iii) subject denial and (iv) submergent cosmopsychism (or emergent panpsychism), which aim to deny premise (1) by reformulating cosmopsychism. I take it that submergent cosmopsychism is incoherent, ²⁵ I take it that emergent panpsychism sacrifices any theoretical or dialectical advantage gained from adopting panpsychism in the first instance, ²⁶ and I take it that subject denial cannot be consistently sustained as long as there is 'something it's like' to be whole and part. ²⁷

Instead my focus will be on (i) denying the Unity/Boundedness Inconsistency Thesis (UBIT) and, following this, (ii) denying the Subject Essence Thesis (SET).

4. Reformulating the Unity/Boundedness Inconsistency Thesis (UBIT): Relativising to Subjects

By denying (UBIT) the cosmopsychist would be able to avoid the *reductio* of the de-combination argument, and, likewise, the panpsychist would be able to avoid the combination argument.

- The last two both count as denying premise (1).
- ²⁵ Schaffer states: 'though emergence is metaphysically possible, submergence—the converse of emergence—is metaphysically impossible' (Schaffer, 'Monism', p. 56.). In order for the cosmopsychist to have submergence, the intrinsic properties of the parts and the relations between them must fail to supervene upon, or fail to be necessitated by, the intrinsic properties of the whole. But this cannot possibly obtain, i.e. it cannot be true: any intrinsic property of the parts is *ipso facto* an intrinsic property of the whole, and any relation between the parts are also intrinsic properties of the whole. If we fix the nature of the whole, then the nature of the parts and the relations between them are also fixed. Hence, submergence is incoherent on the priority monist and cosmopsychist picture.
- ²⁶ A true metaphysical emergence relation seems, as Nagel (*Mortal Questions*) highlights, incoherent. At best emergence claims can be epistemological, and hence are merely constitution relations that we do not fully grasp.
- ²⁷ If either cosmopsychist, or panpsychist, want to hold on to the idea that we are subjects, then they must deny that the other term of the proper parthood relation is a subject whilst also holding that it is fully conscious and experiential in the same manner a subject is. If there is something which it is like to be either the whole or the part, then it qualifies for subjecthood in the minimal Nagelian sense: see Thomas Nagel, 'What Is It like to Be a Bat?', *Philosophical Review*, 83, October (1974), 435–50. Hence, it becomes unclear what it means to be a subject of experience once we start denying whole or part that status. I also take it that subject denial is against the aim of this inquiry (viz. trying make sense of subject-subject proper parthood relations), in the sense that subject denial does not need to be true for the cosmopsychist or panpsychist to respond.

Denying (UBIT) would allow one to say that the phenomenal boundedness of the subject-proper parts did not conflict with the phenomenal unity of the subject-whole. Even though the subjects remain essentially unified and bound, this generates no problem for the subject-whole and its subject-parts.

One way in which the cosmopsychist or panpsychist can deny the Unity/Boundedness Inconsistency Thesis (UBIT) would be to make the thesis *relative to specific subjects* along with making a distinction between 'absolute' and 'relative' notions of unity and boundedness. This, as I shall explain below, will allow the cosmopsychist or panpsychist to claim that although absolute phenomenal unity excludes the boundaries or 'absolute breaches' resulting from absolute phenomenal boundedness, absolute phenomenal unity does not exclude the boundaries or 'relative breaches' brought about by relative phenomenal boundedness. However, they do not have to claim that a lack of absolute phenomenal unity is compatible with relative phenomenal unity, as I shall explain below.

Relative phenomenal unity and relative phenomenal boundedness are like unity and boundedness articulated above, but the difference is that the definition is indexed not only to a specific time T_1 but also to a particular subject S_1 . But, importantly, subject S_1 is a subject-proper part: S_{part} . This gives us the following articulations of relative unity and boundedness:

Phenomenal Unity_{relative}: a set of experiences $E_1 ... E_n$ is phenomenally unified at time T_1 for a subject S_{part} iff they have a conjoint phenomenology at T_1 , i.e. there is something which it is like for S_{part} to have them 'together' at T_1 .

Phenomenal Boundedness_{relative}: a set of experiences $E_1 \dots E_n$ is phenomenally bound at time T_1 for a subject S_{part} iff (i) they are phenomenally unified at T_1 for S_{part} and (ii) not phenomenally unified with any other experience E_x beyond that set, for subject S_{part} .

If relative phenomenal unity is merely phenomenal unity for a specific subject-part, absolute phenomenal unity is the phenomenal unity that holds for a subject-whole. We stipulate that the variable S_1 is the subject-whole, and, hence, the phenomenal unity is 'absolute'. Likewise, for phenomenal boundedness, we stipulate that the subject is the subject-whole. This gives us the following definitions:

Phenomenal Unity_{absolute}: a set of experiences E_1 ... E_n is phenomenally unified at time T_1 for a subject S_{whole} iff they have a conjoint phenomenology at T_1 , i.e. there is something which it is like for S_{whole} to have them 'together' at T_1 .

Phenomenal Boundedness_{absolute}: a set of experiences $E_1 \dots E_n$ is phenomenally bound at time T_1 for a subject S_{whole} iff (i) they are phenomenally unified at T_1 for S_{whole} and (ii) not phenomenally unified with any other experience E_x beyond that set, for subject S_{whole} .

The distinction between these two types now allows us to claim the following: that a unity/boundedness inconsistency thesis cannot be generated when we index the unity and boundedness to different subjects, where one subject is the subject-proper part and the other is the subject-whole. So, for instance, if we take the Phenomenal Unityabsolute and Phenomenal Boundedness_{relative} then we cannot generate an inconsistency. The proof: 28 consider the total set of concrete existing experiences E_1 , E_2 , E_3 ... E_n which are the phenomenally unified and bound experiences of the cosmos subject S_{cosmos}. Now consider a macro subject S_{macro} like you or me who experiences a proper subset of those experiences, e.g. E₁₇, E₁₈, E₁₉, as phenomenally unified and bound. The unity_{absolute} of the experiences does not conflict with the boundedness_{relative} of these experiences because the subject S_{macro} need not experience E_{17} , E_{18} , E_{19} , as unified with experiences which it does not have, e.g. E₉₉. In other words, because the experiences outside of the proper subset of experiences of a subjectpart are not had by that subject, then the unity between those experiences and its own should not be 'had' in any way either. If the subject-part does not experience both relata of the phenomenal unity relation, e.g. E_{19} and E_{99} , then those experiences cannot be unified for that subject-part.

I have here used the cosmos-subject for ease of explanation, the proof still applies to panpsychism and macro-subjects. Moreover, I take it that my definitions can apply to subject-wholes which are not parts of other subject-wholes, but also subject-wholes which are themselves proper parts of a larger subject-wholes. For example, I take it to apply to any two underlapping subjects which themselves have subject-parts, and I take it to apply to any two subjects (which have subject parts) that do not underlap.

It may be worth considering whether this solution would be open to a panpsychist like Galen Strawson who thinks that subjects are numerically identical to experiences. I speculate that this solution would not be open to the theorist who holds subjects are numerically identical to experience.

One may be tempted to raise the following objection: relativizing unity to subjects and making the absolute/relative distinction makes room for the odd scenario in which sets of experiences may be phenomenally unified_{relative}, whilst not being phenomenally unified absolute. But this is not true. The theorist who wants to argue that subjects can be proper parts of other subjects (cosmopsychist or panpsychist) can still claim that experiences between which there is no unity_{abslolute} there is no phenomenal unity_{relative}. The proof: consider a set of experiences E_1 , E_2 , E_3 ... E_n , in which only certain subsets, say of five experiences, e.g. $E_{11} - E_{15}$ or $E_{41} -$ E₄₅, are phenomenally unified_{absolute} and where each subset is phenomenally bound_{absolute}. In this scenario there would be subject-wholes corresponding to each of the unified discrete subsets and the subjects which were the subject-parts of those subsets. Because the set as a whole is not phenomenally unified it is not a subject (recall (SET) is true), and because it is not a subject it cannot be a subject-whole with subject-parts. Since there are no subject-parts other than those which are the parts of the discrete subset subjects, there are no subject-parts for which the experiences within two of the discrete subsets could be phenomenally unified_{relative} for. Hence, there cannot be phenomenal unity_{relative} in the absence of phenomenal unity_{absolute}. If one were to say that there were subject-parts which the experiences within the ostensibly discrete subsets were phenomenally unified_{relative} for, then one would have to say that there was phenomenal unity between the two subsets. If there is phenomenal unity between the two subsets of experiences, then they are not in fact discrete and belong to a subject. Hence, if there is unity_{relative} there is unity_{absolute}, and one cannot say that sets of experiences may be phenomenally unified_{relative} whilst not being phenomenally unified_{absolute}. 30

The moral: in making sense of subjects being proper parts of other subjects (i.e. subject-subject proper parthood relations), we must stipulate that the subject-parts are phenomenally bound_{relative} while the subject-whole is phenomenally unified_{absolute}. Doing this allows us to avoid the incoherence of a subject-whole's unified conscious field having the phenomenal boundaries of their

³⁰ One objection may be that this distinction between absolute vs. relative unity/boundary is *ad hoc.* I reject this claim. If *ad hoc* responses are those which have no independent principled reasoning behind them, then my distinction is not *ad hoc.* (i) we typically assume that phenomenal unity must be for a specific subject, (ii) we typically assume that two experiences cannot be unified for a subject if a subject does not have both of those experiences. My distinction is based in these assumptions and hence preserves them.

subject-parts within it, and either the part or whole ceasing to be a subject.³¹

5. Modifying the Subject Essence Thesis (SET): Making way for Disunity

As I suggested above, the cosmopsychist and panpsychist could try denying the Subject Essence Thesis (SET). Denying (SET) would allow them to avoid the incoherence generated by the subject-subject proper parthood relation and the essentially unified and bound nature of subjects: it would allow them to say that the subject-whole was disunified and the subject-proper parts were unbound. In fact, in denying (SET) the cosmopsychist or panpsychist need only deny one of the conjuncts whilst maintaining the other. They may choose to deny either essential phenomenal unity, or essential phenomenal boundedness.

Denying the essential unity of subjects would get us the following notion of 'phenomenally scattered':

Phenomenally Scattered: a set of experiences $E_1 \dots E_n$ is phenomenally scattered at time T_1 iff (i) they have no conjoint phenomenology at T_1 , i.e. there is nothing which it is like to have $E_1 \dots E_n$ 'together' at T_1 .

And denying the essential boundedness of conscious subjects would get us the following notion of 'phenomenally unbound':

Phenomenally Unbound: a set of experiences $E_1 \dots E_n$ is phenomenally unbound at time T_1 iff they (i) are phenomenally unified at T_1 , i.e. there is something which it is like to have them 'together' at T_1 , and (ii) they are not phenomenally bound, i.e. they are unified with another experience E_x beyond that set.

Accepting either of these notions would allow the cosmopsychist or panpsychist to claim that whilst one term of the subjectsubject proper parthood relation is phenomenally unified or

One may object that there would be a 'doubling up' of unity relations in the subject-whole or subject-part's consciousness, but this is not so. The phenomenal unity, or the unity relations, is numerically identical. It is just that a proper part does not experiences all of it (and there is no reason they should – the subjects which are the proper parts only have a proper subset of the experiences, and should not therefore experience all the unity relations that hold in the absolute sense).

bound, the other term is not, and hence no incoherence can be generated. 32

Whilst both methods are open to the cosmopsychist and panpsychist alike, considering our prior assumptions about subjects (mainly ourselves), one option is more appropriate for the wholeto-part priority ordering (monism) and the other is more appropriate for the part-to-whole priority ordering (pluralism). In other words, choosing whether one term of the subject-subject proper parthood relation is either phenomenally scattered or phenomenally unbound depends upon: (i) whether the subject which we are most interested in is a subject-proper part or a subject-whole, and (ii) whether that subject is already assumed to be phenomenally unified or phenomenally bound.

If macro-subjects like us are (i) subject-proper parts and (ii) we take it to be a plausible datum that we macro-subjects are phenomenally bound, then we should say that the cosmos-subject is a phenomenally scattered subject-whole. This would get us the scenario in which we have a set of experiences E_1 , E_2 , E_3 ... E_{50} , where each subset of, say, five experiences, e.g. E_1 - E_5 or E_{26} - E_{30} , is phenomenally unified and phenomenally bound, and where each of these subsets or streams will correspond to a subject. But, so too will the disunified set correspond to a subject. Both terms of the subjectsubject proper parthood relation maintain their status as subjects, but the subject-whole is simply permitted to be phenomenally disunified. Why? Because in trying to make sense of the subject-subject proper parthood relation, and in noting that macro-subject proper parts are phenomenally bound, it would be contradictory to then claim we are phenomenally unbound. Hence, if the subject of interest is (i) a proper part and (ii) we take it to be bound, we should deny the essential unity of conscious subjects and claim the subject-whole is phenomenally scattered.

If macro-subjects are (i) subject-wholes and (ii) we take them to be phenomenally unified, then we should say that micro-subjects are phenomenally unbound subject-proper parts. This would get us the scenario in which we have a set of experiences $E_1, E_2, E_3 \dots E_{50}$ which are phenomenally unified and bound, corresponding to some

³² One may try to give antecedent empirical justification for either of these notions by appealing to certain understandings of split-brain phenomena, namely the 'two streams' and 'partial-unity' models. Elizabeth Schechter, 'Partial Unity of Consciousness', in *Sensory Integration and the Unity of Consciousness*, ed. by David J. Bennett and Christopher S. Hill (The MIT Press, 2014), pp. 347–74; Michael Lockwood, *Mind, Brain, and the Quantum* (Oxford: Oxford University Press, 1989).

macro-subject whole, but where each experience is had by a micro-subject proper part and is phenomenally unified with every other experience of the micro-subject proper parts. Both terms of the subject-subject proper parthood relation remain subjects, but the subject-parts are allowed to be phenomenally unbound. Why? Because in trying to make sense of the subject-subject proper parthood relation, and in noting that we the macro-subject wholes are phenomenally unified, it would be contradictory to then claim what we actually are is a phenomenally scattered subject-whole. Hence, if the subject of interest is (i) a subject-whole and (ii) we take it to be phenomenally unified, we should deny the boundary of conscious subjects and claim that the subject-parts are phenomenally unbound.

The moral: if we do not assume that subjects have essentially unified and bound conscious fields, then the phenomenal unity of a subject-whole or the phenomenal boundedness of a subject-part will not conflict with subject-subject proper parthood.

6. Which method should be preferred?

With two methods of reconciling the unity and boundedness of phenomenal consciousness with the subject-subject proper parthood relation in hand, which of these methods should be preferred? Should we maintain that phenomenal unity should be relativized to subjects of experience, allowing the subject-part's experiences to be bound while the subject-whole's experiences remain totally unified? Or should we allow for either term of the subject-subject proper parthood relation to be scattered or unbound?

Firstly, if we take it to be a plausible datum that we, human macro-subjects, have phenomenally unified consciousnesses, then we should rule out any position that would suggest otherwise. This means the only methods available which preserve this datum are (a) adopting a modified phenomenal unity/boundedness thesis (UBIT), (b) the panpsychist modifying (SET) and allowing for phenomenally unbound parts, or (c) the cosmopsychist modifying (SET) and allowing for a phenomenally scattered whole.³³ It is only the first of these three methods that is not 'theory specific' and applies to each scenario entailed by panpsychism and cosmopsychism. That is, modifying the phenomenal unity/boundedness

³³ Granted, it may not be the case that we are as unified as we suppose, and this should be something we are willing to acknowledge. However, the intuition, or assumption, that we are is a rather significant datum.

inconsistency thesis (UBIT) has a greater *utility* than its alternatives. If we take it to be a theoretical virtue that one's theses have a greater range of applicability, and hence have a greater degree of utility, then it should be this method that is adopted. Hence, we should prefer a modified phenomenal unity/boundedness inconsistency thesis (UBIT).

Secondly, we could argue that relativizing phenomenal unity and modifying (UBIT) in fact preserves our intuitions about unity better than modifying the subject essence thesis (SET).³⁴ We typically expect the unity of consciousness to be *for* a subject: the modification accommodates precisely this. Moreover, we do not expect a subject which does not undergo a certain experience, for instance E₉₉, to experience it as being unified with an experience which she does in fact undergo. In other words, we pretheoretically think that unity is for a subject and we do not expect subjects to experience unity relations between experiences that they do not have. The modified unity/boundedness inconsistency thesis (UBIT) preserves these intuitions.

Thirdly, it could be argued that rejecting the subject essence thesis (SET) to accommodate scattered subjects flies in the face of what we are able to imagine sympathetically, and should therefore be rejected. Kriegel, Bayne, and Dainton all raise considerations like this regarding what is phenomenologically possible. Striegel, for instance, believes that if one can (i) sympathetically imagine some phenomenal state lacking a certain property and (ii) when one imagines being in that state notices that there is an apparent phenomenological difference, then we must conclude that the property in question is phenomenally manifest. However, if we fail to do this task in virtue of failing to (i), then Kriegel believes that such properties are necessary and constitutive of phenomenal consciousness. 36 Because we cannot sympathetically imagine being a subject that was in a state which we could describe as being phenomenally scattered, then we must conclude that it is not possible. In other words, because we cannot project ourselves into the perspective of a phenomenally scattered subject, phenomenal unity must be a necessary and constitutive feature of a subject's consciousness. If phenomenal

³⁴ See fn.30.

³⁵ Uriah Kriegel, 'The Phenomenologically Manifest', *Phenomenology and the Cognitive Sciences*, 6.1–2 (2007), 115–36; Bayne, *Unity*, pp. 41–44; Dainton, *Self*, pp. 259–60.

³⁶ However, Dainton and Bayne are duly sceptical regarding this method. Their concern is with partially unified subjects from split-brain cases, such cases are less drastic than phenomenally scattered subjects.

unity is a necessary and constituent feature of conscious subjects, then accepting that one term of the subject-subject proper parthood relation was phenomenally scattered would be inconsistent with this. Relativizing the unity/boundary inconsistency thesis to subjects and making the relative vs. absolute unity distinction is not, however. For this reason, it should be preferred.³⁷

7. Conclusion

In making sense of subjects being proper parts of other subjects (i.e. subject-subject proper parthood relations) we must either stipulate that the parts are phenomenally bound_{relative} while the whole is phenomenally unified_{absolute}, or we must claim that the parts are phenomenally unbound or the whole is phenomenally scattered. Doing either allows us to avoid the incoherence of a subject-whole's unified consciousness having the phenomenal boundedness of its subjectparts' consciousnesses within it, thus either the part or whole ceasing to be a subject. Moreover, as I have shown, the problem is faced by the cosmopsychist and panpsychist alike, and hence my proposed conditional proposition, 'if the panpsychist cannot answer the combination problem, then the cosmopsychist cannot answer the decombination problem' is vindicated. Of the two methods proposed I have argued that reformulating the unity/boundedness inconsistency thesis (UBIT) is the option that should be preferred: if we allow subjects to be phenomenally scattered then we lose our grip on what it is to be a subject of experience and we betray our intuitions regarding the unity of consciousness, whilst reformulating the unity/boundedness inconsistency suffers none of these flaws.³⁸

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 $^{^{\}rm 37}$ $\,$ This objection does not apply to allowing phenomenal unboundedness.

³⁸ I would like to thank the anonymous referee at *Ratio* for their helpful and insightful comments on this paper. I would also like to thank Barry Dainton, Attila Tanyi, Garrett Mindt, Katherine Field, and Stephen McLeod for reading various drafts. The audience members at the Central European University summer school 'Mind, Matter, and Consciousness,' and the Durham University Early Career Mind Network meeting both deserve my thanks too, in particular: Philip Goff, Fabian Klinge, and Siddharth Raghavan.