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Nagasawa, Yujin; Wager, Khai

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# Panpsychism and Priority Cosmopsychism

YUJIN NAGASAWA AND KHAI WAGER

## 4.1 Introduction

A contemporary form of panpsychism says that phenomenality is prevalent because all physical ultimates instantiate phenomenal or protophenomenal properties. According to priority cosmopsychism, an alternative to panpsychism that we propose in this chapter, phenomenality is prevalent because the whole cosmos instantiates phenomenal or protophenomenal properties. It says, moreover, that the consciousness of the cosmos is ontologically prior to the consciousness of ordinary individuals like us. Since priority cosmopsychism is a highly speculative view our aim in this chapter remains modest and limited. Instead of providing a full defense of priority cosmopsychism, we try to show only the theoretical advantage of the view over panpsychism. This, however, by no means entails that we develop the view in logical space merely for its own sake. We offer instead a blueprint for a new alternative to panpsychism and explain how such a view avoids some of the most persistent problems for panpsychism while maintaining several of its strengths.<sup>1</sup>

This chapter has the following structure. In section 4.2, we discuss panpsychism and priority monism, which are relevant to priority cosmopsychism. In section 4.3, we introduce priority cosmopsychism. In section 4.4, we show that priority cosmopsychism overcomes the main difficulties for panpsychism, including the problem of infinite decomposition and the combination problem. In section 4.5, we defend priority cosmopsychism against possible objections. Section 4.6 concludes.

## 4.2 Panpsychism and Priority Monism

Priority cosmopsychism is structurally parallel to both panpsychism and priority monism. We therefore address each of these views before formulating priority cosmopsychism.

### 4.2.1 Panpsychism

Since the present volume is devoted to panpsychism, we will not provide a comprehensive overview of panpsychism here. Nevertheless, some essential preliminaries are in order. The most straightforward version of panpsychism is formulated in terms of ordinary mental states. It says that everything has mental states in the same sense as we do—for example, rocks have thoughts to the same extent that we do. This is highly implausible. Contemporary panpsychism is, on the other hand, typically formulated in terms of phenomenal or protophenomenal properties instead of all types of mental states. There are many contemporary formulations, but in this chapter we focus on Philip Goff's formulation as follows (see Goff 2009, 294):

Panpsychism: All physical ultimates instantiate phenomenal properties.

As Goff notes, this view is closely related to the following view:

Micropsychism: Some physical ultimates instantiate phenomenal properties.

Panpsychism is an extreme form of micropsychism because it says that all, not merely some, physical ultimates instantiate phenomenal properties. That is why the view is called *pan*psychism.

Some formulate panpsychism in terms of protophenomenal properties instead of phenomenal properties. They say that some physical ultimates instantiate protophenomenal, rather than phenomenal, properties. David Chalmers addresses the distinction between the phenomenal and protophenomenal versions of panpsychism:<sup>2</sup>

There are two ways this might go. Perhaps we might take [phenomenal] experience itself as a fundamental feature of the world, alongside space-time, spin, charge and the like. That is, certain phenomenal properties will have to be taken as *basic* properties. Alternatively,

perhaps there is some *other* class of novel fundamental properties from which phenomenal properties are derived. . . . [T]hese cannot be physical properties, but perhaps they are nonphysical properties of a new variety, on which phenomenal properties are logically supervenient. Such properties would be related to experience in the same way that basic physical properties are related to nonbasic properties such as temperature. We could call these properties *protophenomenal* properties, as they are not themselves phenomenal but together they can yield the phenomenal. (Chalmers 1996, 126–27)

The main reason for holding panpsychism is that it avoids the problem of strong emergence. This problem arises from the unexpectedness of phenomenal properties: phenomenal properties are instantiated by physical entities such as aggregates of neurons, but this is unexpected and surprising because neurons seem to be fundamentally nonexperiential. It seems impossible to explain how something experiential can be instantiated by something fundamentally nonexperiential. According to Galen Strawson, the instantiation of experiential phenomena by wholly nonexperiential phenomena is as extraordinary as the instantiation of spatial phenomena by nonspatial phenomena. He contends that such emergences are impossible because the following is true: For any feature *Y* of anything that is correctly considered to be emergent from *X*, there must be something about *X* and *X* alone in virtue of which *Y* emerges, and which is sufficient for *Y*. Strong emergence violates such a law and, hence, it is, “by definition, a miracle every time it occurs” (Strawson 2008, 64–65).

Panpsychism avoids the problem of strong emergence by stipulating that physical ultimates are themselves phenomenal or protophenomenal. That is, according to panpsychism, it is not surprising that phenomenal properties are instantiated by aggregates of neurons because physical ultimates, which constitute neurons and other physical entities, are already phenomenal or protophenomenal.

#### 4.2.2 Priority Monism

Priority monism says that exactly one *basic* concrete object, that is, the cosmos, exists (see Schaffer 2008). Priority monism should be distinguished from existence monism, according to which exactly one concrete object, that is, the cosmos, exists.<sup>3</sup> Unlike existence monism, priority monism is compatible with the existence of multiple concrete objects because it says only that there is exactly one *basic* concrete object. According to priority monism, the cosmos is more basic than other concrete objects in the sense that it is ontologically prior to, or ontologically more fundamental than, those other objects.

In other words, all concrete objects, except the cosmos itself, are derivative of the cosmos.

Priority monism appears counterintuitive initially because in most instances we think that a whole is not ontologically prior to its parts. We think, for example, that the grains of sand constituting a heap are prior to the heap or that tiles in a mosaic are prior to the mosaic. Jonathan Schaffer points out, however, that there are many other examples in which we think that a whole is, in fact, prior to its parts. For instance, we think that a circle is prior to semi-circles of the circle or that a body is prior to organs of the body (see Schaffer 2008). This is because, according to Schaffer, our common sense distinguishes between mere heaps and genuine unities. A heap of grains of sand and a mosaic are mere heaps but a circle, a body, and the cosmos are, according to Schaffer, genuine unities.

Schaffer notes that priority monism is concerned with concrete objects and excludes everything else. He writes:

I assume that there is a maximal actual concrete object—*the cosmos*—of which all actual concrete objects are parts. I should emphasize that I am only concerned with actual concrete objects. *Possibilia, abstracta*, and actual concreta in categories other than *object* are not my concern (deities and spirits, if such there be, are not my concern either). When I speak of the world—and defend the monistic thesis that the whole is prior to its parts—I am speaking of the material cosmos and its planets, pebbles, particles, and other proper parts. (Schaffer 2010, 33)

Phenomenal properties are not within the scope of priority monism as they are not concrete objects.

### 4.3 Priority Cosmopsychism

We are now ready to formulate priority cosmopsychism. Again, priority cosmopsychism is structurally parallel to both panpsychism and priority monism.

Consider, first, the parallel structure between priority monism and priority cosmopsychism. Priority monism says that exactly one basic concrete object, the cosmos, exists. In parallel to this, priority cosmopsychism says that exactly one basic consciousness, the cosmic consciousness, exists. Recall that priority monism is concerned only with concrete objects. Priority cosmopsychism is, on the other hand, concerned only with phenomenal and protophenomenal properties, which fall outside the scope of priority monism. Priority cosmopsychism should be distinguished from existence cosmopsychism, according

to which exactly one consciousness, the cosmic consciousness, exists. Unlike existence cosmopsychism, priority cosmopsychism is compatible with the existence of multiple individual consciousnesses because it says only that there is exactly one *basic* consciousness. The cosmic consciousness is more basic than other consciousnesses in the sense that it is ontologically prior to or ontologically more fundamental than other consciousnesses. All consciousnesses except the cosmic consciousness itself are derivative of the cosmic consciousness, in a manner similar to that in which all concrete objects except the cosmos itself are, according to priority monism, derivative of the cosmos.

Consider now the parallel structure between panpsychism and priority cosmopsychism. Panpsychism says, again, that all physical ultimates—that is, physical entities on the bottom level of reality—instantiate phenomenal properties. In parallel to this, priority cosmopsychism says that the cosmos, which is on the top level of reality, instantiates phenomenal properties. Panpsychism claims that phenomenal properties that physical ultimates instantiate are more fundamental than phenomenal properties of ordinary individuals. In fact, according to panpsychism, phenomenal properties of physical ultimates are the most fundamental form of phenomenality. In parallel to this claim, priority cosmopsychism says that phenomenal properties which the cosmos instantiates are more fundamental than phenomenal properties of ordinary individuals. In fact, according to priority cosmopsychism, the cosmic consciousness is the most fundamental form of phenomenality.

It is interesting to note that the combination of priority monism and (priority) cosmopsychism entails a unique version of panpsychism. Recall the formulation of panpsychism we adopt in this chapter: all physical ultimates instantiate phenomenal properties. Priority monism says that the phrase ‘physical ultimates’ in the formulation refers to a single entity, the cosmos, and (priority) cosmopsychism says that the cosmos instantiates phenomenal properties. This means that the combination of priority monism and (priority) cosmopsychism entails that the physical ultimate instantiates phenomenal properties, which is exactly what panpsychism says. In this chapter, however, in order to avoid confusion, by the term ‘physical ultimates’ we mean fundamental physical entities on the bottom level of reality, rather than the cosmos. Also, we remain neutral about the compatibility of priority monism with (priority) cosmopsychism because priority cosmopsychism does not rely on priority monism (and vice versa). We also remain neutral about the nature of the cosmic consciousness. Some pantheists or panentheists might think that the cosmic consciousness is the consciousness of a higher being, such as God, which shares phenomenal experiences of individual conscious beings. Some others might think that the cosmic consciousness is not in itself phenomenal but only protophenomenal. However, these issues are not crucial to our discussion.

## 4.4 Priority Cosmopsychism Versus Panpsychism

Why should we consider priority cosmopsychism as a serious alternative to panpsychism? First, like panpsychism, priority cosmopsychism is not vulnerable to the problem of strong emergence. This is because priority cosmopsychism rejects the claim that something experiential can be instantiated by something fundamentally nonexperiential. Second, more importantly, priority cosmopsychism avoids some of the most persistent problems for panpsychism albeit that priority cosmopsychism is structurally parallel to panpsychism. In this section, we consider two such problems, the problem of infinite decomposition and the combination problem.

### 4.4.1 The Problem of Infinite Decomposition

Again, panpsychism holds that all physical ultimates instantiate phenomenal properties. This means that panpsychism presupposes fundamentalism. Fundamentalism identifies entities on the bottom, fundamental level as ultimate reality.<sup>4</sup> Consider, for instance, physicalism as a version of fundamentalism. According to one form of physicalism, the ultimate level of reality is physical because, roughly speaking, microphysical theory describes the properties and behaviors of fundamental subatomic particles, on which everything else in the actual world supervenes. This means that entities on the fundamental level are entirely physical and, hence, everything in the actual world is ultimately physical. Panpsychism, at least the version that we have been considering here, adds to this form of physicalism that the fundamental subatomic particles, that is, physical ultimates, instantiate phenomenal properties.

Schaffer (2003) and Montero (2006) consider the argument that physicalism is false because fundamentalism is false. According to this argument, since the cosmos is stratified infinitely into levels, physicalism cannot be true. They are right in thinking that, insofar as physicalism is formulated as a version of fundamentalism, the falsity of fundamentalism entails the falsity of physicalism. However, the falsity of fundamentalism also entails the falsity of panpsychism because, again, panpsychism presupposes fundamentalism.

Schaffer tries to show that it is at least possible that the cosmos is stratified infinitely into levels by appealing to the conceivability and logical consistency of infinite decomposition (see Schaffer 2003, 501). First, he says, infinite decomposition is metaphysically possible because it is conceivable that everything has parts. It is conceivable that everything is extended and everything that is extended is decomposed into further entities. If conceivability entails

possibility, then it is possible that everything has parts. Second, he says, infinite decomposition is metaphysically possible because it is logically consistent. There are consistent models of mereology that allow infinite decomposition. Given that there are such consistent models, there is no a priori ground for rejecting the possibility of infinite decomposition as a metaphysical possibility. Schaffer contends, moreover, that infinite decomposition might be not only possible but also actual because it is taken seriously by scientists. For example, the quantum physicist David Bohm (1957) says that his formulation of physics is “consistent with an infinity of levels.” To take another example, the physicist Hans Dehmelt (1989) postulates an infinite regression of subelectron structure. So it appears that while it remains inconclusive whether the lack of physical ultimates is actually true, it should be taken seriously.

Again, if fundamentalism is false and there are no physical ultimates, then panpsychism is false. In such a case, contrary to what panpsychism says, there are no physical ultimates to instantiate phenomenal properties. One might suggest at this point that if there are no physical ultimates, then panpsychism can be defined as a thesis that certain microphysical entities, but not physical ultimates, instantiate phenomenal properties. However, such a view is arbitrary. It is unclear why certain microphysical entities on a certain level of reality instantiate phenomenal properties while others on lower levels do not. The possibility of infinite decomposition therefore threatens panpsychism.

Priority cosmopsychism, however, is not vulnerable to the problem of infinite decomposition. This is because priority cosmopsychism does not rely on fundamentalism. More specifically, it attributes basic consciousness to the cosmos, which is on the top level of reality, rather than physical ultimates, which, if they exist, are on the bottom level. Whether there is a bottom level, therefore, is irrelevant to the cogency of priority cosmopsychism. As long as the cosmos exists, priority cosmopsychism is intact, and indeed the cosmos does exist. These observations give us a reason to prefer priority cosmopsychism to panpsychism.

We have considered the possibility of infinite decomposition of concrete objects, but we might extend this idea to phenomenal properties as well. Chalmers, for example, seems to think that phenomenal properties are properly arranged sums of protophenomenal properties when he says that phenomenal properties logically supervene on protophenomenal properties (see Chalmers 1996, 126). If that is true, it might be the case that phenomenal properties are infinitely decomposable into more and more primitive forms of protophenomenal properties and that the chain of decomposition or supervenience continues infinitely. Such a possibility would also undermine panpsychism because the whole point of panpsychism is to introduce phenomenal or protophenomenal properties as fundamental building blocks of phenomenal



reality on the bottom level so that the existence of consciousness does not entail strong emergence. If phenomenal properties are infinitely decomposable they cannot be fundamental building blocks.

Priority cosmopsychism is not threatened by the possibility of infinite decomposition of phenomenal properties either, because, again, priority cosmopsychism regards the cosmic consciousness as ontologically prior to ‘smaller’ forms of consciousness, so whether there are ‘smallest’ forms of phenomenal or protophenomenal properties is irrelevant to the cogency of priority cosmopsychism.<sup>5</sup>

#### 4.4.2 The Combination Problem

The combination problem arises from the apparent discrepancy between a highly complex, structured aggregate of atoms and brain cells, on the one hand; and a smooth, uniform phenomenal experience such as a visual experience, on the other. The problem can be formulated as an objection to panpsychism as follows: Ordinary phenomenal experiences present themselves as smooth, continuous, and unified. They do have distinct aspects, but they have an underlying homogeneity. According to panpsychism, however, all physical ultimates instantiate phenomenal or protophenomenal properties and our ordinary phenomenal experiences result from combinations of these properties. It is hard to see, however, how phenomenal or protophenomenal properties of microphysical entities could add up to the homogeneous character of phenomenal experiences that we have.

The combination problem is arguably the most difficult problem for panpsychism. Chalmers, for example, writes, “It is certainly the hardest problem for any sort of Russellian view” (which includes a version of panpsychism we consider here; Chalmers 1996, 307). William Seager also regards it as “the most difficult problem facing any panpsychist theory of consciousness” (Seager 1995, 280). Priority cosmopsychism, however, does not face the combination problem because, unlike panpsychism, it denies that phenomenal experiences are constituted by phenomenal properties of physical ultimates.<sup>6</sup> Again, priority cosmopsychism attributes basic consciousness to the cosmos and regards individual consciousnesses as derivatives of it. That is, contrary to what panpsychism says, priority cosmopsychism regards phenomenal experiences as derivatives of something ‘larger’ (i.e., the cosmic consciousness) rather than as the aggregate of something ‘smaller’ (i.e., phenomenal or protophenomenal properties of physical ultimates). In other words, panpsychism faces the combination problem because it is a bottom-up view—it starts with phenomenal properties or protophenomenal properties of physical ultimates and tries to build ordinary phenomenal properties from them. Priority cosmopsychism,

on the other hand, is a top-down view—it starts with the cosmic consciousness and tries to derive ordinary phenomenal properties from it. Here is an analogy to illustrate this point. Suppose, *per impossibile*, there is an absolutely perfectly smooth painting, which is analogous to a smooth, homogeneous phenomenal experience. Such a painting cannot be an aggregate of small dots, which are analogous to phenomenal or protophenomenal properties of physical ultimates, but it can be a segment of a larger painting that is equally smooth and homogeneous, which is analogous to the cosmic consciousness.

One might point out here that while priority cosmopsychism avoids the combination problem it does seem to face a problem of the same structure on a larger scale. The combination problem asks how medium-size consciousnesses can be built from minute phenomenal or protophenomenal properties of physical ultimates. Similarly, the problem in question asks how the cosmic consciousness can be built from medium-size individual consciousnesses.

Fortunately, this is not a serious problem because it is based on a misinterpretation of priority cosmopsychism. Priority cosmopsychism says that medium-size individual consciousnesses are derivatives of the cosmic consciousness but that does not entail that medium-size individual consciousnesses constitute the cosmic consciousness as ontologically prior building blocks of the cosmic consciousness. On the contrary, according to priority cosmopsychism, the cosmic consciousness is ontologically prior to medium-size individual consciousnesses.

One might claim, however, that priority cosmopsychism still fails to provide an answer to the following crucial question: How could medium-size individual consciousnesses be derived from the cosmic consciousness? Let us call this problem the ‘derivation problem.’ It is not easy to provide an answer to the derivation problem because we do not know the exact nature of the cosmic consciousness. Yet we can speculate how we might be able to respond to the problem.

It is reasonable to assume that the cosmic consciousness is somewhat comparable to the consciousness of an ordinary individual because, after all, it is a form of consciousness. If we can then show that the consciousness of an ordinary individual can be divided into smaller, less fundamental segments, then we have reason to think that the cosmic consciousness can also be divided into smaller, less fundamental segments. And it seems indeed possible to divide the consciousness of an ordinary individual into smaller segments.

Consider, for example, a visual experience. A visual experience can be considered to be a unity which may be segmented into distinguishable color experiences (e.g., experiences corresponding to red and green hues) or experiences of separable regions in space (e.g., experiences corresponding to the right-hand side and the left-hand side of the visual field). Yet the whole visual

experience is considered to be a unity that is more fundamental than the segments. Perhaps the cosmic consciousness unifies individual consciousnesses in a similar way. The cosmic consciousness is more fundamental than individual consciousness, so it is not the case that individual consciousnesses are fundamental building blocks of the cosmic consciousness. On the contrary, smooth, continuous and unified individual consciousnesses are derived from the smooth, continuous and unified cosmic consciousness.

It may be useful to recall, here, that priority cosmopsychism shares a parallel structure with priority monism. Priority monism states that the concrete cosmos, as an integrated whole, is the only basic concrete object and other ordinary concrete objects are derived from it. Priority cosmopsychism states that the cosmic consciousness, as an integrated whole, is the only basic form of consciousness and ordinary consciousnesses are derived from it. As a result of this parallel structure, just as priority cosmopsychism has to address the derivation problem, so too priority monism has to address its own equivalent of the derivation problem. In the case of priority monism, the derivation problem can be stated as the problem of how the many concrete parts of the cosmos are derived from the basic concrete whole.

Schaffer (2010, 57) offers a number of possible solutions to the derivation 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.

Recall that for priority monism the derivation problem is the problem of accounting for the derivative parts in terms of the basic cosmos. Schaffer addresses the problem in terms of heterogeneity. It is typically an uncontroversial premise that the basic feature(s) of the cosmos must be homogenous. According to priority monism the cosmos itself is the only basic feature, yet it claims that the cosmos is also heterogeneous because it contains derivative parts. Schaffer offers three different options for explaining the heterogeneity of the cosmos whilst still allowing that it is, as an integrated whole, basic. He also notes that *any* view positing basic features needs to account for their being heterogeneous as opposed to homogenous (see Schaffer 2010). The three accounts of the heterogeneity of the cosmos are given with respect to firstly, distributional properties, secondly, regionalized properties, and finally, regionalized instantiation.

On the first account the cosmos, as an integrated whole, is heterogeneous due to instantiating distributional properties,

For the monist, the general fact that the world is heterogeneous is due to the world's instantiating the determinable property of being heterogeneous. The specific way that the world is heterogeneous is due

to the world's instantiating the determinate property of tracing such-and-such a curve through physical configuration space. Thus the one whole can be parturient. (Schaffer 2010, 260)

On the second account, the cosmos is heterogeneous due to regionalized properties. The cosmos has the monadic property of being the cosmos, yet it bears a relation of, say, spikiness to one region and flatness to another. The third account also makes use of regionalization but instead appeals to regionalized instantiation, where the cosmos is heterogeneous due to it, say, instantiating-here spiky and instantiating-there flat.

There are differing views regarding the three accounts, but the important thing is that they are consistent ways to make the move from, in concrete terms, a cosmos that is a basic integrated whole to a derivative heterogeneity. 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.

In parallel to the first response, priority cosmopsychists might say that the cosmic consciousness is heterogeneous due to it instantiating the determinable property of being heterogeneous. According to this response the cosmic consciousness would instantiate the distributive property of following a particular path through phenomenal configuration space (no doubt an extremely complex path through a configuration space of many dimensions). In parallel to the second response, priority cosmopsychists might say that the cosmic consciousness is heterogeneous due to regionalized properties, where the cosmic consciousness is a monadic property which bears a relation of redness to one region and blueness to another region. The monadic property of being the cosmic consciousness would demonstrate many relations among regionalized phenomenal properties. Finally, in parallel to the third response, priority cosmopsychists might say that the cosmic consciousness is heterogeneous due to regionalized instantiation of phenomenal properties, the cosmic consciousness instantiates-here red and instantiates-there blue. A thorough exploration of such possibilities is not within bounds of the present chapter but will make for interesting future work.

Let us recap. Panpsychism faces the infinite decomposability problem because it relies on fundamentalism. Priority cosmopsychism, on the other hand, does not face that problem as it is free from fundamentalism. Panpsychism also faces the combination problem, which is recognized as the strongest objection to the view. Priority cosmopsychism, on the other hand, offers a satisfactory answer to this problem. Instead of the combination problem, however, priority cosmopsychism faces the derivation problem. Yet, as we have seen,

there are *prima facie* reasons to think that it can be resolved. Therefore, priority cosmopsychism seems more attractive than panpsychism.

## 4.5 Objections to Priority Cosmopsychism

We have seen that priority cosmopsychism overcomes some of the most persistent problems associated with panpsychism. One might argue, however, that priority cosmopsychism still seems more implausible than panpsychism. In this section, we review some objections to priority cosmopsychism.

### 4.5.1 Inexplicability of the Cosmic Consciousness

One might reject priority cosmopsychism by saying that it is silent about exactly what the cosmic consciousness is. The attribution of phenomenality to the cosmos is essential for priority cosmopsychism, so without explaining what the cosmic consciousness is, one might say, priority cosmopsychism is incomplete.

Priority cosmopsychism is not completely silent about the nature of the cosmic consciousness. It says, for example, that the cosmic consciousness is ontologically the most fundamental form of consciousness of which the consciousnesses of ordinary individuals are derivative. We can also speculate about further possibilities. For example, we might think that since the cosmos on the whole is not complex enough in a relevant sense to instantiate phenomenality to the fullest extent there is no such thing as the phenomenal self for the cosmic consciousness. Perhaps the cosmic consciousness is an organic unity of phenomenal and protophenomenal forms of conscious experiences. Recall again however that our purpose here is not to offer a full defense of priority cosmopsychism but only to show that priority cosmopsychism is more attractive than panpsychism insofar as it avoids some of the most persistent problems for panpsychism. If panpsychism does not say much about the nature of the consciousness of physical ultimates, priority cosmopsychism is not committed to saying much about the nature of the cosmic consciousness either. And, in fact, panpsychism says very little about the consciousness of physical ultimates. Chalmers, for example, writes, “Of course it is very hard to imagine what a protophenomenal property [which a physical ultimate instantiates] could be like but we cannot rule out the possibility that they exist” (Chalmers 1996, 127). We can make a parallel claim here: Of course it is very hard to imagine what the cosmic consciousness could be like but we cannot rule out the possibility that it exists. And, again, there are reasons to prefer priority cosmopsychism to panpsychism.

#### 4.5.2 Counterintuitiveness

Priority cosmopsychism attributes consciousness to the cosmos, which seems highly counterintuitive. One might wonder how we could take such a counterintuitive thesis seriously.

Recall, once again, that we are comparing only the plausibility of priority cosmopsychism with that of panpsychism. So our interest here is to show only that priority cosmopsychism is no more counterintuitive than panpsychism. Panpsychism holds the fundamentalist view that there is a fundamental bottom level of reality and it adds that physical ultimates on the fundamental level instantiate phenomenal properties. Priority cosmopsychism, on the other hand, holds that the cosmos is on the top level of reality and adds that the cosmos instantiates phenomenal properties. Structurally speaking, therefore, they are parallel, and there seems no reason to think that either of them is distinctively more counterintuitive than the other.

One might claim, however, that the attribution of phenomenality to the cosmos is particularly absurd. The brain can instantiate phenomenal properties because it has the right structural complexity. Yet, one might continue, the cosmos is not comparable to the brain in terms of structural complexity.

While this might be a good argument to show that priority cosmopsychism is counterintuitive it is not a good argument to show that priority cosmopsychism is *more* counterintuitive than panpsychism. This is because panpsychism faces an objection of the exact same form: Physical ultimates do not have the structural complexity of the brain, so it is counterintuitive to think that they can instantiate phenomenal properties. (If structural complexity is really crucial it might be more implausible to say that physical ultimates have consciousness than that the cosmos does because they are structurally much less complex than the cosmos.)

Notice that panpsychism itself is often rejected on the ground that it is highly counterintuitive. John Searle, for example, calls panpsychism an “absurd view” and characterizes Chalmers’s defense of panpsychism as follows: “when faced with a *reductio ad absurdum* argument he just accepts the absurdity” (Searle 1997, 156). It would be ironic if panpsychists were to dismiss priority cosmopsychism because of its counterintuitiveness when they emphasize that panpsychism should not be dismissed on the basis of its counterintuitiveness.

We can apply the same reasoning to many other objections to priority cosmopsychism. For example, one might say that priority cosmopsychism is absurd because there is no sign that the cosmos is conscious (the ‘no sign’ problem for priority cosmopsychism) or because there is no definitive empirical test to prove that the cosmos is conscious (the ‘no test’ problem for priority cosmopsychism). In response to the ‘no sign’ problem, one might say that there

is no sign because the cosmos is not structured in such a way that it behaves in accordance with the phenomenal or protophenomenal properties it has, unlike the way in which human bodies behave in accordance with the phenomenal or protophenomenal properties humans have. In response to the ‘no test’ problem, one might point out that, to the extent that there is no definitive empirical test to prove that the cosmos has consciousness, there is similarly no definitive empirical test to prove that higher animals have consciousness. That is why the problem of animal minds (and other minds) is intractable. However, it is unnecessary to offer such philosophically substantial responses because these problems apply as much to panpsychism as to priority cosmopsychism. There is no sign that physical ultimates are conscious (the ‘no sign’ problem for panpsychism) and there is no definitive empirical test to prove that physical ultimates are conscious (the ‘no test’ problem for panpsychism). Again, we are comparing only priority cosmopsychism and panpsychism. It is, therefore, sufficient to say that while these problems might be genuine challenges for priority cosmopsychism they apply equally to panpsychism. Hence, these problems do not make priority cosmopsychism any more implausible than panpsychism.

#### 4.5.3 Estrangement from Current Science

It might be contended that priority cosmopsychism is not to be preferred since it is less compatible with features of current science than contemporary panpsychism is. It might be argued, for example, that priority cosmopsychism is an especially estranged view since it is not concerned with the same physical ultimates that are the focus of current physics. One might claim panpsychism is preferable on the grounds that it is concerned with the same physical ultimates described by current physics, since it states that fundamental phenomenal, or protophenomenal, properties are associated in some sense with such ultimates.

One particular objection of this kind might be that priority cosmopsychism is unable to adhere to the causal closure of the microphysical. This is the principle, which says that the causal efficacy of the world is fully accounted for in terms of the causal efficacy of the physical ultimates. One might claim that panpsychism can address the problem of causal closure but priority cosmopsychism cannot. Panpsychism might adhere to the principle by claiming that since all physical ultimates instantiate phenomenal properties any causal efficacy that they may have is already accounted for in current physics.

In response to such objections, we first note that the purpose of this chapter is to defend a blueprint for a new alternative to panpsychism, here we do

not defend any specific view based on this blueprint. In this chapter we only address phenomenality and do not endorse a particular relation between phenomenal properties and physical properties. Since it is in such a relation that it will become clear if priority cosmopsychism can adhere to the causal closure of the microphysical, it is after developing a specific view based on the blueprint that one would be fully equipped to respond to this objection. However, it might be interesting to note that one possible development on the blueprint we offer here is a *dual-aspect* version of priority cosmopsychism, according to which the phenomenal and the physical are co-extensive, with the respective properties at the level of the cosmos being basic. On such a view it might be considered more plausible for the priority cosmopsychist to follow the panpsychist in claiming that the principle of causal closure is adhered to on the grounds of the phenomenal already being accounted for in our current physics.

## 4.6 Conclusion

Panpsychism is an attractive view because, by attributing phenomenality to the fundamental nature of reality, it avoids the problem of strong emergence. However, on the other hand, panpsychism faces the infinite decomposition problem because it presupposes the existence of physical ultimates. It also faces the combination problem because it holds that phenomenal experiences are constituted by phenomenal or protophenomenal properties of physical ultimates. Priority cosmopsychism can be construed as a hypothesis designed to avoid these problems without compromising the promising approach to the problem of strong emergence suggested by panpsychism. Priority cosmopsychism attributes the most fundamental form of consciousness to the cosmos, rather than physical ultimates, and holds that the consciousnesses of ordinary individuals are derivative of it. In this way, priority cosmopsychism avoids not only the problem of strong emergence but also the infinite decomposition problem and the combination problem. Since priority cosmopsychism and panpsychism are structurally parallel, priority cosmopsychism is no more implausible or counterintuitive than panpsychism. Therefore, we can conclude that priority cosmopsychism benefits from a theoretical advantage over panpsychism.

Again, what we have defended in this chapter is a blueprint for a new alternative to panpsychism. This blueprint may be used to develop more specific views, such as monistic, dualistic, or even pantheistic views based on priority cosmopsychism. We have to wait for another occasion to develop and assess such specific views.



## Notes

1. An earlier version of this essay was presented at the “Minds: Human and Divine” conference in Munich in 2012. This conference was part of the Analytic Theology Project graciously funded by the John Templeton Foundation. We would like to thank all in the audiences. We are particularly grateful to Godehard Brüntrup who organized the event. This essay was written as part of Nagasawa’s research project with Andrei Buckareff, “Exploring Alternative Concepts of God,” funded by the John Templeton Foundation. We thank the Foundation for its generous support.
2. To be precise, in this passage Chalmers is talking about the phenomenal and protophenomenal versions of what he calls type-F monism, which subsumes some versions of panpsychism. So his focus in the passage is more general than ours.
3. For a discussion of existence monism see Horgan and Potrč 2000.
4. As Barbara Montero (2006, 181) points out, fundamentalism can be formulated in many ways. For example, it can be formulated in terms of decomposition, in which case entities on the fundamental level are undecomposable proper parts (i.e., mereological atoms or simples) that constitute everything else on higher levels. To take another example, it could be formulated in terms of supervenience, in which case entities on the fundamental level are the bases on which all entities on higher levels supervene. It can also be formulated in terms of realization, explanation, reduction, determination, and so on. In this chapter, we focus on decomposition because that seems to be most intuitive. However, most of the claims that we make over the course of this paper apply equally to other formulations.
5. Here we use the term ‘small’ metaphorically. Phenomenal properties are not concrete objects so, of course, they do not occupy physical space.
6. Similar points are made by Ludwig Jaskolla and Alexander Buck (2012) and Freya Mathews (2011), but the cosmopsychist views to which they appeal are radically different from ours. Consider, first, Jaskolla and Buck’s ‘panexperientialist holism.’ Panexperiential holism presupposes existence monism, saying “there is exactly one entity—the universe itself” (Jaskolla and Buck 2012, 196). Existence monism is a highly controversial thesis, on which our view, priority cosmopsychism, does not rely. Priority cosmopsychism does not even rely on priority monism, which is more modest than existence monism. Panexperiential holism also stipulates that the universe is “a subject of experience . . . exemplifying experiential content” (Jaskolla and Buck 2012, 196). Priority cosmopsychism does not make such a claim as it is a minimalist view that is parallel to panpsychism. Insofar as panpsychism does not assume that physical ultimates are subjects of experience exemplifying experiential content, priority cosmopsychism does not assume that the cosmos is a subject of experience exemplifying experiential content. Consider, second, Freya Mathews’s “cosmological panpsychism.” According to this view, “the One” is a subject that “may feel the effects of finite centres of subjectivity in the field of its own larger subjectivity, even though it may not be able actually to experience the way such finite selves feel to themselves” (Mathews 2011, 149). Priority cosmopsychism is not committed to such a claim as, again, it does not assume that the cosmos is a subject of experience. Also, in explaining the nature of the consciousness of the One, Mathews appeals to an idea in psychoanalysis saying, “Amongst the unconscious components of psyche are enduring constellations of psychophysical energy which never surface into ego consciousness yet which nevertheless may be active in the psychic life of a person” (Mathews 2011, 148). Again, priority cosmopsychism does not make such a claim.

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