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Unity Between God and Mind? A Study on the Relationship Between Panpsychism and Pantheism

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Abstract
A number of contemporary philosophers have suggested that the recent revival of interest in panpsychism within philosophy of mind could reinvigorate a pantheistic philosophy of religion. This project explores whether the combination and individuation problems, which have dominated recent scholarship within panpsychism, can aid the pantheist's articulation of a God/universe unity. Constitutive holistic panpsychism is seen to be the only type of panpsychism suited to aid pantheism in articulating this type of unity. There are currently no well-developed solutions to the individuation problem for this type of panpsychism. Moreover, the gestures towards a solution appear costly to the religious significance of pantheism. This article concludes that any hope that contemporary panpsychism might aid pantheists in articulating unity is premature and possibly misplaced.

Keywords Pantheism · Panpsychism · Combination problem · Unity · Philosophy of mind

Introduction

For better or worse, philosophy of mind and philosophy of religion have a porous relationship. This paper evaluates whether recent scholarship on panpsychism's combination/individuation problem within philosophy of mind can be adapted to provide the articulation of unity, both within the world and between the universe and God, required for a philosophical articulation of pantheism.[1]

Panpsychism and pantheism have often appeared as complimentary positions within the history of philosophy (see James 1909/2008), and so, it is unsurprising that there

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has been some expectation that the growing resurgence of interest in panpsychism over the last 30 years might reignite philosophical interest in pantheism. Panpsychists sometimes trace their lineage back to Thales' reported statement, 'all things are full of gods' (Aristotle 2007: 411a7). The term 'panpsychia' was coined by Francesco Patrizi in the sixteenth century to refer to the phenomenal nature of the divine omnipresence, which links panpsychism and divine immanence (Nagasawa forthcoming). However, unlike many of their historical forebears, most contemporary panpsychists construe panpsychism in a purely naturalistic fashion. That is, the explicandum for panpsychists is not God or any religious unity, but (primarily) the human mind and subjective awareness. Yet, if mentality is in some way considered akin to divinity, then it is easy to suppose, prima facie, that the fundamental and often ubiquitous position of mind within panpsychism is complimentary to pantheism.[2] John Macquarrie exhibits this thinking when he writes that, 'But God would be present to some degree in everything, so that pantheism often combines with a doctrine of panpsychism' (Macquarrie 1984: 53). However, the intuition that panpsychism and pantheism might be counterpart theories in mind and religion needs careful examination.

It is for this reason that leading contemporary pantheist, Michael Levine, writes that neither pantheism nor panpsychism 'entail one another, and the suggestion that pantheism and panpsychism naturally go together is vague apart from specific accounts of the two positions' (Levine 1994: 114). Levine draws a clear distinction between panpsychism and pantheism so that the core claims of both theses extend far outside the purview of the other. In brief, panpsychism makes no direct claim on religious views and pantheism (in Levine's hands) makes no claims on the origin or place of consciousness. Panpsychism and pantheism can certainly be held independently of one another. However, the question of whether panpsychism can aid pantheism in articulating a religiously significant model of unity within the universe is not discussed by Levine. This paper addresses this lacuna, not by evaluating the relationship between panpsychism and pantheism through the vague notion that if mind is ubiquitous then God must be also, as Levine rightly critiques, but instead focuses on the structural correspondence between the problems of mental combination and divine-world unity within each philosophy.

The first argument within this paper (Section 1: Pantheism and the Importance of Unity and Section 2: Types of Panpsychism Relevant to Pantheism) is to show that the pantheist's problem of unity and the panpsychist's problems of combination are parallel problems. First, it is shown that pantheism, to become a successful and popular position within contemporary philosophy of religion, urgently requires a clear and distinctive articulation of unity. It is argued that in order to demarcate pantheism from neighbouring theological positions, the pantheist needs to articulate a constitutive unity with regard to both the universe taken as a single whole and to the God-world relationship. Second, this paper argues that the type of panpsychism that is most likely to aid the pantheist, in that it requires the same expression of unity as pantheism, is *constitutive holistic panpsychism*. The third section moves on to the second main

[2] Yujin Nagasawa argues that, if mentality is akin to divinity, then the more precise correspondence is between pantheism and cosmopsychism, whereas panpsychism corresponds to (an extreme form of) polytheism (Nagasawa forthcoming).

argument of this paper; constitutive holistic panpsychism currently offers no successful solutions to the unity problem that it shares with pantheism. To argue this, I evaluate four contemporary models of constitutive holistic panpsychism in reference to pantheism. It is seen that these panpsychist solutions are either inconsistent, underdeveloped, or come at a significant religious cost to the pantheist. Overall, this paper argues that very few versions of panpsychism are suited to aiding pantheists articulate unity, and the one version that is suited is currently unable to do so. As such, the revival in panpsychism currently offers much less hope for reigniting pantheism than might be imagined. It may be that contemporary panpsychism holds more compatibility with non-pantheistic philosophies of religion such as classical theism (as Leibniz argued) or panentheism (as Hartshorne argued). Indeed, Freya Mathews has suggested that panentheism may simply be the religious equivalent of panpsychism (Mathews 2010). It is beyond the scope of this paper, which focuses on panpsychism's relationship to pantheism, to evaluate this possibility, but it remains an important area for future research.

Section 1: Pantheism and the Importance of Unity

Pantheism stands at one end of a spectrum of views regarding the 'God-world' relationship. As is implied in the name, pantheism is broadly the view that *everything* (pan) *is God* (theism). This definition sounds simple enough, but, of course, much depends on how 'everything', 'God' and perhaps most importantly 'is' are more precisely defined. What ontological categories are included in everything and whether God is perceived as a personal or impersonal category, dictate what resources a pantheist has in when parsing out the unity between all things, which is the core of the pantheistic thesis.

Pantheism, in fact, asserts *two* relations of identity. First, God is identified with the universe (or vice versa), and second, all things within the universe are identified into a single unity. Alasdair MacIntyre's definition of pantheism captures this well. He writes, 'Pantheism essentially involves two assertions: that everything that exists constitutes a unity and that this all-inclusive unity is divine.' (MacIntyre 1967: 34)[3] Following MacIntyre's definition, leading contemporary pantheist scholar Michael Levine speaks of 'an all-inclusive divine unity' (Levine 1994: 2). The pantheist, firstly, requires unity *within* the world so that God/universe can be understood as one single deity, distinguishing pantheism from polytheism. Secondly, the unity *between* God and world must be able to differentiate pantheism from other forms of theism which also emphasize a divine immanence.[4]

Douglas Hedley has argued (contra Michael Levine) that whereas Spinoza can be considered a pantheist because he posits 'a *constitutive* unity (because one substance

[3] Paul Harrison writes, 'Two core beliefs lie at the heart of pantheism. All pantheists believe that the universe is divine, or that there is no distinction or separation between the universe and God. And they believe that the universe is in the deepest sense a unified whole of which all individual things are interdependent parts' (Harrison 1999: 1, 39). Graham Oppy also provides the two-part definition, '1. There is a unique thing of which all things are parts. … 2. The thing of which all things are parts is divine' (Oppy 1997: 320).

[4] As Douglas Hedley has argued, too long have theists and pantheists only dealt with "crude" version of their opponents positions, 'The real debate is between subtle pantheism (SP) which proposes a unifying immanent force worth of worship and subtle theism (ST) which proposes a causal relationship between a transcendent unity and the cosmos' (Hedley 1996: 62).

has modes and attributes)', the Neoplatonists could not be considered pantheists because they believed in 'a causal relationship between the One and the Many', which is a *non-constitutive* unity (Hedley 1996: 65–66, italics added). My concern here is not, as it is for Hedley, with characterizing who was or was not a pantheist or theist historically. Instead, what I take from Hedley is the need for a more nuanced, perhaps less polemic, understanding of both theism and pantheism in the comparative literature on these two positions. Theism should not be mischaracterised as a position lacking in all types of unity in the God-world relationship and pantheism should not be seen to posit unity of an unspecified nature. Instead, pantheism and theism are genuine religious alternatives because they uphold different types of unity between God and the world, constitutive unity and non-constitutive (or causal) unity, respectively.

Constitutive unity here refers a type of unity between levels or phenomena, whereby if x is in constitutive unity with y, then all the true statements about y are true because they are true about x. Constitutive unity is sometimes seen as a reductive relation, in that the unity between levels does not permit new properties at the higher-level that are not constituted by the properties at the lower level. By contrast, x is unified with y in a non-constitutive relation if x is more than y in some way, there are some independent truths about x. For a non-constitutive relation, there could be truths about x which cannot be said to be true of y or are not true about x because of its unity with y (even if they are true about x and y separately). If a pantheist posits a non-constitutive unity between God and the world, then they would open a descriptive and causal gap between God and the world, thus failing to demarcate their position from alternative positions. What I am suggesting here is that the type of unity between God and the universe necessary for demarcating pantheism from other neighbouring theological positions is specifically *constitutive unity*; all statements which are true about God are also true about the universe (when taken as a single whole), and it is because they are true about the universe that they are also true about God and vice versa.

Two common ways to posit unity within the universe are through either a materialist or idealist monism. Materialistic pantheism (sometimes called 'scientific pantheism' or 'naturalistic pantheism') has long been charged with atheism.[5] By defining everything as exclusively material, or as exclusively knowable to the natural sciences, materialistic/scientific pantheism is in danger of reducing divinity to a sentimental gloss which humans attach to an otherwise mechanistic and mindless universe.[6] Hence, Schopenhauer's famous objection to pantheism 'is that it says nothing. To call the world God is not to explain it; it is only to enrich our language with a superfluous synonym for the word "world"' (Schopenhauer 1951: 40). The implication is that if God is to be a religiously significant term or if pantheism is to have semantic content beyond atheism, then it cannot be merely a collective term for all the (purely) physical objects in the universe.

[5] Coleridge, in his non-pantheistic phrase, claimed that 'everything God, and no God, are identical positions' (McFarland 1969: 228). H.P. Owen (1971: 69–70) says, 'if "God" (theos) is identical with the universe (to pan) it is merely another name for the Universe'. Richard Dawkin's writes that 'Pantheism is sexed up atheism' (Dawkins 2006: 40).

[6] Illingworth famously accused pantheism of being 'materialism grown sentimental' (Illingworth 1898: 69), and Henri Bergson writes that the result is to 'hypostatize the unity of nature, or, what comes to the same thing, the unity of science, in a being who is nothing because he does nothing, an ineffectual God who simply sums up in himself all the given' (Urquhart 1919: 207, 614).

Idealistic pantheism, by contrast, has been critiqued for implying that the material universe and all which we perceive is an illusion or shadow of the Infinite Being. Idealistic pantheism has been a leading theory throughout the long history of Indian philosophy. In the *Rig-Veda* (x.90) we read the pantheistic statement, 'He [Brahman] is Himself the very universe. He is whatever is, has been, and shall be' (Urquhart 1919: 58). Early twentieth century commentators identify two movements within the pantheism of the Upanishads: the denial of the particularity of our ordinary experience so that there are no discrete objects and an absolute identity between the individual subject (Atman, the soul and no-self) and the divine Brahama, 'so as to reach an absolute unity', a single self (Ibid: 109–118). The goal is 'the fontal unity of undifferentiated being' (Ibid: 111). The individual Atman is not a small part of the divine being but is wholly and fully the divine being, since they are identified as one and the same. This is the discovery that one's own self and existence as an individual, discrete entity is an illusion; I do not really exist, or not in a differentiated sense. The conclusion that all material existence and mental particularity does not exist is at best experientially unsatisfactory and at worst self-refuting (Descartes was at least correct about that). Pantheism requires an account of constitutive unity which can hold together the reality of particular individual subjects and a concept of a single universal whole.

Section 2: Types of Panpsychism Relevant to Pantheism

The ancient theory of consciousness, panpsychism, is undergoing something of a revival within philosophy of mind. Arguments put forward by renowned figures such as Thomas Nagel, Galen Strawson and David J. Chalmers are being joined by an increasing number of established philosophers defending the claim that panpsychism is currently the most cogent way to understand human consciousness and its place in an evolutionary world.

Panpsychism refers to a diverse range of theories all united by the broad idea that 'mind is a fundamental feature of the world which exists throughout the universe' (Seager and Allen-Hermanson 2010).[7] There are three main questions panpsychists must answer in constructing a specific type of panpsychism. (a) How (or where) is it best to articulate fundamentality? Here the choice is between *atomistic* and *holistic* forms of panpsychism. (b) What type of mentality is necessary referring to the fundamental level of reality? Here the choice is between (subject) *panpsychism* and *panprotopsychism*. (c) What is the relationship between human minds (macro-level minds) and fundamental mind(s)? Here the choice is between *constitutive* and *non-constitutive* panpsychism. Each choice is fairly independent of the others, so that there are eight possible versions of panpsychism. Here I will argue that *constitutive holistic panpsychism* is the type of panpsychism most relevant to pantheism and thus most promising in aiding the pantheism in articulating the unity within the universe/God.

[7] Philip Goff and Galen Strawson differentiate panpsychism from idealism. Goff defines panpsychism as 'the view that fundamental physical entities are conscious' (Goff 2017a: 283). Strawson writes that panpsychism means that 'that the existence of every real concrete thing involves experiential being even if it also involves non-experiential being' (Strawson 2006: 8).

What Is Fundamental?: Atomistic Panpsychism vs. Holistic Panpsychism

To say that a property or entity is fundamental, in this context, is to suggest that it cannot be explained in terms of, composed of, or derived from anything else. Panpsychism is distinguished from traditional substance dualism by adopting some form of monism such that there can be only one fundamental level. This may contain mind and matter together (dual-aspect or Russellian monism) or just mind (idealism). Whichever type of monism is proposed, there remain two options for articulating fundamentality: atomism or holism. Atomistic panpsychism claims that the smallest, indivisible entities of the universe are what is fundamental, and so it is here that they posit mentality. Holistic panpsychism claims that the universe, taken as a fundamental single whole, is mental.

Atomistic panpsychism, which attributes mentality to the most basic, non-composite subatomic waves and particles of the universe—the building blocks of reality, as it were—is the default option for most panpsychists. This principle is largely taken as parallel to the basic intuition and methodology of the natural sciences that microphysical entities combine into macrophysical entities; an engine is made up of parts, parts are made of up of molecules, molecules are made up of atoms, etc.. Mereological relationships remain a difficult area for any philosophy, but this appears particularly tricky in the case of mental parts and wholes.

Panpsychism's explanatory promise rests upon the idea that human minds can be explained by fundamental mental entities (the micro-mentality of electrons or quarks, or the cosmic-mentality of the universe as a whole). However, human self-reflective experience is of a single unity or self; it is not transparent that human minds are a collection of selves. Therefore, a principle of either the combination of micro-phenomena to bring about real unity (and not mere aggregation) or the individuation of the cosmic-mentality to bring about bounded finite subjectivity lies at the core of the panpsychist's thesis.[8] Without positing a theory of why some physical compositions instantiate bounded consciousness and first-person perspective and others do not panpsychism quickly becomes an absurdity. This is called *the Combination Problem*.

The most well-known and probably the most difficult version of the combination problem is the Subject Summing Problem: How does the combination of two distinct subjects, each with their own bounded first-person perspectives, yield an entirely new subject? And, what is the new subject's relation to the original two (or more) combined subjects? (Chalmers 2017: 182). This is directly related to what Gregg Rosenberg has termed the Boundary Problem: How is it that micro-experiences combine to yield a bounded consciousness that, as we saw in the subject-summing problem, appears isolated and finite? (Rosenberg 1998: 77–90) Although the boundary problem has received less attention, it may in fact be the hard-nut of these various problems since it focuses not on what is to be combined but on the boundaries that prevent or enable combination. Mental combination without boundaries is of no aid to the panpsychist or the pantheist. This is because without bounded selves the finite individuals, whom both

[8] What I call 'the individuation problem' has also been referred to as the 'decombination problem' by Miri Albahari (forthcoming), the 'decomposition problem' by David Chalmers (Chalmers 2015), and the 'derivation problem' by Yujin Nagasaw and Khai Wager (Nagasawa and Weger 2017). For an excellent treatment of various types of combination that the atomistic panpsychist needs to account for, see Chalmers (2017: 179–214). I know of no such equally precise treatment of various individuation problems.

theories maintain to some degree, would be lost. As Rosenberg writes, 'in a world where experiences combined according to a matrix or vector rules, for example, one might predict an ocean of experience constituting universal consciousness, but not experiences below that level: a comically cosmic god-mind, experiencing itself alone forever' (Rosenberg 2017: 156). From this, we can begin to see how some versions of panpsychism may dovetail with pantheism.

Chalmers' exploration of the Subject Summing Problem and Rosenberg's articulation of the Boundary Problem both approach this challenge from the perspective of atomistic panpsychism, that is, they both seek an account of mental *combination*. By holding that parts are more fundamental than wholes, atomistic panpsychism is a difficult starting place if one is looking for a way to articulate the primacy of unity within the universe, as the pantheist is. There has been one proposal to articulate pantheistic unity through atomistic panpsychism, however. Karl Pfeifer has explicitly argued that a variety of panpsychism that he calls 'panintentionalism' can make pantheism's unity claims more intelligible (Pfeifer 2016: 41). Contrary to this paper, Pfeifer concludes that 'panpsychism can be tantamount to pantheism' (Ibid.: 49).

Pfeifer's first thesis is that the God of pantheism should be understood as a 'mass noun', which can be infinitely divided and combined without losing its essential identity. The first half of Pfeifer's chapter concludes by viewing God as the metaphysical substratum of the universe, the stuff which the various objects of the universe are configurations of (Ibid.: 44). This first thesis seems plausible enough but has little to do with panpsychism and does nothing to make the God of pantheism a religiously significant concept, as opposed to merely a semantic term for the stuff of the universe (see Schopenhauer's famous quote above). Pfeifer's second thesis introduces panpsychism to try and aid pantheism becomes a more compelling position in philosophy of religion. Interestingly, whereas most forms of panpsychism are naturally aligned with idealistic pantheism, Pfeifer's builds a thoroughly materialistic pantheism.

The panpsychism in Pfeifer's presentation can only very charitably referred to a panprotopsychism, since there is very little talk of 'psyche' at any level. Pfeifer's panintentionalism is built on the identification of intentional mental states with physical dispositional states, based on an analogy of the behaviour and capacities of these two phenomena. Intentional mental states are then described as the *summation* of lots of cruder dispositional physical states (Ibid.: 47–48), making this an atomistic approach. It is hard to discern, in this discussion, if Pfeifer is a realist about consciousness, which is the backbone of the revival in contemporary panpsychism (Strawson 2006). There is no discussion of phenomenal consciousness, no talk of experience, or subjects of experience in this chapter (it is perhaps telling that the philosophers of mind Pfeifer draws upon for his panintentionalism are not panpsychists, i.e. Daniel Dennett, Fred I. Dretske and John R. Searle). Without subjects of experience, it is hard to see *whose* intentionality Pfeifer is discussing; it might be God's since 'the world [is] God's brain', but then God would not be a mass noun, but a countable subject (Ibid.: 41, 48, 49), and we would be back to the drawing board on the individuation problem. Pfeifer's proposal may be a way to articulate materialistic pantheism, but it does not have a robust account of mentality to convince this author that panintentionalism is a form of panpsychism, which is necessary in order to prove the thesis that panpsychism can be tantamount to pantheism. Nor has Pfeifer successfully accounted of the combination/individuation of *subjects* within a cosmic-divine unity, which is the goal of this paper's exploration.

The alternative to atomistic panpsychism is holistic panpsychism. Different versions of holistic panpsychism, such as 'panexperiential holism', 'priority cosmopsychism' and 'cosmological panpsychism', all share the common thesis that the universe as a single whole is the only fundamental entity, and therefore, it is the universe as a single whole which instantiates consciousness. This priority of cosmic unity suggests that holistic panpsychism should be of some interest to the pantheist.

Ludwig Jaskolla and Alexander Buck's panexperiential holism is a panexperientialist version of 'existence monism', which states that 'there is exactly one entity—the universe itself' (Jaskolla and Buck 2012: 197). This means that 'strictly speaking there is only one real subject—i.e. the big experiential subject of the universe as a whole' (Ibid:198). Jaskolla and Buck write that combination 'is not a problem for panexperiential holism at all, because there are no [micro] subjects to sum' (Ibid: 197). Equally, however, Jaskolla and Buck could say that there are no subjects to individuate, because there are no subjects except the universe itself as a single subject. It becomes very difficult to locate human selves or subjects within the framework of *existence* monism; there is only one true subject and all other appearances of subjectivity are defined as 'one particular experiential pattern [that] the universe undergoes' (Ibid: 198). Jaskolla and Buck refer to this quasi-abstract experiential pattern as individual, persisting, human selves (Ibid.). Jaskolla and Buck do not discuss the first-person perspective that we normally associate with subjects, and this creates some ambiguity in their paper. Since human selves are not 'equally real as the concrete pattern at a particular point in spacetime', one can assume that human selves do not have their own first-person perspective. However, as long as human selves remain the main explanandum of any philosophy of mind, then holistic panexperiential must be deemed unsatisfactory. Panexperiential holism does not explain human subjectivity; it merely ignores the question of human subjectivity all together and this is to evade the core of the problem.

Other forms of holistic panpsychism are more promising. Itay Shani, Philip Goff, Yujin Nagasawa and Khai Wager all employ Jonathan Schaeffer's priority monism (token monism), which states that the universe exists as a single whole but is not the only truly existing entity (Schaeffer 2010a, b, 2013). Schaeffer argues that whereas for aggregates (such as a pile of sand), we intuitively consider the parts prior to the wholes; for genuine wholes, we intuitively consider the whole more basic (a circle is more basic than a semi-circle; a body is more basic than a limb). Schaeffer argues that we should consider the universe as a genuine whole and not an aggregate, more like a circle or body than an aggregate pile of sand (Schaeffer 2010a: 31, 45–46). Some priority cosmopsychists employ the metaphor of 'a vast ocean of consciousness' in a similar way to how Schaeffer employs a circle; the ocean can be understood to be a whole which can be divided, rather than a collection of water molecules (Shani 2015: 389–437, 411–412.).

Holistic panpsychism and pantheism both state that the universe is fundamentally a single unified whole and not to be viewed as an aggregate or collection of individual parts. Priority monism seems to be a suitable model for holistic panpsychists and pantheists to adopt in seeking to emphasise the primary unity the single cosmic whole, without denying the reality of things within that whole. Panpsychists use the unity of consciousness to give articulation of the nature of this cosmic unity; the universe can be taken as a single whole because it consists in a single consciousness. This seems a very promising way for pantheism to express the unity within the universe. A pantheist

would then only need to identify (in a one to one identity relation) this single consciousness with God.

The move towards holistic panpsychism is often motivated by the desire to retreat away from such the problems of combination. However, this move runs into the arms of an equally difficult problem: the Individuation Problem. Although this problem is often gestured to and widely acknowledged, I know of no precise articulation of the types of individuation that a holistic panpsychist needs to account for. There are, to my mind, at least six overlapping types of individuation problems:

> How does one consciousness give rise to many distinct subjects, whose experience and perspective is neither identical to each other, nor to the former single consciousness? (the Subject Individuation Problem)
> How does one quality laden field individuate into distinct qualities such that individual subjects may experience these qualities and not others? (the Quality Individuation Problem)
> How does one experiential field individuate into distinct experiences, such that individual subjects may enjoy some experiences and not others, and some experiences may be had by one subject but not another subject? (the Experience Individuation Problem)
> How does one experiential or quality laden field individuate into subjects which have bounded awareness? (the Awareness Individuation Problem)
> How does the cosmically structured (we might say sparsely structured), unbounded cosmic consciousness or field of experience structure itself in such a way as to hold within it distinct (compactly structured) subjects and qualities? (the Structural Individuation Problem)

Atomistic panpsychists are keen to defend that not *all* combinations of matter give rise to new macro-subjects. One of the reasons a theory of combination is so important for atomistic panpsychism is to avoid the absurd conclusion that *every* combination of matter gives rise to a new individual subject. Holistic panpsychism has a similar problem of over-individuation:

> What prevents the continuous individuation of consciousness so that every configuration of matter at every level of reality is a discrete agent? (the Over-individuation Problem)

Since it seems that my consciousness and experience is not identical to yours, and since there are many qualities which I believe I have not yet experienced, then I am justified in believing my own mind to be finite, personal and private. It is a necessary part of the holistic panpsychist's task to provide an account for the how an infinite, universal and public cosmic consciousness takes on these properties of a single human mind.

Given that, like holistic panpsychism, pantheism takes the unity of the world as primary, it is panpsychism's individuation problem which is most pertinent to pantheism. It is not enough to simply claim that the universe is a single whole, there must also be an explanation for how the reality of my own subjectivity, of which I am most intimately acquainted and committed to, relates to and might be explained in relation to,

this cosmic whole. In this way, the pantheist's problem of unity and the holistic panpsychist's problem of individuation are parallel problems.

What Type of Mind?: Subject Panpsychism vs. Panprotopsychism

The second point of variation is the question of how to define *mind* in its fundamental form. Panpsychists here form two camps: subject-panpsychists and pan*proto*psychists (including panexperientailists and panqualityists). Subject-panpsychists posit minimal subjects at the fundamental level (micro or cosmic), in that there is something that it is like to be a fundamental subject of experience (an electron or the universe as a whole). Subject-panpsychists argue that if it is the first-person perspective of subjects that is non-emergent and irreducible, then it is the first-person perspective that needs to be seen as a fundamental property.

However, Sam Coleman has pointed out that it is the claim for fundamental subjects that gives rise to the sharpest edge of the combination/individuation problem—the summing of phenomenally unified and bounded macrosubjects from microsubjects (Coleman 2014: 19–44). Alternatively, pan*proto*psychism denies that fundamental mentality includes a micro-subjects or cosmic subjects, such that there is nothing it is like to be an electron or the universe as a whole. Instead, panprotopsychism suggests that some other mental property can instantiate phenomenal properties and the first-person perspective. For example, panexperientialists state that experiences are fundamental (without the existence of a subject having that experience), and a panqualityist claims that unexperienced qualities can collectively constitute a first-person perspective or fully phenomenal property.

The main advantage of panprotopsychism is that it does not face a subject-summing problem, since it holds that subjects do not sum but only result from non-subjects summing. However, the mysterious nature of these proto-phenomenal properties also means that panprotopsychism offers less explanatory power or competitive appeal over strong emergence theory or interactive substance dualism. This sacrifice might be acceptable if panprotopsychism really avoided the combination problem. Unfortunately, the problem of how subjects are constituted by a combination of non-subjects may not be any less difficult than the subject panpsychism's subject-summing problem and may be no less miraculous than the strong emergence thesis of obtaining subjectivity from physical properties. Weighing these factors, panprotopsychism seems to have an intuitive advantage, but explanatory disadvantage, in comparison to subject panpsychism. It remains up to individual panpsychists to decide which of these factors is more valuable and this decision has no bearing of the conclusions of this paper. The more important question for this paper is which of these two alternatives serves pantheism best.

Pantheists who argue for a *personal* god are more likely, prima facie, to be attracted to holistic (subject) panpsychism than to holistic panprotopsychism. Holistic panpsychism claims that the fundamental consciousness of the universe as a whole has its own first-person perspective, although it may be of a very different kind to our neurologically constrained consciousness. Pantheists who argue that the god of pantheism is non-personal and non-agential are likely to prefer a holistic panprotopsychism, where the cosmic whole is taken as proto-phenomenal. A pantheistic use of panprotopsychism would mean that there is nothing that it is like to be the universe/God.

The question arises if proto-phenomenal properties are a sufficient basis for positing cosmic unity. On holistic panprotopsychism, the universe would be a single proto-phenomenal whole: a single experience or a single quality. Although a single phenomenal subject, with a single first-person perspective, provides a clearer sense of unity, I cannot rule out the possibility (although I find it unlikely) that proto-phenomenal properties are adequate to establish a cosmic unity. Fortunately, this question does not prevent this article for proceeding, since the decision of whether subject panpsychism or panprotopsychism is more suited to solving the pantheists unity problem is determined *not* by the preference for a personal or impersonal deity but by the pantheists need for a *constitutive* unity. As is more fully argued below, a proto-phenomenal cosmos cannot constitutively instantiate human subjectivity within its aspects and so if pantheists wish to maintain human subjectivity—even within an impersonal divine-cosmos, pantheism needs to align itself with subject panpsychism and not panprotopsychism.

Constitutive Panpsychism vs. Non-constitutive Panpsychism

Is human consciousness constituted by the fundamental mentality, or do our minds hold some other non-constitutive relation to fundamental mentality? Constitutive panpsychists argue that 'macroexperience is (wholly or partially) grounded in microexperience' (Chalmers 2017: 25). 'Grounded in' is used as equivocal to 'metaphysically constituted by'; all true statements about the macro-level are true because of truths at the micro-level. The relationship between the parts and the whole is synchronous and not a causal relation. On constitutive panpsychism, the macro-level phenomena can be said to be *nothing but* its micro-level phenomena and their relations. Or conversely, on constitutive panpsychism, the fundamental level is said to be wholly sufficient as an explanation for the existence of the human mind. In addition, the constitutive relation means that the fundamental minds or phenomena continue to exist and are neither lost nor annihilated by the existence of the macro-mind. This is because if there were no truths at the micro-level, then they could neither be truths at the macro-level according to the constitutive relation. This synchronic constitutive relation seems exactly right for the pantheist model of unity; God is the universe as a whole and nothing more, and the whole universe is God in such a way that does not annihilate the subjects (and objects) of the universe. Unfortunately, constitutive panpsychism carries the full force of the combination/individuation problem, and most of the arguments against panpsychism over the possibility of combination were more precisely against *constitutive* panpsychism.

Non-constitutive panpsychists often seek to deflate the combination/individuation problem by positing a causal, rather than synchronous combining or individuating, relation between the fundamental mentality and the human mind. For a non-constitutive panpsychist, the macro-entity (the human mind) is *more than* the sum of the micro-entities and their relations. The main type of non-constitutive relation is the *emergence* relation, which claims that a macro-mind (animal or human) is a (strongly) emergent feature of micro-minds (Brüntrup 2017: 48–71; Rosenberg 2017: 153–175). A sub-type of emergent panpsychism has been argued for by William Seager in his theory of panpsychist *infusion* (Seager 2010: 239). The distinctive feature of the fusion account of emergent panpsychism is that the fused entities cease to exist as separate entities;

they sacrifice themselves and their causal powers to the creation of the new emergent macro-entity.

Non-constitutive relationships between the whole and the parts are unsuited to holistic panpsychism. An aspect of the universe cannot exceed or be more than the sum of the universe, since the universe is an exhaustive unity. It is hard to imagine what it could mean for the contents of the universe to emerge from the universe, since the universe is not an empty (divine) chamber existing prior to its contents. The contents of the universe cannot manifest a property which the universe itself also does not manifest (albeit only in a particular aspect). Since panprotopsychism states that through combination something more (i.e. subjectivity) comes into being, panprotopsychism seems to be incompatible with holistic panpsychism. Furthermore, it is logically incoherent to suggest that the universe can fuse, and therefore cease to exist, for the sake of creating some aspect within the universe (what would the universe even fuse with?). Non-constitutive panpsychism, in either emergent panpsychism or combinatorial infusion forms, does not seem able to be adapted for holistic panpsychism's *individuation* problems.

I have already stated in Section 1 that pantheism requires a constitutive relation of unity in order to demarcate it from other forms of theist immanence. This point can now become clearer. If the unity between God and the universe is an emergence based unity, then the claim might be that God emerges from the universe as new individual or property. This emergent theism, as put forward by Samuel Alexander is not a version of pantheism. Alexander's emergent theism has a clear temporal separation between emergent deity and the universe, so that God does not permeate the whole universe but is contained within the space-time continuum as one part (Alexander 1920: 394, 397–8; cf. Thomas 2016). Alternatively, the universe may emerge from God, which seems close to a theistic or panentheistic model of emanation. In both cases, the distinction between God and the universe is too strong for a pantheist expression of unity.

What we can take from the discussion above is that the closest form of panpsychism to pantheism seems to be *a constitutive holistic panpsychism*. For a pantheist, it is the universe as a whole which is given ontological priority and taken as fundamental, as for holistic panpsychism. For this unity to be sufficiently robust and bare a constitutive relationship to human subjects, then subject panpsychism (and not panprotopsychism) is required. Lastly, the relationship between fundamental mentality and human minds must, for pantheists, be a constitutive relation. The argument so far as shown that constitutive holistic panpsychism, and not any other type of panpsychism, has the best chance to aiding pantheists solve their unity problem. If holistic panpsychists can find a constitutive solution to the individuation problem, then this should give pantheism a more cogent way of articulating the 'all-inclusive divine unity' (Levine 1994: 2).

Section 3: Combination Solutions and Unity Problems

How then do constitutive holistic panpsychists articulate the relationship between the cosmic consciousness and human consciousness? Are any of the solutions currently on offer sufficient to articulate the pantheists expression of unity? In this final session I will address the theories put forward by holistic panpsychists, Itay Shani, Yujin Nagasawa,

Freya Mathews and Philip Goff. Goff's is deemed the most promising, despite being woefully incomplete, but it includes strict constraints upon the nature of the cosmic (divine) subject which pantheists will most likely reject.

Itay Shani describes the universe as 'a vast ocean of consciousness', or an 'oceanic plenum... [which] gives rise to various quasi-independent patterns and configurations...some of these emergent forms...qualify as genuine subjects' (Shani 2015: 389–437, 411–412). Human and animal subjects are described using aquatic metaphors as 'local disturbances coursing the ocean as currents, waves, streams, eddies, bubbles, ripples, and the like...*vortices* of enduring stability, the latter corresponding to the persistent systems and objects of our ontology' (Ibid: 414). Human subjects emerge from these structural dynamics within the universe as 'the crystallized ego-structure, the self-centred mental occupation of the individual "vortex"' (Ibid: 419). The emergence which Shani talks about is a weak form of emergence, because he describes it as 'nothing but dynamic differentiations with the absolute; all are predicated on an underlying flux from which they emerge, and to which they ultimately dissolve' (Ibid: 413). The predication and 'nothing but' are the clues that Shani's relative subjects (like you and me) are weakly emergent from the whole. This is a possible theory of constitutive individuation, unlike the non-constitutive strong emergent panpsychism discussed above. However, weakly emergent entities have no additional causal powers, which in this case means human experience and action is determined by the absolute. The threat here is that Shani's relative subjects are epiphenomenal, submerged 'in an engulfing oceanic consciousness' (Ibid: 390).

It is for this reason that, in addition to the weak emergence theory, Shani also articulates a *partial* grounding thesis. Partial grounding here means that 'while [the human subject] depends on [the absolute subject] it amounts of something more and is not exhausted by this particular dependency relationship' (Ibid: 423). Shani wants to maintain the irreducibility of human subjectivity by describing the human subject-vortex as 'an independent entity which neither grounds any other perspective, nor being grounded by any' other (Ibid: 423). If human subjectivity is not grounded in the oceanic consciousness of the universe, where does this 'independent entity' come from? This seems to imply something closer to substance dualism, where the subjectivity at the human level is fundamental and independent and where the first-person perspective is non-combining and non-individuating. Since weakly emergent subjects are reducible, this model cannot be combined with independent and irreducible subjects. In his fluctuating between two incompatible and competing models of consciousness—weakly emergent subjects and fundamental independent subjects—Shani fails to find the middle ground necessary for cosmopsychism to be a viable and demarcated position of human subjectivity.

Whereas this paper asks the question of whether panpsychists' answers to the combination problem hold any profit for pantheism, Yujin Nagasawa's investigation moves in the opposition direction from philosophy of religion to philosophy of mind. He argues by analogy that because polytheism and pantheism are compatible positions within philosophy of religion, the many animal subjects are compatible within a single cosmic subject within philosophy of mind (Nagasawa forthcoming). Although this may be the case, it does not seem to offer any explanatory relief for my concerns for individuation, since we can know very little about the relationship between polytheistic gods and a pantheistic God. Nagasawa offers no further explanation for why polytheism and pantheism are compatible and so sheds no further light on how the analogy to

divinity aids in the question of how private individual minds, as we experience them, individuate from a single cosmic mind.

Beyond the comparison with philosophy of religion, Nagasawa gives two more metaphors for how to understand the relationship between the one and many for cosmopsychism. He suggests we think of the cosmic consciousness like a perfectly and infinitely smooth painting, which since perfectly and infinitely smooth is not made up of many atomistic dots (Nagasawa forthcoming; Nagasawa and Weger 2017: 122). Within this one smooth homogeneous painting, there can be an equally smooth segment of the painting or the original painting may be a segment of an even larger perfectly smooth homogeneous painting. Nagasawa suggests that this might be analogous to the relationship between the larger consciousness of the cosmos and the consciousness instantiated by the brain. This analogy does nothing to alleviate my concerns regarding the Over-individuation Problem. This is because if a segment of a painting is more than a portion which the hypothetical viewer chooses to draw an imaginary line around, then the painting is not perfectly smooth and homogenous. If the painting is truly perfectly smooth and homogeneous, then the segment cannot be objectively differentiated or individuated from the larger whole.

Nagasawa's second analogy is to a visual experience which can be considered a unity and segmented into distinguishable colour experience (Nagasawa and Weger 2017: 121–122). Developing this line of thinking may answer the Quality Individuation Problem and the Experience Individuation Problem as I have outlined them above. However, since this analogy is about segments of one experience and regional qualities within one subject/perspective, with no further subjects/perspectives being proposed, it goes no way towards answering the Subject Individuation Problem. Nagasawa's proposal cannot yet, to my mind, fully defend the claim that 'it seems reasonable to think that cosmopsychism can answer the derivation problem' when this is applied to the derivation of bounded subjects (Nagasawa forthcoming).

Freya Mathews' work is a significant attempt to 'enter the terrain of "spirituality"' through 'cosmological panpsychism' (Mathews 2011: 141). Mathews speaks of the human relationship to the world as 'kneeling tenderly at *its* feet, awaiting *its* command, trying to divine *its* will. From this point of view the world is our sovereign, our solace, our beloved, and we are its people' (Mathews 2003: 1). The relationship between the one (the cosmic self) and the many (all relative selves such as humans and ecosystems) is an erotic and mutually self-realizing communication (Ibid: 10). Mathews' construction of a spiritual panpsychism is in line with many ideas within pantheism.

Since her spirituality of erotic communication is based on the presupposition of individuated relative subjects within the cosmic subject, Mathews sees the importance of individuation for holistic panpsychism. Mathews articulates that 'The question, from this point of view, is … how it is that a particular part of the continuum can come to experience itself as a relatively distinct and individual subject, or center of awareness' (Ibid: 38). She affirms that there is 'no such thing as free-floating subjectivity—subjectivity that does not belong to a particular subject' (Ibid: 46). This means that there is no substance called 'subjectivity' which is organized into centred subjects, but that the One subject must differentiate itself into many centres of subjectivity. However, she also affirms that a subject is 'necessarily an indivisible unity: there are no "scattered subjects"', even in the case of the one differentiated cosmic subject (Ibid: 46). Finally, she states that 'the boundaries between even only relatively individuated subjects are

not nominal'. (Ibid: 46) This is in contrast to the individuation of matter which has a 'purely nominal status' (Ibid: 47). She acknowledges a 'tension' in her proposal between 'relative individuation. [of subjects] … with their relative dissociation from the whole' and the indivisibility of the whole (Ibid: 40). The question remains if the boundaries between subjects are objectively real and subjects are indivisible unities, then how can many relative subjects, with their own first-person perspectives, exist within another without the whole subject being a scattered subject? How is the unity of the cosmic subject maintained?

Mathews' solution to the individuation problem is expressed through systems theory. She defines a self as a 'self-realizing system … [which is] defined in systems-theoretical terms, as a system with a very special kind of goal, namely its own maintenance and self-perpetuation' (Mathews 2003: 48). A relative self is individuated by becoming self-reflexive which occurs 'wherever the primal field assumes the configurations characteristic of self-realizing systems' (Ibid: 50). Mathews grounds subject individuation in biological individuation, despite having said that biological individuation is nominal (existing by name only from the perspective of knowing/naming subject), whereas subject individuation is not. There is a risk that to speak of 'self-realizing systems' presupposes, a self around which the system is organized, rather than a self which arises out of the behaviour of the system.

Mathews concludes that 'Individuation will not, in the case of such systems [which is in the case of every subject Mathews posits], be precise, and questions of demarcation will certainly arise' (Ibid: 51). However, without clear demarcation, what does it mean to assert that subjects are objectively bounded indivisible unities? Without demarcation, there can be no genuine communication between different selves, and communication constitutes the flourishing of the many and the self-realization of the one. Mathews' larger project rests on the presupposition of individuation, but her biological systems-based account does not go far enough, in my mind, to securing and articulating a theory of subject and perspective individuation.

The final possible solution is Philip Goff's theory of 'grounding by subsumption'. This is a solution which, although underdeveloped, might be suitable for the pantheist. Grounding by subsumption is defined as:

> Entity X grounds by subsumption entity in Y iff (i) X grounds Y, (ii) X is a unity of which Y is an aspect. (Goff 2017b: 224)

On this view, finite minds, such as human minds, are aspects of the one unified cosmic mind. Finite minds are grounded in the more expansive infinite unity, because as with normal grounding relations, all true statements at the finite (human) level are true because of facts at the cosmic level. The weakness of this solution is that it is ultimately mysterious—'knee deep in noumenalism' (Ibid: 234–35) as Goff writes.[9] From a panpsychist's perspective, it is unclear if Goff's noumenalism is any better than strong emergentists' or the mystery of combination within atomistic panpsychism. However, since the pantheist is not so much looking for an exhaustive explanation of God as a

[9] From a panpsychists perspective, if this is Goff's final conclusion then for the sake of parsimony perhaps Colin McGinn's hypothesis should be accepted without the bother of articulating a cosmic consciousness about which we can know nothing (McGinn 1989).

credible articulation, this may not be so severe a problem. Goff is clear that this proposal only works for holistic *subject* panpsychism and so would be unsuited to impersonal, non-agential and non-subject based versions of pantheism. It is this component of Goff's proposal which may be problematic for the pantheist.

Goff's solution only applies to *subject* panpsychism because, as a constitutive relation, grounding by subsumption entails that, 'the nature of an aspect that it is nothing over and above the unity of which it is an aspect' (Ibid: 229). The aspects (human minds) cannot have properties or capacities over and above the cosmic mind.[10] Since all the finite subjects are subsumed within and constituted by the cosmic subject, the cosmic subject would have to be aware of all the experiences and perspectives of the multitude of finite subjects. This could be a theory of omniscience for the cosmic subject. However, the cosmic subject would not only know *about* each first-perspective, but it would also experience them all as its own first-person perspective. Since the cosmic subject is nothing over and above the finite subjects, it would not be able to harmonize or adjudicate between contrary beliefs or experiences. A holistic panpsychist should not claim that the many first-person perspectives combine into one cosmic consciousness, since this only places the atomistic panpsychists combination problem on a cosmic scale but needs to hold that the cosmic consciousness is a unity of non-harmonized subjectivities. Goff writes, 'Cosmopsychism does not entail pantheism. We need not think of the universe as a supremely intelligent rational agent.... It is more plausible to think that the consciousness of the universe is simply a mess' (Ibid: 246). In so far as pantheism seeks to offer a religious alternative to theism, Goff is wrong to imply that pantheism entails the belief in a 'supremely intelligent rational agent', but it does entail a unified deity worthy of worship, adoration and capable to giving religious meaning to human lives. Is Goff's cosmic subject a suitable candidate for not only philosophy of mind, but also philosophy of religion?

Goff's grounding by subsumption solution sets fairly strict guidelines for the nature of the God/universe, which determine its religious significance in specific ways. As stated above, the pantheist God may be said to be omniscient in this specific sense, which includes confusion and incoherence. A pantheist God, inspired by Goff's panpsychism, may also be said to be omnipotent in a qualified sense. Holistic panpsychism implies that 'the actions of [ordinary] o-subjects as aspects of—and hence are nothing over and above—the 'actions' of the universe.... the causal powers of the universe result in its changing itself from moment to moment' (Ibid: 250). Thus, everything that happens in the universe could not have happened otherwise (determinism) and occurred due to the movement of the universe as a whole and cannot be ultimately attributed to the movements to localised or individual aspects of the universe, i.e. no libertarian free will (Ibid: 257).[11] To this extent, the pantheist may express gratitude or lament towards cosmic whole for all the events in one's life, in addition to one's own existence (although, of course, this expression of gratitude is

[10] Goff writes: 'Panprotopsychist subject-subsumption does not seem to me to be coherent, at least once we accept that conscious subjects are irreducible... for an entity E to have a *unified nature* to incorporate M [a conscious mind] within itself. And surely E cannot incorporate a conscious mind within its nature without itself being conscious' (Goff 2017a, 2017b: 234).

[11] A careful discussion of regarding compatibalist notions of freedom within form of pantheism is necessary here and may provide the pantheistic a way to employing Goff's model without suffering this consequence but lies beyond the scope of this paper.

determined also and so might be viewed as the self-congratulation of the cosmic self). That said, given the 'messy' nature of the cosmic consciousness, it is difficult to view this movement as in any way planned or purposeful. Indeed, for the cosmic self to have intentions of its own would be for it to exist over and above, rather than in unity with, the animal and human subjectivities of the universe. This is clearly a very different sense of omnipotence to what is meant by the monotheistic world religions or theistic belief in a transcendent personal creator, which may not be a problem for the pantheist of course.

More seriously for many pantheists, the determinism herein may provide some challenges to the ethical imperative towards care for the Earth, ecosystem, and universe as a whole which pantheism is often associated with and motivated by. In fact, the destruction of the Earth would not be the fault of human beings (since humans do not ultimately cause anything), on this model. Instead, ecological destruction would be the result of the universe's/God's action towards this specific internal region we call Earth. On this view, suffering and destruction could only be explained as the confused cosmic God harming parts of itself. This implication alone may cause some pantheists to reject Goff's 'cosmopsychism' as a suitable expression of the pantheistic unity. However, in this case, the pantheist will need to look elsewhere than panpsychism to aid in articulating the nature of this unity.

Section 4: Conclusions

For panpsychism to maintain a competitive, explanatory edge over and against competing philosophies of mind, and for pantheism to offer a clear articulation of the God/universe unity distinguishable from other forms of religious belief, both theories require an account of how smaller subjects can form parts of larger subjects (combination) or how larger subjects contain smaller subjects within themselves (individuation). Although not identical problems, the first half of this paper showed the parallel nature of the pantheists' problem of unity and the panpsychists' problem of combination/individuation.

Holistic panpsychism and pantheism share a common problem, how to articulate a constitutive relation between individual human subjects and a larger cosmic whole; but can they share a common solution? If translated into panpsychist typologies, then pantheism seeks a constitutive relation of individuation between God/the universe and the contents of the universe (in particular, human subjects). After surveying various attempts by panpsychists (Shani, Nagasawa, Mathews and Goff) to articulate this relation, this paper found that Goff's grounding by subsumption appears the most promising, but is significantly underdeveloped. However, it will be up to contemporary pantheists to decide whether the religious entailments of this position disqualify it from warranting further development. I suspect many pantheists will find Goff's position a bitter pill to swallow.

This paper sought to explore the dialogue and potential compatibility between panpsychism and pantheism. The first implication from this paper is that there are far more types of panpsychism incompatible to pantheism than there are compatible with it. This points to a tension within the relationship between panpsychism and pantheism which has so far not be appreciated and should be of concern to those who seek to unify

these two philosophies. A secondary implication for further research, as it would require another paper to be explored fully, is that other positions within philosophy of religion (theism, panentheism, polytheism, etc.) may find dialogue with various forms of panpsychism easier and more profitable than previously imagined.

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