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God, Consciousness, and Conjunctive Explanations

Joanna Leidenhag

Abstract: The existence of consciousness is so surprising on the naturalist's account of things that a version of the argument from consciousness for the existence of God, which places theistic and scientific explanations in competition, has received new support and attention. Consciousness, therefore, seems like an appropriate place to enquire into the need and character of conjunctive explanations between science and religion. The first section of this paper evaluates the explanations for consciousness currently on offer from various positions in philosophy of mind. The second section of this paper explores what kind of explanation panpsychism offers as an account of consciousness. The third section asks: What kind of conjunctive explanation is best when one is conjoining theism with a scientific explanation for consciousness? I argue that in the case of consciousness we should not employ special divine action as a cause in conjunction with scientific explanations, nor employ God as a unificationist explanation for consciousness. Instead, we should allow theistic and scientific explanations to fit together in a pragmatic conjunction by answering different interlocking questions. If I am right about this then theists should support theological panpsychism, rather than positing the origin of each creature's conscious mind as a miracle.

Introduction: Horse Racing, Sperm Whales, and A Bowl of Petunias

That some physical organisms, like human beings, are conscious is perhaps the most surprising feature of the natural world. What do I mean by surprise? Let's take a silly example from *The Hitchhikers Guide to the Galaxy's* improbability drive. The existence of consciousness is not surprising in the way that the sperm whale, suddenly being called into existence *ex nihilo* several miles above the surface of an alien planet, was itself surprised by the appearance of its own conscious mind (and the similarly appearing bowl of petunias was curiously unsurprised, only remarking "Oh no, not again").¹ There is an important sense in which consciousness is *not* surprising to the conscious subject, the biological organism, itself. Indeed, to the conscious subject, consciousness is the most integral and undeniable thing in existence. Descartes was at least right about that much. From the perspective of the subject, consciousness does not just appear out of nowhere (like Douglas Adam's unfortunate sperm whale), but it pervades every moment and aspect of one's existence, such that one cannot imagine oneself without consciousness.

By contrast, consciousness is surprising, embarrassingly so, to the scholar who has adopted physicalism or naturalism. Surprise, in this case, is not a reaction of shock but a more considered and perplexed realisation that some absolutely essential and indisputable phenomena cannot be explained with the ontological resources available. That which should be most central to one's account of the way things are in the universe is inexplicably unaccounted for and marginalized. When this sort of surprise happens, one needs more than a comforting cup of tea, one needs to radically rethink our current understanding of the universe. As Douglas Adam's episode of the sperm whale and petunias concludes, "Many people have speculated that if we knew exactly why the bowl of petunias had thought that we would know a lot more about the nature of the universe than we do now."²

Whereas the physicalist and naturalist are confounded by consciousness, a theist finds it entirely unsurprising that some biological organisms are conscious. After all, the theist typically believes that an immaterial conscious being is the source of all reality, giving a logical primacy to mentality. The theist can then, as Christian theologians have done for centuries, explain the existence of human consciousness by an appeal to a divine desire for relationship with creatures and that a universe with conscious agents gives more glory to God than an otherwise purely material or non-experiential universe would do. On the theist's account of things, why God also decided to create lightyears of non-experiencing matter is far harder to account for than the existence of consciousness. Maybe an appeal to God's will to become incarnate or something similar might suffice to explain the need for so much non-experiencing matter.

The sharp contrast between the naturalist's surprise and the theist's ease has lent recent popularity to the argument from consciousness for the existence of God. Simply put, if the existence of consciousness cannot be accounted for by purely physical processes, laws, and random events, but can be explained with simplicity and elegance with reference to divine intentions and special divine action, then the reality of consciousness seems to add considerable evidential support for the existence of God. As David Glass mentioned at the end of his chapter in this volume, arguments from consciousness for the existence of God most often attempt to show that a scientific explanation for consciousness is impossible, thereby placing the appeal to theism in competition with a scientific explanation for consciousness.³ By contrast, this chapter explores whether we can and should offer a theistic-scientific conjunctive explanation for consciousness.

A conjunctive explanation occurs when one is confronted with a selection of distinct explanations and judges it better to adopt two (or more) of these explanations, rather than merely one.⁴ This is not the same as placing bets on two different horses at a race, thereby increasing your chances of being right in either one case or the other. A conjunctive explanation first posits explanatory pluralism, that two explanations can be simultaneously true (they are compatible, or both can 'win'). To move from explanatory pluralism to conjunctive explanation, two explanations must explain the evidence better together than either would on its own. To continue the metaphor, we might imagine a scenario where two horses run faster together than either alone. Furthermore, as Glass's chapter argues, a successful conjunctive explanation must be able to show that the explanatory gain outweighs the additional explanatory cost; we don't want either horse slowing the other down.⁵

What is not captured in my horse racing metaphor, but is important to this chapter, is the idea that there are different types of explanation, and so different types of explanatory pluralism.⁶ One might be a causal explanatory pluralist by holding that multiple causes explain a single phenomenon, as in pluralistic explanations for the extinction of the dinosaurs. Causal explanatory pluralism may arise because there are multiple partial causes for an event, or because a particular event is overdetermined, or possibly because the two causes work on different levels. Alternatively, one might be a non-causal/causal explanatory pluralist by positing a non-causal explanation in addition to a causal explanation for the same phenomenon. A prominent and relevant example of a non-causal explanation that can be combined with causal explanations is Michael Friedman's and Philip Kitcher's unificationist account of explanation. Unificationist explanations hope to explain the widest possible number of phenomena with the fewest number of argument patterns possible, thereby reducing "the number of facts we have to accept as ultimate."⁷ Finally, one might follow van

Fraassen's pragmatism or Godfrey-Smith's contextualism, where multiple explanations are required for different purposes or in different contexts.⁸ As well shall see, all of these types of explanatory pluralism are relevant in the effort to explain human consciousness.

The remainder of this paper proceeds as follows. First, I look at the difficulty of explaining human consciousness for physicalists, emergentists and dualists. Second, I introduce panpsychism. I argue that panpsychism fits with a range of accounts of scientific explanation, but that contemporary panpsychists seem to favour explanatory unification. Third, I ask, what is the best way to conjoin theories of consciousness with theism? I argue that divine action should not be conjoined as a causal explanation with either causal or non-causal scientific explanations for consciousness. Instead, I suggest that in the case of consciousness, we should employ pragmatic or contextual explanatory pluralism by allowing theistic and scientific explanations to answer different interlocking questions. Although I argue that the combination of panpsychism and theism is more satisfying than either position alone, I am not convinced that this view counts as a conjunctive explanation. Nevertheless, if the arguments in this paper are sound, then within the race for an explanation for consciousness theists should support panpsychism, rather than betting on any other horse.

1. Failing to Explain Consciousness: Physicalism, Emergentism and Dualism

I hope it is not too controversial to start from the assumption that human beings are psychophysical beings. That is, human beings are a living biological organism and a conscious subject. This is broadly what I mean when I speak of conscious biological organisms. Despite the psychophysical nature of the human, most explanations of why biological organisms are conscious emphasise only one side of this coin. This is done either by attempting to explain the mental solely in terms of the physical (i.e., various forms of physicalism, materialism, or functionalism), or by explaining consciousness without much reference to the body (i.e., various forms of Cartesian and substance dualism). I will briefly outline why I take both these approaches to fail.

If a physicalist seeks an explanation of consciousness they must, by definition, do so solely in terms of physical causes and processes. Physicalist approaches to consciousness often try and explain how neural states and representational states can give rise to (the appearance of) conscious states. The promise of this approach is to achieve a causal account of consciousness by uncovering the physical mechanisms that allow some biological organisms to experience the world around them. If the physicalist could deliver on this promise, then we could have an account of consciousness which was fully integrated with the current scientific picture of the rest of the natural world as a complex (causally closed) network of information and efficient causes guided by a few simple laws of nature. However, not only has the physicalist as of yet failed to deliver on this promise, but we have very good metaphysical reasons to suppose they never will.

The reason to doubt that we will ever achieve a fully and exhaustively physicalist account of consciousness is sometimes referred to as 'the explanatory gap'. That is, it seems reasonably clear that no amount of explanation of the behaviour, functioning, or structure of entirely non-experiential (physical) stuff will ever be able to explain experience (consciousness).⁹ This explanatory gap is not only a problem for reductive physicalists, but for non-reductive physicalists or emergence theorists as well, who affirm that consciousness

is a higher-level phenomenon wholly constituted by physical parts.¹⁰ As Tom McLeish's chapter rightly argues, instances of strong emergence (the unpredictable manifestation of top-down causation) in physics (and other natural sciences) are often more plausible and illuminating than uses of emergence in philosophy of mind.¹¹ He gives us two concrete examples, the fractional quantum Hall effect and entangled polymer ring fluids, where a certain "topological order makes a system behave as a unified whole" to such an extent that the (basal) properties of the parts are determined by the behaviour of the whole and cannot be separated from the whole.¹² In such strongly emergent physical systems, which McLeish tells us are widespread in natural science, the behaviour and properties of the whole may be unexpected, but are not radically discontinuous with the base. Such emergent phenomena, then, may be impressive, complex, and cause us to wonder at creation, but they are not so surprising such that we say some radically new ontology or type of thing has come into existence. By contrast, the surprise that consciousness emerges from soggy-grey brains and nervous systems (even when these are rightly appreciated as the most complex and intricate physical systems known to exist) is sustained and perplexing; incredulously so.¹³

If physical causation and natural processes can account for biological organisms but not consciousness, then perhaps we need an alternative explanation for consciousness quite apart from the physical constitution of the organism. Historically, the most popular explanation for consciousness has been to posit a wholly non-physical part of the human, typically called 'the soul', that results from non-physical or non-natural causes. This, of course, is dualism. In particular, a theistic dualist might lean on special divine action in one of two ways: either God creates each and every human soul directly *ex nihilo* and pairs it with a human embryo (soul creationism), or God creates only the first human soul(s) directly *ex nihilo* and all subsequent souls derive from these first souls by some natural process of soul-inheritance (traducianism).¹⁴

The question is not whether such an explanation is coherent, it clearly is, but whether or not it is satisfactory. The dualist offers two separate explanations for organismic consciousness. There is one explanation for how biological organisms develop through natural processes (e.g., natural selection) and another separate causal explanation for why some of these organisms are conscious (e.g., a special, direct divine act). We do not need to overblow the separation or suggest that interaction between bodies and minds is *a priori* impossible. After all the dualist's claim is that mind and matter are separable (both can exist without the other and each has a separate origin story), not that there are not non-unifiable.¹⁵ However, the dualist should remain at least moderately surprised (in the sense of deeply perplexed given their account of things) that consciousness occurs with such predictable regularity, and that bottom-up causation (from body to mind) as well as top-down causation (from mind to body) is so thoroughly entangled and continuous. There is nothing within the conscious organism itself – in either its physical or mental parts – that accounts for this holistic integration. Typically, the theistic dualist will appeal to something outside of the conscious organism, like God's design plan, to make sense of this integration. If we accept the dualist's account, then it is not the existence of consciousness, but the pervasive, predictable, and regular cooperation between body and soul that cries out for an explanation.

This brings us to stronger accounts of emergence, which seek to combine the advantages of both the accounts rejected above and depict the (purely physical) biological organism as the origin and source for the emergence of an immaterial soul. For the (super-)strong emergence of consciousness, or emergent dualism, it is not the case that something-more arises from something-less, but that something radically new appears from something

nothing-like. The mind appears from wholly non-experiencing, non-mental stuff. Galen Strawson has rightly called this claim “brute emergence”, which is a “miracle... every time it occurs.”¹⁶ This kind of emergence attempts to jump over the explanatory gap in a way that, as the pioneering early twentieth century emergentist Samuel Alexander writes, “admits no explanation” but is a “brute empirical fact” to be accepted with a “natural piety.”¹⁷

All explanations have a brute element. However, the location of the brute element matters in determining the explanatory power of a theory. Ideally, the brute element in any theory needs to lie as far back in the explanation as possible. If there is a brute element in the middle of the theory or near the end, then the explanation falls flat. Think of it like telling a joke. Everyone accepts that jokes can start with an apparently arbitrary or even incredulous set-up, “A panda walks into a bar”. However, if the joke ends with a punchline that is a similarly arbitrary or incredulous non-sequitur then the joke fails. The emergentist’s brute assumption that the world starts off entirely non-experiencing and physical, and the subsequent narrative from this that as evolution develops more complex physical structures emerge and give rise to different levels of reality, which hold various novel physical properties seems entirely plausible (although it cannot get us to consciousness). But, in emergent dualism (or superstrong emergence), the punchline falls flat: out of this physical complexity, suddenly consciousness! In order to make the punch line work, you would need to move all the brute elements back to the beginning of the story and start off with psychophysical stuff, rather than wholly non-experiencing physical stuff.

Reductive physicalists, non-reductive physicalists (emergentists), and dualists (emergent and otherwise) all ask the same question: How do we get from non-experiential material to a conscious biological organism? Whilst the answers to this question differ, the question remains the same. Recently a small group of philosophers of mind, dissatisfied with the current range of answers, have politely asked: Why think matter is wholly non-experiential in the first place?¹⁸ Indeed, it seems that we have no positive reason to assert the mechanistic view of matter as entirely non-experiential. We are used to thinking about matter – atoms, strings, molecules, waves – in this inert way, but if this assumption leads to the conundrums outlined above, perhaps it is time for a fresh approach.

2. Panpsychism as an Explanation for Consciousness

A dissatisfaction with reductive physicalism, Cartesian dualism, and mysterious emergentism has led to the revival of a family of views; panpsychism(s). So, what is panpsychism? Simply put, all forms of panpsychism seek to explain consciousness in the human organism by positing mentality (“psyche”) as fundamental and ubiquitous throughout the natural world (“pan”). This is not to say that every electron and household electronic device wonders about the nature of its existence or holds a grudge every time you hit it, but it is to say that every electron (and/or other most fundamental building-block of the universe) has an unimaginably basic form of experience.¹⁹ (There is some variety between panpsychists on what should be considered fundamental; for cosmopsychists, this is the universe considered as a single fundamental whole, and for panexperientialists, this is processes rather than substances.) It seems that these basic instances of experience do not combine into more complex wholes in the case of household electronic devices but do combine and complexify in living organisms to varying degrees (almost all panpsychists agree on this point). And so, we might say that whilst everything contains consciousness, (some) insects are more conscious than plants, and most animals have a wider range of conscious processing and properties than insects, and so on until you get to the full-blown mental lives of a self-

conscious human adult. Consciousness, the panpsychist suggests, comes in degrees, but is never utterly and entirely absent.

For the panpsychist to say that mentality is 'fundamental' is to say that the mind can neither be explained in terms of, nor reduced to anything non-mental. This is in contrast to reductive physicalists, who claim that the mind can be reduced to wholly non-experiential (physical) stuff, and to non-reductive emergentists, who maintain that minds can be explained by the behaviour and structure of wholly non-mental materials and forces. Instead, the panpsychist argues that there is no non-mental or wholly non-experiential stuff; everything in the universe is psychophysical. The best way to explain mentality 'up here', in something as complex as the human organism, is to posit all the necessary ingredients for human consciousness 'down there'. To some minimal degree, consciousness exists in the most basic particles, structures, or forces of the natural world.

How does the claim that consciousness is fundamental and ubiquitous help the panpsychist explain consciousness? What kind of explanation is being offered here? The answer is not straightforward. Panpsychism can be framed according to a range of models of explanation and is not tied to any one in particular.

When David Chalmers first put forward his naturalism dualism (which I take to be under the family of panpsychist views), his presentation of panpsychism seems to be in the form of Carl G Hempel's and Paul Oppenheim's classic deductive-nomological (D-N) account of scientific explanations: an explanandum e (in this case, human consciousness), a set of initial conditions IC , and nomological connections between them L (in the case, universal psychophysical bridge laws 'specifying how phenomenal (or protophenomenal) properties depend on physical properties') such that ' $(IC \& L) \supset e$ '.²⁰ I am not convinced that this presentation of panpsychism is satisfactory. I raise Chalmers' work here only to show that some constitutive panpsychists aim to leave the structure of (macro-to-micro) reductive explanations intact, only adding non-observable intrinsic natures and new fundamental laws to the scientific image.²¹ If (and, granted, for many it's a big if), all stuff is psychophysical at the fundamental level and there are fundamental laws necessitating mental combination under particular conditions, then the existence of composite subjectivity starts to look like nomological inference (maybe a deduction).

Of course, since we have no idea what the fundamental laws are, a panpsychist may well want to weaken this claim to a statistical inference rather than a deduction. Even if one of the premises turns out to be false and the explanation *de facto* fails, panpsychists can honestly claim to have fitted consciousness into 'a comprehensive scientific world-picture,' in line with evolutionary continuity, causal-closure, and the remarkable predictability with which particular configurations of matter (i.e., in human brains) correlate to conscious experience.²²

However, there are well-known problems with the D-N account of explanation. For example, if we applied the famous flagpole/shadow objection to the case of panpsychism, then it seems like human consciousnesses could be explaining the existence of fundamental consciousness, rather than the other way around. Wesley Salmon argues that to avoid this kind of explanatory reversal, we must invoke the notion of causation, rather than just nomic regularity.²³ However, the panpsychist needs to be cautious. If consciousness can be described in entirely structural or causal terms then it becomes a physical property, since physical properties just are the sorts of things that can be described in the structural, causal, or mathematical-nomic terms. The core of many arguments against physicalism (e.g., the

conceivability argument, the knowledge argument, etc.) and arguments for panpsychism (e.g., the intrinsic natures argument for panpsychism) that consciousness cannot be described in purely structural or causal terms.²⁴ So, instead of causation, the constitutive panpsychist secures her explanation from the problem of explanatory symmetry by employing the notion of grounding.

To speak of ‘up here’ and ‘down there’ is to invoke the image of levels of reality. Furthermore, to suggest that positing consciousness at the fundamental level of reality explains consciousness in humans, is to claim that a state of affairs on one level can be the explanans for a state of affairs at another level. What is this explanatory relationship between levels? By claiming that organismic consciousness exists in virtue of fundamental consciousness, the panpsychist appeals to the explanatory notion of ‘grounding’ in much the same way that microphysical facts are seen to ground macrophysical facts.

Grounding is a “non-causal relation of determination...often expressed by the phrase ‘in virtue of’.”²⁵ To say that p is grounded in q , is to say that p exists in virtue of q . A common example is to say that the party at Jane’s house is grounded in the revelling of Peter, Jon and Jane. The revelling does not cause the party, but it does explain it; we can say that there is a party *because* there is revelling. But there was not a precise moment where something new called ‘party’ came into being as a result of the revelling.²⁶ Grounding is a metaphysical link between explanans and explanandum across levels, rather than across time.²⁷ As Jonathan Schaeffer writes, “Grounding is something like metaphysical causation. Roughly speaking, just as causation links the world across time, grounding links the world across levels.

Grounding connects the more fundamental to the less fundamental, and thereby backs a certain form of explanation.”²⁸ Indeed, Kit Fine characterises grounding as “the ultimate form of explanation”.²⁹ Grounding is irreflexive (if p grounds q , then $p \neq q$), asymmetric (if p grounds q , then q cannot ground p), and is well-founded (if p grounds q then p is essentially connected to q via the intrinsic nature of their properties). Nothing can taste peaty in virtue of being red, because the intrinsic nature of tasting peaty is not essentially connected to redness.³⁰ A grounding relation cannot be confused with reduction (which is reflexive and symmetrical), nor with brute emergence (which is not well-founded). This articulates why grounding is non-causal as well, since grounding is an internal relation between indistinct entities, whereas causation is an external relation between distinct events.³¹

The need to compliment the D-N model of explanation with the asymmetrical notion of grounding shows that the D-N model was never really sufficient for answering the question: what type of explanation is panpsychism? Another form of explanation, which Kitcher describes as the “unofficial model” of the logical positivists that stood behind the official D-N model, is the unificationist account of explanation.³² Like grounding, explanatory unification is metaphysical and not dependent on being able to track causality.³³ A unificationist explanation paints a unified and cohesive picture of the world by seeking to reduce the number of argument patterns needed to explain a diverse range of phenomena, maximizing the stringency of accepted argumentative patterns, and thereby reducing “the number of types of facts we must accept as brute.”³⁴ Paradigmatic examples of unification are Newton’s unifying of terrestrial motion (e.g., the falling of apples) and celestial motion (e.g. planetary orbits) under the single principle of gravitational force, and James Clerk Maxwell’s unification of electricity and magnetism, such that two apparently separate phenomena share a single, common explanation. David J. Chalmers argues that positing consciousness as fundamental should be considered “analogous to what happened with electromagnetism in

the nineteenth century” when Maxwell posited electromagnetic fields and laws as fundamental.³⁵ That Chalmers aligns his naturalistic dualism (which is very close to, if not a form of, panpsychism) with one of the paradigm examples of explanatory unification in the history of science is a good reason to investigate further if panpsychism fits a unificationist style of explanation.

But what are the phenomena that panpsychism seeks to unify? If panpsychism only explains consciousness, then it can hardly count as an unificationist explanation. I think there are two main examples from recent panpsychists that alleviate this worry. First, is the argument from intrinsic natures to offer a Russellian panpsychism. Bertrand Russell famously worried that on a structuralist conception of physics, we know nothing about what underlies the spatiotemporal structure and dynamics of the world. Russellian monism posits intrinsic natures to solve this problem. Russell then asks, what type of thing might these intrinsic natures be? Well, the only intrinsic nature we have access to are our own, and in the case of human beings our intrinsic nature seems to be consciousness. From this the Russellian panpsychism supposes that all intrinsic natures are connected to consciousness, thereby unifying an explanation for consciousness with an explanation for what underlines the physical structure of the world. Gregg Rosenberg has put the connection more forcefully than most when he writes, “Panpsychism shouldn’t be adopted simply because it might be a solution to the mind-body problem. It is also a solution to the carrier-causality problem, the problem of why intrinsic natures carry the schemas of causality in our world.”³⁶ Another recent example of this unificationary defence of panpsychism comes from Hedda Hassel Mørch’s phenomenal powers view, which is even more directly related to the problem of causation. She describes her view in the following way:

phenomenal properties (i.e. properties which characterize *what it is like* to be in conscious states) have non-Humean causal powers— which is to say that they metaphysically necessitate their effects— in virtue of *how they feel*... For example, pain has the power to make subjects who experience it try to avoid it.³⁷

The unification of causality and consciousness in contemporary panpsychism arises out of the argument that these are the two greatest limitations of physicalism. If the mysteries of causation and consciousness are both solved by positing consciousness as the categorical nature of all matter, then this would be a very strong argument for adding conscious categorical natures to the otherwise physicalist picture.

Panpsychism seeks to do to physicalism what quantum mechanics did to classical mechanics. That is, panpsychism does not seek to invalidate physicalism entirely but to show that it has a limited, specialist sphere of validity within a larger panpsychist framework.³⁸ Furthermore, physicalism is “conceptually enhanced” in the process.³⁹ This same approach motivates Thomas Nagel’s controversial *Mind and Cosmos*, where he presents panpsychism not only as “an indispensable part of a thorough-going philosophy of evolution” (to borrow a phrase from William James), but also suggests that panpsychism may be an explanation for the order and directionality of the evolutionary process itself.⁴⁰ Unlike Dennett’s cranes and Fodor’s Granny (discussed in David Livingstone’s chapter) Nagel sees the need for something mindful, but not divine, to ground teleology.⁴¹ He is, like Greene suggests, asking biologists to “revise their philosophy of nature and natural science to make sense of” their own claims.⁴² Nagel, is not just fitting panpsychism into the unificationist picture of evolution, but conceptually enhancing evolution in describing it as “not just a physical process.”⁴³

Unification is currently the best fit for how contemporary philosophers are articulating the explanatory promise of panpsychism. But what does this mean for a conjunctive explanation for consciousness? Unificationist explanations are also thought of as “theoretical reductions” and as such seem the antithesis of conjunctive explanations. Where unification reduces the number of explanatory patterns across multiple explananda, conjunction increases the number of explanations for a single explanandum.⁴⁴ It would be a mistake, however, to think of unification as incompatible with other forms of explanation, such as statistical relevance or causal mechanisms. This is seen most clearly in Wesley Salmon’s argument for the “peaceful co-existence” between bottom-up (causal or ontic) and top-down (unificationist or epistemic) explanations.⁴⁵ Offering a global, systematized “world-picture” does not, on its own, rule out the possibility of complementing this with a more local description of “the hidden mechanisms by which nature works.”⁴⁶ For the constitutive panpsychist, this will mean not abandoning the so-called “easy questions” of consciousness.⁴⁷ Schaffer describes such combinations of groundings and causal explanations as “*hybrid explanations*,” but we might also think of them as conjunctive.⁴⁸ For the non-constitutive panpsychist this will mean that in addition to pursuing the easy problems, continuing the search for a causal explanation for how fundamental micro-subjects unify to form emergent macro-subject wholes, as in complex and sentient biological organisms.⁴⁹ In answer to the question of this section, what type of explanation is panpsychism? I conclude that panpsychism is most promising when articulated as a metaphysical unificationist explanation. But for panpsychism to be deemed a success, multiple forms of explanation will be required in conjunction with one another.

Before moving on to consider how to incorporate theism within an explanation of consciousness, I will take stock of the argument so far. Different positions in philosophy of mind have different resources for explaining why biological organisms, like humans, are conscious subjects. I have argued that the resources available to reductive and non-reductive physicalisms are insufficient for the task. On the physicalist’s or emergentist’s account, whereby everything that exists is determined and constituted by non-experiential material parts, systems, and information, the existence of consciousness remains deeply surprising, to the point of incomprehensibility. On the superstrong emergent dualist’s account the emergence of consciousness out of non-experiential matter is an incredulous, brute, surprise. Thus, I have suggested that the existence of consciousness points towards a more enchanted view of nature; all matter is, fundamentally, psychophysical.

That consciousness is a fundamental and ubiquitous feature of the universe is the core claim for panpsychism, which is a family of views receiving increasing attention by philosophers of mind. Put most simply, if all matter is psychophysical such that simple biological organisms have a simple conscious life, then it is not so surprising that complex biological organisms have a complex conscious life. I then asked: what kind of explanation is panpsychism? I argued that panpsychism is best understood as a unificationist explanation. However, this does not rule out the need for panpsychism to be complemented – conjoined even – with a causal explanation, even if the role that a causal mechanism will play differs between constitutive and non-constitutive forms of panpsychism.

3. Theism and Conjunctive Explanations for Consciousness

I mentioned at the start of this chapter that the inability for physicalists to explain conscious biological organisms has led to a revival of the argument from consciousness for

the existence of God. The thinking behind this revival might be characterised in the following way: the insufficiency of non-theistic explanations for consciousness leaves space for the employment of theism as an explanans for one of the most important and undeniable features of the world. Since there is (supposedly) no other explanation of consciousness apart from theism, the undeniable existence of consciousness lends significant support (by way of evidence) for the existence of God.⁵⁰

As a result of this competition between theistic and non-theistic explanations for consciousness, these apologetic arguments normally depict God as acting directly (infusing or pairing souls with embryos), without recourse to secondary (created, or natural) causation. As with emergent dualism albeit on far better grounds, consciousness is a miracle each and every time it occurs. Combining emergence with soul creationism, Joshua Farris bridges the emergent dualist's gap (between unconscious complexity to consciousness) with (non-miraculous) special divine action in his "emergent-creationism" account of the origin of the soul.⁵¹ Despite employing two causal explanations in this account, Farris avoids the problem of overdetermination, because emergence and creationism both play a partial, rather than a sufficient, causal role in bringing about the existence of conscious, embodied human beings. This is an example of a causal conjunctive explanation for consciousness (Farris refers to it as "a hybrid view").⁵²

The panpsychist could employ soul-creationism to construct a parallel non-causal/causal conjunctive explanation for consciousness if she so chose. The combination problem (the question, how micro-consciousnesses combine to form a unified macro-conscious subject) currently leaves an uncomfortable mystery in the middle of the panpsychist's explanation. It might be tempting for the Christian panpsychist to propose a theologically fitting story about the unifying powers of the Holy Spirit as the bond of love to argue that the Spirit acts, whenever necessary and appropriate, to combine the numerous fundamental micro-subjects into a complex, unified human subject. As with other appeals to special divine action as a causal mechanism within a scientific explanation, there is no reason that God could not act in this way or have created the world with such gaps as signs for God's existence. However, I do not think theists should use the explanatory power of theism in this way.

The occasional miracle, which for the present purposes can be quite loosely defined as a singular event that defies reasonable expectation such that one is justified in positing a supernatural agent as the cause either instead of or alongside natural causes, need not be a problem for scientific theories and explanations. As Alvin Plantinga argued, once the miracle has past the ordinary causal regularities and human predictions can resume as before, so there is nothing anti-science about miracles (just, perhaps, extra-science).⁵³ However, regular, and predictable miracles, such as the suggestion that God conveniently performs a special act of soul-body pairing every time a human sperm fertilizes an ovum, are best avoided.

To employ divine action in order to complete an otherwise deficient scientific explanation of a regular and predictable natural phenomenon is commonly known as the god-of-the-gaps approach to divine action. As an objection, this is often coupled with the cautionary tale of Newton's occasional revolutions and Laplace's dispensing of the God-hypothesis. The caution in this tale is that if future scientific discoveries fill the 'gap' in the explanation, then belief in God seems to be undermined. In his chapter, Gijsbert van den Brink refers to this concern as "the retreat argument": surely, it is best to avoid any set-up whereby theism must retreat in the wake of scientific discovery, but this is not the only problem with the 'god-of-the-gaps' approach.⁵⁴ As a theologian, I am also concerned with the vending-machine picture

of God that this account leaves us with, whereby if we create the right conditions (sperm fertilising ovum) that a miracle is sure to follow. Similarly, Leibniz's complaint against Samuel Clarke, who was defending Newton's occasional revolutions, was not the threat of scientific success but the appearance that God had made an imperfect or incomplete machine that required regular fixing. In this particular discussion, we might follow John Milton's criticism of soul-creationists for making God "a slave to their lusts."⁵⁵ For these reasons we might instead follow Thomas Kuhn's argument that when a scientific anomaly is the sort of thing that can be predictably and regularly observed, such as in the fact that all human beings are conscious, then what must result is a 'revolution' in how we understand our world.

One might argue that panpsychism is such a revolutionary response in light of the failure of the materialist neo-Darwinian concept of nature to explain consciousness. Although panpsychism is not yet a complete (conjunctive) theory of consciousness, it points in a direction that remains an active area of research that should not be ruled out. What would it mean for the argument from consciousness for the existence of God if panpsychism were true? Chalmers depicts his view as containing "nothing particularly spiritual or mystical" and asserts that there is "nothing especially transcendental about consciousness; it is just another natural phenomenon."⁵⁶ It might seem, then, the potential success of panpsychism is at the cost of theism and that these two theories stand in competition with one another.⁵⁷ But this conclusion only results if God is employed as a direct (incompatible) causal explanation for regular, predictable, widespread phenomena. Instead, we might think of the explanatory power of theism in quite another way.

Explaining the Panpsychist Universe

What does it profit a scholar to explain consciousness if he must adopt panpsychism? One might object that, whilst consciousness is certainly surprising, surely panpsychism is only more so!⁵⁸ Well, of course, that depends. As we have already seen 'surprise' in the sense intended in this paper is relative to the ontological resources and epistemic framework available. Panpsychism pushes the surprising brute and contingent fact of consciousness down from the level of rare complex occurrences in biological organisms to the fundamental building-blocks of the universe. Thus, it relocates the bruteness of consciousness in the bruteness of existence. Critics might complain that all the panpsychist has done, then, is kick the explanatory can down the road.⁵⁹ Whilst this is not incorrect, it is not a very severe complaint. As outlined in the analogy to joke-telling, bruteness at the beginning of a story ("A panda walked into a bar...") is acceptable. Is this not the nature of all scientific explanation? Why do apples fall from trees? Because apples have less mass than planets, and because of the law of gravity. Why are there laws of gravity? Well, who knows!?⁶⁰ So, whilst the critic is right to complain that panpsychism does not offer a total explanation for consciousness, this is only by virtue of not explaining why there is a (panpsychist) universe. But, since the universe at large was not the panpsychist's explanandum, I do not think the panpsychist will be particularly worried.

It is still worth asking if one can reduce the surprise of a panpsychist universe. An obvious possibility here is to offer theism as a unificationist explanation, a larger framework within which panpsychism itself sits. With no reference to consciousness, Alister McGrath appeals to the explanatory power of theology in roughly this way when he argues that Christianity,

offers primarily, yet not exclusively, an epistemic model of explanation, by throwing a conceptual net over the complexities of experience, so that

these may both be captured and colligated. To understand something is to locate it within a web of meaning.⁶¹

For a while, I thought that this would be my conclusion; theism provides a unificationist explanation of panpsychism by locating a panpsychist universe within a web of meaning in such a way that reduces the surprise that such a universe exists. We might then debate whether two unificationist explanations, one subsumed beneath the other, counts as a conjunctive explanation or not (to which, I think it probably does not). However, I no longer think that unification is the correct way to connect the explanandum and explanans under consideration, the panpsychist universe and God, respectively.⁶² This is for two reasons, which correspond to the two ways unification appears in philosophy of science; the loose way and the strict way.

There is a loose intuitive sense that unifying multiple explananda under one (or fewer) explanans is a good-making property of explanations. Here, unification is a virtue of explanations, and could in fact be applied to a wider range of types of explanation. However, God wanting a panpsychist universe to exist is not a unifying explanation, even in this loose sense, because it explains one thing, not two. God may well have created a panpsychist universe, and I below give further reasons for why we might think this is the case, but in doing so I am not reducing the explanandum, and instead I am adding God to the explanans. There is good reason, I wager, to add God to the explanans (we need not fear Ockham's razor), but this is because, 'God' as explanans here is an answer to a different question than the one originally asked.⁶³

Beyond the loose sense Michael Freidman and (more influentially) Philip Kitcher developed a precise and technical way in which an explanation might be unificationist by applying the same argument pattern to a range of explananda Kitcher, recognized that if the reduction of explananda by as few as explanans was the *only* criteria for unification, then a pattern like the following would be the ultimate and only necessary unificationist explanation:

God wants it to be the case that α
What God wants to be the case is the case

α

[*Filling instructions*: ' α ' is to be replaced by any accepted sentence describing the physical world]⁶⁴

Kitcher rules out appeals to theological doctrines as unifying beliefs in the technical sense he is after by describing them as "spurious".⁶⁵ Why is this argument pattern spurious? Because it lacks a second good-making property of unificationist explanations, namely *stringency*. 'Stringency', for Kitcher, refers to two constraints placed upon the argument pattern. First, there is a constraint by classification; the set of rules about which sentences are premises, conclusions and what the rules of inference are. Second, and more relevant here, the filling instructions and the nonlogical expressions within the argument pattern both constrain the substitution of dummy letters. If the dummy letters, (α in the example above) can be substituted by any sentence whatsoever, then the argument pattern is not stringent. There needs to be some constraining filling instructions for what sentences can and cannot be substituted for α . Kitcher also suggests that the nonlogical language, "God wants it to be the case", imposes no obvious constraints in and of itself.

The concept of God (and God's will) that Kitcher is working with here is probably a fairly thin concept. Many religious traditions do, in fact, see sentences like "God wants it to be the case that α " as having constraints.⁶⁶ Even granting omnipotence, there are some sentences that cannot be substituted for α . Furthermore, these filling instructions for α are constrained specifically by the nonlogical language, namely 'God'. That is (moving just one step towards Jünger's superfluity of God as non-necessary with regard to explanations, as described by van den Brink) the revelation of God is for many (although not all) a theological condition that places not-insignificant constraints upon α .⁶⁷ God and God's will may, at least in principle, be a unificationist explanation, if adequate theological information, logic, and narrative backing were provided to make the argument pattern stringent, rather than spurious.

It is unsurprising that theological information is required in the explanans, since the why-question being asked ('why is there a panpsychist universe?') is already a theological question. This is a theological question because it only arises in the context of certain background beliefs that suggest that the universe could have been different to what it is, or that it might have not existed at all, such that there is a possible answer to the why-question.⁶⁸ Theism is obviously one such common background belief that can give rise to this kind of question. If the background beliefs are such that the universe could not have been other than it is, then the question of why there is a panpsychist universe will simply not arise. However, given the background beliefs of the present context (where the author and original interlocutor for this question are both Christians, and the edited volume concerns the nature of theistic-scientific conjunctive explanations) the question does arise.

The question stated thus far, Q , 'why is there a panpsychist universe?' states a clear topic of concern (a panpsychist universe), but it is vague as to the contrast class. Does this question ask:

Q_1 : 'why is there a panpsychist universe as opposed to a non-panpsychist universe?'

or,

Q_2 : 'why is there a panpsychist universe as opposed to no universe at all?'

In Q_2 the qualifier 'panpsychist' does not appear to be doing any work such that the question can be simplified to the old chestnut, 'why is there something rather than nothing?' In the context of our wider discussion, explaining the existence of conscious biological organisms, Q_1 is the more relevant question.

Even with the context and contrast-class specified, the kind of answer being asked for is not entirely clear. We could be looking for a scientific story about the causal origins of the universe, such that panpsychism is a necessary outcome of the universe-making process. However, since I know of no such theory, I cannot offer such an explanation (and I don't expect one to appear any time soon). Alternatively, we could be looking for a teleological answer, such that panpsychism is necessary for the universe to fulfil some intended purpose. If this is the answer being asked for, which I take it to be, then the question can be reframed as:

Q_3 : Why did God choose to create a panpsychist, as opposed to a non-panpsychist, universe?

Now it is even more apparent, since God is already invoked in the question, that the relevant answer will be theological both in its content and its success criteria.⁶⁹ Although panpsychism has a long historical pedigree, in contemporary academia it is not often strongly associated with Christian theology. Q_3 is not an unreasonable question to ask. Let me briefly give three reasons, that are intended to motivate Christians in accepting panpsychism.

First, panpsychism and theism can both be construed as giving primacy to mentality. Whilst the panpsychist can claim that mind and matter both really exist, the panpsychist's commitment to the existence of the mental is stronger than her commitment to the existence of the material (for just the same reason it was for Descartes). Not many panpsychists are idealists (although they could be), but the same epistemological primacy of the mental over the material applies in panpsychism as it does in idealism.⁷⁰ Of course, theism also posits an immaterial mind as ultimate, albeit a mind that is transcendent and radically different to created minds. So, it seems that by accepting the primacy of mentality, theism and panpsychism have some shared intuitions that increase the probability of each and make them a fitting pair. If we accept that the only necessary being and the ultimate source of all creation is an immaterial consciousness, then it is not so surprising that creation is shot through with consciousness.

Second, a panpsychist universe gives maximal glory to God. It is widely stipulated that a world with conscious beings is of greater value and brings greater glory to God than a world without any conscious beings. Perhaps this is because, as discussed in the previous point, God is somewhat analogous to a conscious being and so these are the sort of beings which most reflect God's glory, stand in a reciprocal relationship to God, or can appreciate God's creation. If this is the case, then the more consciousness that exists the more glory this brings to God. Gottfried Wilhelm von Leibniz argued something like this when he wrote that,

it is consistent neither with the order nor with the beauty of the reason of things that there should be something vital or immanently active only in a small part of matter, when it would imply greater perfection if it were in all. And even if... intelligent souls...cannot be everywhere, this is no objection to the view that there should everywhere be souls, or at least things analogous to souls.⁷¹

Importantly, it is not that intelligent or human souls are necessary for this argument of greater glory to work but, for Leibniz at least, something "analogous to souls," is sufficient. Leibniz writes that, "since every mind is like a mirror" then many minds mean that "there will be greater light, the mirrors blending the light not only in the [individual] eye but also among each other. The gathered splendour produces glory."⁷² The perception of monads, for Leibniz, means that "the glory of God is likewise multiplied by as many entirely different representations of his work."⁷³ It is a panpsychist universe that Leibniz suggests brings greatest glory to God by reflecting the divine light and giving it back to God at every point of creation, from every possible perspective.⁷⁴ Glory, it is commonly asserted, is a suitable (sometimes even the only suitable) motivating reason for God to create and act.⁷⁵ If it is correct that a panpsychist universe gives maximum glory to God, then the truth of theism reduces the surprise of panpsychism. We can reasonably answer the question, 'Why is there a panpsychist universe?' with the reply, 'Because this kind of universe gives maximum glory to God'.

Third, it seems more fitting for God to create a complete and empowered creation. As already mentioned, Leibniz famously compared Newton's world with an imperfect machine that requires continuous adjustments to keep running, which would be an unfitting creation for a perfect God. As I suggested above, it is not wise to posit miracles "in order to supply the Wants of Nature," for "that God should *usually* perform miracles would certainly be without rhyme or reason."⁷⁶ God may have reason for the occasional miracle, Leibniz suggests, but not to make a regular feature of the natural world miraculous. In keeping with Leibniz's intuitions on this point, panpsychism posits a world without gaps and assumes that there is a causal explanation for consciousness that does not require recourse to miracles. Why is the universe panpsychist? We can answer, because God wanted to make a universe where human consciousness could gradually and smoothly evolve.

The key difference between Leibniz and Clarke here is not just an intuition concerning the appropriate occurrence of miracles, but the nature of causation. For Clarke, matter is inert and has no power of self-motion or transformation; "All things done in the world, are done either immediately by God himself, or by created intelligent beings: matter being evidently not at all capable of any laws or powers whatsoever."⁷⁷ By contrast, Leibniz posits powers within every created thing, such that all the events, motions, and transformations that each entity endures is sourced back to these innate powers.⁷⁸ So, for Leibniz, the perfect machine which we can assume God has designed, is one which the creator has empowered to run itself. A similar intuition has been recently expressed by John Webster (who is attributing the same argument to both Thomas Aquinas and Karl Barth) when he writes: "Perfect power does not absorb, exclude or overwhelm and dispossess other dependent powers and agents, but precisely the opposite: omnipotent power creates and perfects creaturely capacity and movement."⁷⁹ If we accept these intuitions, then it seems more appropriate for God to create a panpsychist universe which is fully empowered in all its regular and natural movements and evolutions.

For these three reasons, it seems likely that God might choose to create a panpsychist universe. We might articulate this through the following supposition: Suppose there is a divine creator who is an immaterial mind, who desires to create other immaterial minds for its own glory and delights in empowering this creation with its own causal powers. If such a thing were true, as the Judaeo-Christian tradition broadly affirms, then it is not surprising that this creator would choose to create a universe in which consciousness is a fundamental and ubiquitous feature of the universe. Theism, then, provides an explanation for why the universe is a panpsychist universe (if, in fact, it is). A panpsychist universe points towards, or implies, the existence of God, so we have a version of argument from consciousness for the existence of God, offers as a part of the wider cosmological argument. It is worth noting that this is, therefore, quite a different approach to the argument from consciousness than those which starts with an appeal to the scientific and naturalistic inexplicability of consciousness.⁸⁰

Conclusion

Is this a theistic-scientific conjunctive explanation for consciousness? I don't think so. Panpsychism was the explanans for human consciousness, now panpsychism has become the explanandum with theism as the explanans. Theism and panpsychism, in this paper, are complementary, but not conjunctive, explanations. To return to the horse racing metaphor for conjunctive explanations, if the explanandum has changed, then we are betting in a different race. This is why, in the introduction, I noted that rather than a causal conjunctive

explanation, or a non-causal/causal (unificationist) conjunctive explanation, I suggest that – when it comes to theism and consciousness – we should adopt a more pragmatic or contextualist view of explanatory pluralism. There are different why-questions, different explanandum, to which panpsychism and theism provide compatible and complementary answers.

If one wanted a theistic-scientific conjunctive explanation for consciousness, then most forms of dualism and panpsychism could be joined with an account of the origin of souls that includes some direct divine input wherever the world's own powers of evolution and soul-creation seem insufficient. However, I suggested that there are good theological reasons to avoid this kind of theistic-scientific conjunctive explanation for regular, predictable, and widespread phenomena, such as the existence of consciousness. I also suggested that, in this debate, God should not be used as a unificationist explanation. Instead, the Christian philosopher and theologian should take a more pragmatic approach by looking for the most promising explanation and see if this universe might be the kind of world God would create, according to the Christian story of who God is. In this chapter, I argued that panpsychism appears the most promising explanation for consciousness and that a panpsychist universe is the sort of universe God might be most interested in creating.

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¹ Douglas Adams, *The Hitchhikers Guide to the Galaxy*, (Harmony Books, 1980), 133-134.

² Adam, *Hitchhikers*, 134.

³ David H. Glass, "Conjunctive Explanations: How Science and Religion Can Work Together," this volume, ms. p.21. Ben Page offers a different approach to the argument from consciousness by arguing that consciousness increases the probability of theism, regardless of which theory within philosophy of mind turns out to be true. Ben Page, "Arguing to Theism from Consciousness," *Faith and Philosophy* 37.3 (2020): 336-362.

⁴ Glass, "Conjunctive Explanations," ms, p.1.

⁵ Glass, "Conjunctive Explanations," ms, p.11.

⁶ Glass, "Conjunctive Explanations," ms. p.7.

⁷ P. Kitcher, "Explanatory Unification and the Causal Structure of the World," 410-505, in P. Kitcher and W. Salmon (eds.), *Scientific Explanation* (Minneapolis, MN: University of Minnesota Press, 1989), 432.

⁸ Peter Godfrey-Smith, *Theory and Reality: An Introduction to the Philosophy of Science* (Chicago, IL: University of Chicago Press, 2003), 197-200.; Bas C. van Fraassen, "The Pragmatic Theory of Explanation" in *Theories of Explanation*, (ed.) Joseph C. Pitt (Oxford: Oxford University Press, 1988), 136-155.

⁹ J. Levine, "Materialism and Qualia: The Explanatory Gap," *Pacific Philosophical Quarterly* 64 (1983): 354-61; Frank Jackson, "Epiphenomenal Qualia," *Philosophical Quarterly* 32 (1982), 127-136; Laurence Bonjour, "Against Materialism," in *The Waning of Materialism* (Oxford: Oxford University Press, 2010), 3-24.

¹⁰ Timothy O'Connor, "Emergent Properties," *Stanford Encyclopaedia of Philosophy* (10th August 2020). Accessed: 24th August 2020.

¹¹ [LINK TO McLEISH'S CHAPTER](#)

¹² [LINK TO McLEISH'S CHAPTER](#) (ms. p.12).

¹³ Thomas Nagel offers a more radical challenge to physicalists' attempt to find the causal mechanisms of consciousness by arguing that a "bare identification of a cause would not be a satisfactory explanation. Without more, it would explain neither why particular organisms are conscious nor why conscious organisms have come to exist at all. For a satisfactory explanation of consciousness as such, a general psychophysical theory of consciousness would have to be woven into the evolutionary story...". It seems that Nagel wants a unificationist style explanation for consciousness whereby "the explanation may have to be something more than physical all the way down." Thomas Nagel, *Mind and Cosmos: Why the materialist neo-Darwinian Conception of Nature is Almost Certainly Failure* (Oxford: Oxford University Press, 2012), 50, 53.

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- ¹⁴ For an up-to-date discussion of the origin of the soul in Christianity in light of contemporary philosophy of mind and the natural sciences, see Joshua Farris and Joanna Leidenhag (eds.) *Origins of the Human Soul: Conversations in Theology, Philosophy and Scientific Thought* (New York: Routledge, forthcoming).
- ¹⁵ Charles Taliaferro, *Consciousness, and the Mind of God* (Cambridge: Cambridge University Press, 2009), 114-122.
- ¹⁶ Galen Strawson, "Realistic Monism: Why Physicalism Entails Panpsychism," in *Consciousness and Its Place in nature: Does Physicalism Entail Panpsychism?* (ed.) Anthony Freeman (Imprint Academic, 2006), 18.
- ¹⁷ Samuel Alexander, *Space, Time and Deity*, vol.2 (London: Macmillan and Co., 1920), 47.
- ¹⁸ Galen Strawson, *Real Materialism, and other essays*, (Oxford: Oxford University Press, 2008), 38-40, 45-6.
- ¹⁹ These fundamental or basic entities do not have to be small. If it turns out that there is no 'bottom' to physics then the panpsychist instead claims that the universe as a single whole is most basic, and organismic consciousness is an individuation (rather than combination) of the fundamental conscious whole. Such forms of panpsychism have received some attention and currently go under the name 'cosmopsychism'.
- ²⁰ David Chalmers, *The Conscious Mind: In Search of a Fundamental Theory* (Oxford: Oxford University Press, 1996), 127-128.
- ²¹ Godehard Brüntrup, "Emergent Panpsychism," *Panpsychism: Contemporary Perspectives* (eds.) Godehard Brüntrup and Ludwig Jaskolla (Oxford: Oxford University Press, 2017), 59.
- ²² Salmon, *Causality and Explanation* (Oxford: Oxford University Press, 1998), 77; Alister McGrath, *Territories of Rationality: Science and Theology in an Age of Multiple Rationalities* (Oxford: Oxford University Press, 2019), 125.
- ²³ Salmon, Wesley, *Four Decades of Scientific Explanation* (Minneapolis, MN: University of Minnesota Press, 1989) 47.
- ²⁴ Goff, *Consciousness and Fundamental Reality* (Oxford: Oxford University Press, 2017), 137-141.
- ²⁵ Paul Audi, "A clarification and defence of the notion of grounding," *Metaphysical Grounding: Understanding the Structure of Reality* (eds.) Fabrice Correia and Benjamin Schnieder (Cambridge: Cambridge University Press, 2012), 101.
- ²⁶ Goff, *Consciousness and Fundamental Reality*, 42.
- ²⁷ Kit Fine, "Guide to Ground," *Metaphysical Grounding: Understanding the Structure of Reality* (eds.) Fabrice Correia and Benjamin Schneider (Cambridge: Cambridge University Press, 2012) pp.37-80.
- ²⁸ Jonathan Schaffer, "Grounding, transitivity, and contrastivity," *Metaphysical Grounding: Understanding the Structure of Reality* (eds.) Fabrice Correia and Benjamin Schneider (Cambridge: Cambridge University Press, 2012), 122. See also, Jonathan Schaeffer, "Grounding in the image of causation," *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, vol. 173, no.1 (Jan. 2016), 49-100.
- ²⁹ Kit Fine, "The question of realism", *Philosophers' Imprint* 2001, 615-616.
- ³⁰ Audi, "A Clarification and defence of the notion of grounding," 108-109.
- ³¹ Schaffer, "Grounding in the image of causation," 94-96.
- ³² Philip Kitcher, "Explanatory Unification," *Philosophy of Science*, vol. 48, No. 4 (Dec. 1981), pp.507-531, at 508.
- ³³ For Kitcher at least, causal claims mirror explanatory claims. Causation does not stand independently of explanation as something that explanations must seek to capture. Woodward, James and Lauren Ross, "Scientific Explanation", *The Stanford Encyclopedia of Philosophy* (Summer 2021 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/sum2021/entries/scientific-explanation/>>.
- ³⁴ Kitcher, "Explanatory Unification," 529.
- ³⁵ Chalmers, *The Conscious Mind*, 127.
- ³⁶ Gregg Rosenberg, "Land Ho? We Are Close to a Synoptic Understanding of Consciousness," *Panpsychism: Contemporary Perspectives* (eds.) Godehard Brüntrup and Ludwig Jaskolla (Oxford: Oxford University Press, 2017), 153-75, 155.
- ³⁷ Hedda Hassel Mørch, "The Phenomenal Powers View and the Meta-Problem of Consciousness," *Journal of Consciousness Studies* (forthcoming).
- ³⁸ This account of the relationship between panpsychism and physicalism explains why panpsychists place themselves in competition with physicalists and also label their view 'real materialism' (Strawson) or as a form of 'impure physicalism'. Goff, *Consciousness and Fundamental Reality*, 141.
- ³⁹ Sorin Bangu, "Scientific Explanation and Understanding: Unificationism Reconsidered," *European Journal of Philosophy of Science* 7 (2017): 116-119.
- ⁴⁰ William James, *The Principles of Psychology* (New York: Dover, [1890] 1950), 149.
- ⁴¹ [LINK TO LIVINGSTONE's CHAPTER \(ms. p. 16\)](#).
- ⁴² [LINK TO LIVINGSTONE's CHAPTER \(ms. p. 24\)](#)
- ⁴³ Nagel, *Mind and Cosmos*, 50.
- ⁴⁴ Wesley C. Salmon, "Scientific Explanation: Causation and Unification," *Critica: Revista Hispanoamericana de Filosofía*, Vol. 22, No. 66 (Dec. 1990): 3-23, at 4.

⁴⁵ Salmon, *Four Decades*, 183-184.

⁴⁶ Salmon, *Four Decades*, 182.

⁴⁷ David J. Chalmers, "Facing Up To The Problem of Consciousness," *Journal of Consciousness Studies* 2, no.3 (1995), 200-201.

⁴⁸ Schaffer "Grounding in the image of causation," 89.

⁴⁹ For examples of recent proposals see, Rosenberg, "Land Ho?"; Hedda Hassell Mørch, "Is the Integrated Information Theory of Consciousness Compatible with Russellian Panpsychism?" *Erkenntnis* 84 (2019), 1065-1085.

⁵⁰ J.P. Moreland, *Consciousness and the Existence of God*, (New York: Routledge, 2008), 115, 133.

⁵¹ Joshua R. Farris, *The Soul of Theological Anthropology: A Cartesian Exploration* (Abingdon, UK: Routledge, 2017), 76-95. I specify "non-miraculous" because Farris uses a Thomistic view of divine action to argue that the secondary causation of physical emergence triggers into effect God's primordial decision to create a specific soul, and thereby (Farris emphasises) God does not break any natural laws. Whilst an improvement, I do not feel that Farris' account avoids the problems I discuss below regarding positing miracles (or special divine action at any time) to explain regular events.

⁵² Farris, *The Soul of Theological Anthropology*, 77.

⁵³ Plantinga, *Where the Conflict Really Lies: Science, Religion & Naturalism* (Oxford: Oxford University Press, 2011), 97-108.

⁵⁴ [LINK TO GIJSBERTS CHAPTER](#)

⁵⁵ John Milton, *Paradise Lost*, Book III, lines 116-7, ed. Alistair Fowler (New York: Longman, 1986), 149.

⁵⁶ Chalmers, *The Conscious Mind*, 126, 128.

⁵⁷ J.P. Moreland expresses this in the following way: "panpsychism follows only if classical theism is ruled out". Moreland, *Consciousness and the Existence of God*, 118. I see no necessary reasons for this kind of competition. For more on how panpsychism is an ally to Christian theology in particular, see Joanna Leidenhag, *Minding Creation: Theological Panpsychism and the Doctrine of Creation* (London: T&T Clark, 2021).

⁵⁸ Many thanks to Andrew Torrance for asking me this question in discussion of an earlier draft of this paper.

⁵⁹ Geoffrey Mandell, *Mind and Materialism* (Edinburgh: Edinburgh University Press, 1988), 3; Sam Coleman, "Being Realistic: Why Physicalism May Entail Panexperientialism," in Galen Strawson et al., *Consciousness and its place in nature* (ed.) Anthony Freeman (Exeter UK: Imprint Academic, 2006), 43.

⁶⁰ This question of self-deriving explanation has been a thorn in the side of philosophy of science since the "notorious footnote 33" of Hempel and Oppenheim's 1948 "Studies in the Logic of Explanation" acknowledged that they could offer no explanation for general regularities or laws, nor provide adequate criteria for when one set of regularities, like Kepler's laws, can be derived, and explained by, higher-level laws, like Newton's laws of motion (and not Boyle's law). See, Wesley C. Salmon, *Four Decades*, 9-10.

⁶¹ McGrath, *Territories of Rationality*, 145.

⁶² I owe thanks to Meghan Page for helping me make up my mind on this issue and articulate the reasons given below.

⁶³ To be clear, this is not to say that God can never be used as a unificationist explanation for a wide range of phenomena. It is only to say that given the explanandum in question here, this is not the type of explanation being offered. For more on why we need not fear Ockham's razor, see [LINK TO VAN DER BRINK](#).

⁶⁴ Kitcher, "Explanatory Unification," 528.

⁶⁵ Kitcher, "Explanatory Unification", 528.

⁶⁶ This distinction between God's will and God's permission in responses to the problem of evil is sufficient theological reason to take this problem seriously.

⁶⁷ [LINK TO VAN DER BRINK](#).

⁶⁸ Bas van Fraassen, "The Pragmatic Theory of Explanation," 145-146.

⁶⁹ Godfrey-Smith, *Theory and Reality*, 197.

⁷⁰ For a discussion of the relationship between panpsychism and idealism see William Seager, "Idealism, Panpsychism, and Emergentism: The Radical Wing of Consciousness Studies," *The Routledge Handbook of Consciousness* (ed.) Rocco J. Gennaro (New York: Routledge, 2018), pp.64-77; David J. Chalmers, "Idealism and the Mind-Body Problem," *The Routledge Handbook of Panpsychism* (ed.) William Seager (New York: Routledge, 2020), pp.353-373

⁷¹ Leibniz, *On Nature Itself* §12 in *Gottfried Wilhelm Leibniz: Philosophical Papers and Letters*, 2nd edition. (ed. & trans.) Leroy E. Loemker (Dordrecht: D. Reidel, 1969), 820.

⁷² Leibniz, *Elements of Natural Law*, §5 in *Gottfried Wilhelm Leibniz: Philosophical Papers and Letters*, 2nd edition. (ed. & trans.) Leroy E. Loemker (Dordrecht: D. Reidel, 1969), 214.

⁷³ Leibniz, *Discourse on Metaphysics*, §9 in *G.W. Leibniz: Philosophical Essays* (ed. & trans.) Roger Ariew and Daniel Garber (Indianapolis: IN: Hackett, 1989), 42.

⁷⁴ I have also argued this point in Leidenhag, *Minding Creation*, chapter 3.

⁷⁵ For example, Jonathan Edwards, “The End for Which God Created the World,” in *The Works of Jonathan Edwards*, vol. 8: *Ethical Writings* (ed.) Paul Ramsey (New Haven, CT: Yale University Press, 1989), 149.

⁷⁶ Leibniz, *New Essays* (L1.4, W.4.588) in *The Monadology and Other Philosophical Writings*, (trans) Robert Latta (Oxford: Clarendon Press, 1899), 399.

⁷⁷ S. Clarke, *A Demonstration of the Being and Attributes of God And Other Writings, 1705* (ed.) E. Vailati (Cambridge: Cambridge University Press, 1998)

⁷⁸ Leibniz theory of perfect harmony took this so far as to, in fact, deny causation between objects or any interaction.

⁷⁹ John Webster “‘Love is also a lover of life’: *Creatio ex nihilo* and Creaturely Goodness,” *Modern Theology* 29, no.2 (April 2013): 156-171, at 170.

⁸⁰ Many thanks to David Glass for helping me make this point clearer, and indeed for many other queries and corrections throughout this paper.