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THE PROBLEM OF EVIL AND THE PROBOEM OF CONSCIOUSNESS: ONE AND THE SAME?

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ABSTRACT: The problem of evil and the problem of consciousness occupy central positions in the philosophy of religion and the philosophy of mind, respectively. On the face of it, these problems seem to be fundamentally distinct. The problem of evil is concerned with whether the existence of evil in the world undermines belief in the existence of God while the problem of consciousness concerns the nature of consciousness and how it can arise from physical processes in the brain. In this paper, however, I defend the following novel thesis: the problem of evil and the problem of consciousness are versions of the same problem, which I term the "problem of ontological expectation mismatch." I argue that, by recognizing that they stem from the same root, we can gain a fresh perspective for evaluating existing approaches to both problems in a systematic manner. I conclude my discussion by utilizing this thesis to critically examine panpsychism, a response to the problem of consciousness that has recently gained significant popularity.

Keywords: the problem of evil, the problem of consciousness, theodicies, God, panpsychism,

Introduction

The problem of evil and the problem of consciousness pose profound conundrums that have provoked intense discussion in the philosophy of religion and the philosophy of mind, respectively, for a long time. On the face of it, these problems seem to be completely unrelated. The problem of evil is concerned with whether the existence of evil in the world, including wars, crimes, and natural disasters, undermines belief in the existence of an omnipotent and wholly good God while the problem of consciousness is concerned with the nature of consciousness and how it can arise from physical processes in the brain. In this paper, I propose a unique thesis that the problem of evil and the problem of consciousness are fundamentally the same, as they stem from a shared root, which I call the "problem of expectation mismatch." Moreover, I argue that recognizing the structural alignment of these two problems proves helpful in classifying and assessing, in a systematic manner, existing responses to both problems. This is especially the case with panpsychism, which has attracted considerable attention recently in the literature in the philosophy of mind.

I advance our discussion as follows. In the second section, I provide an overview of the problem of evil and five prominent responses to it. In the third section, I provide an overview of the problem of consciousness and the six prominent responses to it. In the fourth section, I argue that the problem of evil can be viewed as a version of the problem of expectation mismatch—more specifically, the problem of *axiological* expectation mismatch. I also argue that the problem of consciousness can be viewed as a version of the problem of expectation mismatch—more precisely the "problem of *ontological* expectation mismatch." In the fifth

section, I explain that these problems evoke cognitive dissonance in parallel fashion and suggest that further adjustments can be made to enhance the structural alignment of both problems. This would allow not only the problem of evil but also the problem of consciousness to be framed as a version of the problem of ontological expectation mismatch. Furthermore, I argue that both problems can be modified to share the same object as their focus. In the sixth section, I compare existing responses to the problem evil and existing responses to the problem of consciousness and argue that they also exhibit structural parallelism. In the seventh section, I focus on panpsychism, a view that is now considered among the most promising responses to the problem of consciousness. I utilize the structural alignment of the problem of evil and the problem of consciousness to show that panpsychism cannot be a compelling solution to either problem because it merely replaces one version of the problem of ontological expectation mismatch with another. The eighth section concludes.

The Problem of Evil and Five Responses

Let us focus on the problem of evil first. It seems evident that the world is filled with evil; countless horrific events occur globally, inflicting pain and suffering on many innocent humans and sentient animals alike. If, as traditional theists maintain, there exists an omnipotent and wholly good God, it is puzzling why such events would persist.[1] Philosophers of religion have offered a variety of responses to the problem of evil over the last few centuries. Let me briefly overview five of these responses that pertain to our subsequent comparison between the problem of evil and the problem of consciousness.

The first and most straightforward response to the problem of evil is to embrace the problem at face value and conclude that traditional theism is untenable. If the existence of God and the presence of evil are irreconcilable and evil undeniably exists, it seems reasonable to reject belief in God. In fact, many philosophers endorse atheism precisely because of the problem of evil.

Other responses to the problem of evil aim to uphold traditional theism. One such response revolves around the privation theory of evil. The problem of evil often presupposes that evil exists as a substantial ontological entity, inherently conflicting with the notion of God, who is considered wholly good. According to the privation theory, however, evil is not a positive existence but rather a lack or corruption of good; it can be likened to illness, which represents a deprivation of health. Hence, the presence of what is conventionally deemed evil does not necessarily contradict the existence of God.

The third response is the greater-good theodicy. According to this response, evil is necessary because, without it, God cannot instantiate greater goods, such as compassion, forgiveness, and altruism. J. L. Mackie (1982) elucidates the greater-good theodicy by delineating levels of good and evil. There are instances where second-order good outweighs first-order evil as well as instances where second-order evil outweighs first-order good. Mackie terms these instances "absorbed evil" and "absorbed good," respectively. Evil that remains unabsorbed corresponds to so-called gratuitous evil. According to the greater-good theodicy, roughly speaking, the problem of evil does not pose a challenge to theists because there are no instances of unabsorbed evil in the actual world.

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[1] The problem of evil is typically framed in two main versions: the logical version and the evidential version. Within the evidential version, there are further distinctions, such as inductive, deductive, and abductive approaches. However, I do not address these nuances, as they do not impact my argument in this paper. For a comprehensive discussion of the various formulations of the problem of evil and the responses to them, see Chapter 1 of Nagasawa (2024).

The fourth response is the free will theodicy, which is based on two assumptions: (i) libertarianism about free will is correct, and (ii) holding all else equal, a world in which morally significant freedom is realized is better than a world in which it is not realized. These assumptions imply that God's creation of the actual world, in which there are morally significant free human agents, is not in conflict with His power and goodness. According to this theodicy, the responsibility for evil, particularly moral evil, in the actual world rests with free human agents rather than with God.[2]

The fifth response is skeptical theism. According to this response, the fact that we cannot comprehend God's justification for allowing evil does not undermine the existence of God because we almost certainly lack direct access to God's mind. Given our cognitive and moral limitations, we should not expect to be able to fully grasp the reason that God allows evil because we do not (and probably cannot) know everything relevant to the nature of God and morality. This is analogous to a situation in which, for example, a small child has to have dental surgery without understanding why her parents would force her to undergo such a painful procedure. In this analogy, the child represents us and the parents represent God. The child does not and cannot comprehend the justification for allowing such "evil" but that does not mean that the parents lack justification.

The Problem of Consciousness and Six Responses

Let us set aside the problem of evil for now and move on to the problem of consciousness. When we taste bitter coffee, see a bright flashlight, or listen to pleasant music we have distinctive subjective experiences. These experiences correspond to specific mental states with unique phenomenal properties that characterize "what it is like" to experience these mental states. This familiar feature of reality that we experience every day, or indeed every moment when we are awake, is the source of the problem of consciousness, which is considered one of the most intractable problems in the philosophy of mind.

From our inner, subjective perspective, there seems no doubt that phenomenal consciousness is real. Experiencing pleasure and pain and other sensory modalities is an essential part of our sentient life, and our access to them seems more immediate than our access to anything else. In light of findings in neuroscience, there is also no question that these phenomenal experiences correlate with specific neural states. When we are in a certain mental state there is always a corresponding minimal set of neural states that are realized in the brain. Inasmuch as the brain is a bodily organ, it seems natural to expect that phenomenal properties that are realized by the brain can in principle be explained fully in materialistic terms. After all, states that are realized in other organs, such as the lungs and liver, are fully explained in entirely materialistic terms. It is counterintuitive to think that the brain is fundamentally distinct from other bodily organs.

These considerations notwithstanding, the problem of consciousness arises here—phenomenal experiences appear to be anomalies that elude scientific explanation. While we can analyze the structure and function of the brain to determine, for instance, exactly which phenomenal states are correlated with which neural states, specifying correlations only raises a more profound question: why are they correlated in the first place? Why must the phenomenal experience of seeing a bright flashlight correspond to *this* rather than *that* particular neural

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[2] The free will theodicy is typically applied to moral evil, such as wars and crimes, caused by morally significant free human agents. However, in principle, it could also be used to explain natural evil, such as earthquakes and tornadoes, by suggesting that they are caused by morally significant free superhuman agents, such as Satan. For a relevant discussion on the free will *defence* see Plantinga (1974, p. 58).

state? Phenomenal experiences seem distinctly peculiar from other material events, such as the movements of planets and the digestion of food.

Frank Jackson's knowledge argument illustrates the problem of consciousness vividly through a thought experiment (Coleman 2019, Jackson 1982, 1986; Ludlow, Nagasawa, and Stoljar 2004). Imagine Mary, a brilliant scientist in the remote future, who is confined to a black-and-white room. Although she has never been outside her room in her entire life, she has learned everything there is to know about material reality by reading black-and-white textbooks and watching lectures on a black-and-white television. Mary's knowledge includes all material facts and laws of physics, including causal and relational facts and functional roles. She knows exactly which phenomenal experiences are correlated with which neural states. If materialism is true, Mary, who has complete knowledge of the material, must have complete knowledge *simpliciter*.

What will happen, Jackson continues, when Mary leaves her room and looks at, say, a ripe tomato for the first time? Materialism seems to imply that she should not come to know anything new because she is already supposed to have complete material knowledge. It appears obvious, however, that she will *discover* something new upon her release; namely, "what it is like to see red," a phenomenal feature of her color experience. This contradicts the materialist assumption that Mary, prior to her release, had complete knowledge *simpliciter*. Mary's complete knowledge of material reality fails to capture certain facts about the world. Jackson concludes, therefore, that materialism is false.

There are many metaphysical views explaining the relationship between phenomenal properties and material properties, and these views can be construed as responses to the problem of consciousness. I provide here a brief overview of six of them based on David Chalmers's useful taxonomy (Chalmer 2002). These six responses include type-A materialism, type-B materialism, type-C materialism, type-D dualism, type-E dualism, and type-F monism. It is important to introduce these responses because they play an important role in our discussion later.

According to type-A materialism, ultimately there is nothing about consciousness that requires explaining over and above the material. Type-A materialism suggests that, given that Mary knows all there is to know about material reality, she should know exactly what it is like to see red without having a red experience. While she might acquire new abilities—such as the ability to recall a red experience or distinguish a blue experience from a purple experience—upon her release, she does not acquire any new propositional knowledge when she leaves her room (Lewis 1988). Eliminativism is a well-known example of type-A materialism. According to this view, ultimately there are no phenomenal truths because, contrary to common sense, there is no such thing as consciousness in an ontologically significant sense in the first place. Consciousness should be eliminated from future scientific discourse, perhaps following a trajectory akin to the elimination of witchcraft and thunder gods from scientific consideration. Another version of type-A materialism is analytical functionalism, according to which consciousness can be fully explained in wholly functional terms. The existence of consciousness is not an issue for materialism because, according to this view, it expresses only a functional concept within a materialist ontology.

Type-B materialism is less radical than type-A materialism in the sense that it allows for a gap between the material and the phenomenal. That is, it agrees with Jackson that Mary learns something new upon her release. As a form of materialism, however, it denies that the gap in question is ontologically significant; it is a mere *epistemic* gap. That is, what Mary learns upon her release does not imply the ontological conclusion that materialism is false. A common version of type-B materialism holds that, while there is no a priori entailment from complete physical truths to phenomenal truths there is an a posteriori entailment. According to this view, entailment $P \rightarrow Q$ is necessary and a posteriori, where P refers to the complete set of physical

truths and Q refers to any phenomenal truth. The necessary part of the entailment secures materialism and the a posteriori part allows for Mary's learning (or the epistemic gap). The identity of phenomenal states and relevant physical states is analogous to the identity of H_2O and water, which is necessary a posteriori, as opposed to the identity of triangles and three-sided objects, which is necessary a priori. In other words, while materialism is true there is no way to deduce specific phenomenal truths from physical truths by appealing to a priori reasoning alone. Yet Mary's "discovery" of what it is like to see red does not entail any negative ontological implications for materialism, just as scientists' discovery that water is H_2O does not entail any negative ontological implications for materialism.

Type-C materialism, like type-B materialism, considers the gap between the phenomenal and the material to be epistemic rather than ontological. Type-C materialism advocates, however, for a wider epistemic gap than type-B materialism assumes. According to Colin McGinn's version of type-C materialism, we are cognitively closed with respect to the solution that fills the gap (McGinn 1989). That is, while the complete set of physical truths does entail all phenomenal truths, no matter how far we advance the physical sciences it is beyond our ken to determine precisely how the brain can realize phenomenal experiences. According to Thomas Nagel's version of type-C materialism, which is less pessimistic than McGinn's, while we cannot solve the problem of consciousness by merely advancing the physical sciences in their current form, we may be able to solve it if there is a radical breakthrough. Nagel writes, for instance, that our current inability to understand how the brain can yield consciousness is analogous to pre-Socratics scholars' inability to comprehended how matter can be equivalent to energy (Nagal 1974, p. 447). Once the appropriate conceptual revolution occurs we may be able to grasp how the complete set of physical truths entails every conceivable phenomenal truth. We can construe type-C materialism as a version of mysterianism. While it does not give up materialism as an ontological view it admits that the problem of consciousness is a profound epistemic puzzle, which is extremely difficult, if not impossible, to solve given our cognitive limitations.[3]

As we have observed, type-A, type-B, and type-C views are variations of materialism. Type-D and type-E views represent, on the other hand, versions of dualism. Both of these perspectives recognize that Mary's alleged discovery upon her release highlights the ontological, rather than epistemic, gap between the material and the phenomenal. Type-D dualism affirms that the material and the phenomenal are ontologically distinct. This affirmation represents the dualist aspect of type-D dualism. The type-D component of type-D dualism maintains that both the material and the phenomenal are causally efficacious and interact with each other. In other words, type-D dualism is synonymous with interactionist dualism. Cartesian substance dualism is the most widely known iteration of type-D dualism. Type-D dualists are not, however, obligated to endorse the existence of two distinct types of *substance*, as Descartes does. Instead, they can propose that, while there is only one type of substance, there are two types of properties that are ontologically distinct. That is, type-D dualism encompasses both the substance-dualist and property-dualist versions of interactionism.

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[3] Chalmers and I interpret Nagel's view, as presented in his 1974 paper, as a version of type-C materialism. However, it may be more accurate to categorize his view as a form of neutral monism, as this better aligns with the position he develops in his later work (Nagel 2002, 2012). I thank an anonymous referee for raising this point. For the purposes of our discussion, the key distinction lies between two versions of type-C monism: the pessimistic version in which the solution to the problem of consciousness is, in principle, unattainable, and the less pessimistic version in which the solution is attainable in principle, but currently beyond reach, pending a conceptual revolution.

Type-E dualism also holds that the material and the phenomenal are ontologically distinct. Unlike type-D dualism, however, it implies that the causal link between the material and the phenomenal is one-way only; typically, type-E Dualists hold that the material can cause the phenomenal but the phenomenal cannot cause the material. In principle, type-E dualism is, like type-D dualism, compatible with both substance dualism and property dualism. For example, type-E dualists can subscribe to substance dualism by holding that there are two distinct types of substance and two correspondingly distinct types of properties and that properties of one type of substance are causally inefficacious for properties of the other type of substance. They can also subscribe to property dualism by holding that, while there is only one type of substance—material—there are two types of properties—mental and material—and that mental properties are causally inefficacious for material properties. In the 1982 paper in which he introduced the Mary scenario, Jackson expressed his endorsement of the property dualist version of type-E dualism—epiphenomenalism—as a plausible alternative to materialism.

It is important to emphasize that, while interactionist substance dualism is a well-known version of type-D dualism and epiphenomenalism is a well-known version of type-E dualism, the type-D/type-E distinction does not correspond to the distinction between substance dualism and epiphenomenalism. It corresponds rather to the distinction between "two-way interactionism" and "one-way interactionism."

Type-F monism is a novel perspective that can be viewed as a fusion of materialism and dualism. Like materialism, this response denies the ontological division between the material and the phenomenal. However, like dualism, it acknowledges that phenomenal properties elude standard explanations offered by the physical sciences. This idea arises from the thesis that, while the physical sciences effectively explain natural phenomena by reference to structure, function, and dynamics, phenomenal properties are not solely a matter of structure, function, and dynamics. According to a common formulation of type-F monism, phenomenal properties correspond to the categorical grounds of fundamental physical dispositions. An increasingly popular version of type-F monism is panpsychism. This view suggests that phenomenal properties, or protophenomenal properties, permeate nature on the fundamental level as the categorical underpinnings of dispositional properties. Panpsychism presents a unique solution to the problem of consciousness, positing that the brain yields fully fledged phenomenal properties that we experience because the brain is an appropriately structured aggregate of fundamental microphysical entities that are themselves phenomenal or protophenomenal. I address panpsychism in detail later in this paper.

The Problem of Evil and the Problem of Consciousness as Problems of Expectation Mismatch

Thus far, I have outlined the problem of consciousness and the problem of evil along with existing responses to each. Again, these two problems in two distinct fields of philosophy seem to be completely unrelated. In what follows, however, I argue that these problems are variations of the same problem, which I term the "problem of expectation mismatch." Framing the problem of evil and the problem of consciousness in this manner allows for a systematic comparison and evaluation of responses to them.

The core of the problem of evil is normally presented as an apparent conflict between the following two propositions:

(1e) There is an omnipotent and wholly good God.
(2e) There is evil.

Because proposition (1e) is the foundation of traditional theism, the problem of evil is construed as a challenge for traditional theists. It is not immediately obvious, however, that propositions (1e) and (2e) are in conflict. As Alvin Plantinga says, (1e) and (2e) are not explicitly contradictory because they are not comparable to the set of propositions *P* and not-*P*. Neither is it formally contradictory because neither of the propositions can be shown to entail the negation of the other proposition by the laws of logic alone. They cannot be implicitly contradictory either because there does not seem to be a necessarily true proposition a supplement of which implies that either of the propositions entails the negation of the other proposition. (Plantinga 1974, p. 12). It is more accurate to say that proposition (1e) informally implies the following proposition, which *is* in conflict with proposition (2e):

(3e) There is no evil.

Given the theistic belief expressed in proposition (1e), our expectation is that, as proposition (3e) implies, this world, which was supposedly created by an omnipotent and wholly good God, should not contain evil.[4] However, our observation suggests, as proposition (2e) states, that there is evil in the world. This conflict between propositions (2e) and (3e) is indeed the core of the problem of evil. It is interesting to note that (3e), unlike (1e), is silent about whether or not God exists. That is, (3e) can be accepted not only by traditional theists but also by certain nontheists and atheists. That is why I argued in my 2024 book *The Problem of Evil for Atheists* that the scope of the problem of evil is much wider than it is generally thought to be. My thesis in the book is that the problem of evil creates a challenge for anyone, not just traditional theists, who form optimistic axiological expectations of how the world should be, which is in conflict with the less optimistic axiological observation of how the world actually is in light of evil. The problem of evil is a problem that arises from our axiological expectation of how good the world should be and our observation of evil in the world, which does not seem to sit well with the corresponding expectation.

Consider, then, in parallel, the problem of consciousness. The core of the problem of consciousness is an apparent conflict between the following two propositions:

(1c) The world is entirely material.
(2c) There is phenomenal consciousness.

Inasmuch as proposition (1c) is the foundation of materialism, the problem of consciousness is construed as a challenge for materialists. However, it is not immediately obvious that propositions (1c) and (2c) are in conflict. Like (1e) and (2e), (1c) and (2c) are not explicitly, formally, or implicitly contradictory. It is more accurate to say that proposition (1c) informally implies the following proposition, which *is* in conflict with proposition (2c):

(3c) There is no phenomenal consciousness.

Given the materialist belief expressed in proposition (1c), our expectation is that, as proposition (3c) implies, this world should not contain phenomenal consciousness, which appears to be nonmaterial. Considering the success of the physical sciences in explaining nature, we expect the world to be exclusively and uniformly material. This gives us a simple and elegant picture of the world. Our experience suggests, however, as proposition (2c) states, that phenomenal consciousness, which seems to be fundamentally distinct from material objects or properties with which we are familiar, exists. This conflict between propositions (2c) and (3c) is indeed

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[4] Note that 'should' here should be construed as an epistemic rather than moral notion.

the core of the problem of consciousness. The problem of consciousness is a problem that arises from our ontological expectation of how thoroughly material the world should be and our observation of phenomenal properties, which do not seem to sit well with that expectation. Hence, the problem of consciousness is a version of the problem of *ontological* expectation mismatch.

Cognitive Dissonance

We have seen that the problem of evil and the problem of consciousness are structurally in parallel. The problem of evil arises from an axiological discrepancy between the theistic expectation of how the world should be and the observation of how the world actually is. Similarly, the problem of consciousness arises from an ontological discrepancy between the materialist expectation of how the world should be and the observation of how the world actually is. Each of these problems arises from a mismatch between expectation and observation.

It is important to note that the problem of axiological expectation mismatch and the problem of ontological expectation mismatch can be construed as instances of cognitive dissonance. Cognitive dissonance is defined as a state of discomfort that one experiences as a result of conflicts between one's beliefs, attitudes, or behaviors.[5] For example, cognitive dissonance arises when one finds it difficult to stop smoking even though one is fully aware that smoking is harmful or when one finds it difficult to stop stealing even though one firmly believes that stealing is morally wrong.

Consider the problem of evil as an example of cognitive dissonance. Cognitive dissonance arises for traditional theists when they experience a state of discomfort upon realizing that their optimistic expectations, rooted in their theistic beliefs, appear to be in conflict with their observation of evil in the world. This point can be supported with examples. Shusaku Endo's novel *Silence* is one of the most powerful illustrations of the problem of evil and the problem of divine hiddenness. In the novel, the main character Sebastião Rodrigues, a Portuguese Jesuit in seventeenth-century Japan, faces brutal persecution of Christians, including the annihilation of a village occupied by Christians, and asks God why He does not intervene to end the pain and suffering:

> Why have you abandoned us so completely?, he prayed in a weak voice. Even the village was constructed for you; and have you abandoned it in its ashes? Even when the people are cast out of their homes have you not given them courage? Have you just remained silent like the darkness that surrounds me? Why? At least tell me why. We are not strong men like Job who was afflicted with leprosy as a trial. There is a limit to our endurance. Give us no more suffering. (Endo, 1980, p. 96)

Rodrigues is deeply perplexed, and even feels betrayed by God here, because of the axiological expectation mismatch that he faces: based on his Christian faith he had expected that a benevolent and powerful God would not allow the horror that he witnesses but his observation suggests that God, if he exists, remains completely silent, allowing evil to prevail. Take another, more familiar example: Jesus's words on the cross, "Eli, Eli, lama sabachthani? That is to say, My God, my God, why hast thou forsaken me?" (Mark 15:34). This expression from Christ reflects profound bewilderment at the perceived absence of God despite the suffering he endures on the cross. The discomfort felt by Rodrigues and Jesus

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[5] For the psychological literature on cognitive dissonance see Joel Cooper (2007), Leon Festinger (1957), Eddie Harmon-Jones (2019), and Eddie Harmon-Jones and Judson Mills (1999).

represents cognitive dissonance—a disquieting misalignment between their expectations of the world and its harsh realities. This dissonance triggers a profound shock, perhaps even inciting feelings of anger within them.

The problem of consciousness may not evoke existential anxieties akin to those stirred by the problem of evil. Yet there are instances that support my argument, demonstrating that the problem of consciousness similarly gives rise to cognitive dissonance. Take, for example, the black-and-white Mary scenario again. Mary's implicit assumption in the scenario is that type-A materialism or a view that is sufficiently similar to it is true. Hence, Mary assumes that there is nothing in the world that escapes her complete physical knowledge. According to Jackson's description of the scenario, though, upon her release from the black-and-white environment she *does* discover something new that surprises her. Jackson writes, "[w]hen she is let out of the black-and-white room or given a color television, she will learn what it is like to see something red, say. This is rightly described as *learning*—she will not say 'ho, hum'" (Jackson 1986, p. 291). Mary's surprise represents cognitive dissonance, which corresponds to the ontological gap between her materialist expectations and the observation of reality that defies them.

Here is another illustration. Australia boasts many prominent contemporary dualists, including Keith Campbell, David J. Chalmers, Alec Hyslop, and Frank Jackson. It may seem curious to find such a concentration of dualist philosophers in a country where many of their predecessors, such as U. T. Place, J. J. C. Smart, and David Armstrong, were well-known for their defenses of materialism, often referred to as "Australian materialism." Upon closer examination of these dualists' views, however, the apparent inconsistency dissolves. Their endorsement of dualism does not stem from spiritual or supernatural commitments; rather, it emerges from their steadfast adherence to the naturalistic worldview and their recognition— albeit surprising and undeniable to them—that consciousness eludes physical explanations. Campbell, Chalmers, Hyslop, and Jackson all begin with materialism, which they initially find most plausible, and reluctantly transition to dualism in response to the challenges posed by the problem of consciousness. The following passage by Chalmers exemplifies this transition:

> Temperamentally, I am strongly inclined toward materialist reductive explanation, and I have no strong spiritual or religious inclinations. For a number of years, I hoped for a materialist theory; when I gave up on this hope, it was quite reluctantly. It eventually seemed plain to me that these conclusions [of his book *The Conscious Mind*] were forced on anyone who wants to take consciousness seriously. Materialism is a beautiful and compelling view of the world, but to account for consciousness, we have to go beyond the resources it provides. (Chalmers 1996, p. xiv)

Hyslop similarly writes:

> Epiphenomenalism's appeal is to those who are convinced that the Materialist view of human beings is false, but regret this, regretting that the case for Materialism fails, overwhelmed by qualia. Epiphenomenalism gets as near to Materialism as is decent, so it is thought. It is a (more than) half way house: not Materialism but deeply Materialist, giving us a world of purely material causes. (Hyslop 1998, p. 61)

As mentioned earlier, Jackson also endorses epiphenomenalism in the paper in which he introduces the Mary scenario because, if we assume that the knowledge argument refutes materialism, epiphenomenalism appears to be a dualistic option that is closest to the heart of

materialism. [6] Campbell (1970) expresses a similar sentiment and calls his version of epiphenomenalism, whose nonmaterialist scope is limited to phenomenal properties—not all mental properties—"Central-State Materialism Plus." Expressions they use, such as "reluctance," "regret," and "overwhelmed," underpin my point that the problem of consciousness is an example of cognitive dissonance, in this case caused by an ontological expectation mismatch.

I have elucidated the close relationship between the problem of evil and the problem of consciousness. Yet, we can illuminate their intimate connection even further by implementing the following adjustments to the arguments. First, to align the problem of evil with the problem of consciousness, we can reinterpret the problem of evil as a version of the problem of ontological, rather than axiological, expectation mismatch. According to this interpretation, the problem of evil arises from the discrepancy between theists' ontological expectation that the world should be devoid of evil and their observation of its presence—not the disparity between their optimistic axiological expectation of the world's greatness and their less optimistic observation of it in light of evil. Second, we can restrict the scope of the problem of evil to center on pain rather than evil in its broader sense. The crux of the problem lies in the tension between the theistic belief in the existence of an omnipotent and wholly good God and the presence of pain manifested in horrific events. Third, and finally, we can also restrict the scope of the problem of consciousness to pain, rather than to the whole range of phenomenal properties. The significance of the problem of consciousness as a challenge for materialism remains unchanged regardless of the type of phenomenal properties under scrutiny—be it pain, pleasure, or colorful sensations. With these revisions, the problem of evil and the problem of consciousness emerge as nearly identical problems, solving either of which requires bridging the gap between one's expectation of a world free from the phenomenal property of pain and their observation of pain's existence within it. The only remaining difference between the problem of evil and the problem of consciousness here is whether the expectation in question is based on traditional theism or materialism.

Expectation-confirmation theory, which is concerned with the phenomenon of the discrepancy between one's expectations and observations, is widely discussed in many academic fields, including social psychology, marketing, and information-systems research. This theory explains how our pre-existing expectations of an event or an object can influence our perceptions, attitudes, and behaviors. For instance, we often have a certain expectation of a product before purchasing it. After purchasing and using it, we acquire new information about the product. If the new information contradicts our expectations, there may be negative cognitive or emotional impacts, such as disappointment, that correspond to the gap between our expectations and the new information. As we saw above, similar phenomena are observed regarding the problem of evil and the problem of consciousness. Adherents to traditional theism expect a world without pain, a phenomenal property seemingly at odds with the existence of an all-powerful and entirely benevolent God. Adherents of materialism likewise anticipate a world without phenomenal properties, including pain, which seems at odds with materialist ontology. However, our observations seem to contradict their expectations.

In what follows, I assess existing responses to the problem of evil and the problem of consciousness, as outlined in the second and third sections, by reinterpreting them as endeavors to mitigate the cognitive dissonance in question.

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[6] The belief that epiphenomenalism is a dualistic option that is most closely aligned with materialism is contentious. Some might argue that certain versions of dualistic panpsychism or neutral monism are more closely related to materialism. Thanks to an anonymous referee for raising this point.

Comparing Responses to the Problem of Consciousness and the Problem of Evil

An expectation mismatch generally occurs when a misalignment between our expectation and our observation of reality occurs. The problem of evil and the problem of consciousness present a distinct form of this mismatch: our worldview posits that the world is thoroughly characterized by *X*, yet we encounter the existence of *Y*, seemingly in conflict with the expectation of *X*. The problem of evil represents a conflict between the theistic expectation of a thoroughly nonevil world and the observed presence of evil within it. Similarly, the problem of consciousness represents a conflict between the materialist assumption of a thoroughly material world and the observed presence of phenomenal properties—that is, seemingly nonmaterial—properties, within it.

When we assess responses to the problem of evil and the problem of consciousness we can keep in mind their shared structural pattern. The main question that any plausible response to the problems needs to answer is the following: how can we fill or explain away the gap created by the presence of *Y* in a world that is assumed to be uniformly characterized by *X*? If we succeed in answering this question the associated cognitive dissonance should disappear. Let me then compare responses to the problem of consciousness discussed in the third section and responses to the problem of evil discussed in the second section by framing them as attempts to answer this question. I will categorize the responses into five distinct approaches to contrast their strategies.

Approach 1: "Give up the expectation. The gap is real" (type-D dualism and atheism)

The most straightforward approach to the problem of ontological expectation mismatch involves simply accepting the observation at face value and abandoning the expectation that the world is uniformly characterized by *X*. This approach insists that giving up the expectation is the only sensible answer to the problem because we cannot pretend that *Y* does not create a gap. While this approach does not offer a "solution" to the problem it seeks to address the cognitive dissonance by revising our expectation. According to this approach, the cognitive dissonance disappears once we accept that the world is partly *X* and partly *Y*.

Among responses to the problem of consciousness, type-D dualism falls into this category. Type-D dualists maintain that we should reject materialism because the existence of consciousness indicates that the world is not entirely characterized by material objects and properties. Given the existence of phenomenal properties, we should acknowledge that the world is partly material and partly nonmaterial. The cognitive dissonance that materialists face can be eliminated by affirming dualist ontology, which aligns with our observation of the world.[7]

Among responses to the problem of evil, atheism falls into the category in question. Atheists argue that we should reject traditional theism because the existence of evil indicates that the world is not entirely characterized by goodness. Given the existence of evil, we should acknowledge that the world is partly good and partly evil.[8] The cognitive dissonance that traditional theists face can be eliminated by affirming atheistic ontology, which aligns with our observation of the world. However, just as dualism does not offer any solution to the problem of consciousness, so atheism does not offer any solution to the problem of evil. Atheists rather

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[7] Strictly speaking, nonmaterialists who affirm the existence of nonmaterial entities do not necessarily have to maintain that the world is both partly material and partly nonmaterial because they could contend that the world is entirely nonmaterial. This is a form of idealism. I set aside such a view, however, because there are very few nonmaterialists who hold it.

[8] Strictly speaking, atheists who affirm the existence of evil do not necessarily have to maintain that the world is both partly good and partly evil because they could contend that the world is entirely evil. I set aside such a view, however, because there are very few atheists who hold it.

accept the problem as a compelling refutation of traditional theism, in the same way that dualists accept the problem of consciousness as a compelling refutation of materialism.

Approach 2: "The gap is real and has ontological implications; yet there is no need to worry because it is a mere byproduct" (type-E dualism and the free will theodicy)

Approach 2 represents a nuanced variation of Approach 1. Like Approach 1, it advocates accepting the existence of an ontological gap created by *Y* and discarding the assumption that the world is entirely defined by *X*. Unlike Approach 1, however, Approach 2 maintains that the gap is not as serious as implied by the way in which Approach 1 presents it. While, according to this approach, we do need to give up our original expectation to accommodate the existence of *Y*, such a move does not have any radical implications for the worldview in question. This is because *Y* is a mere byproduct of *X*, making little impact on the part of the world that is *X*.

Among responses to the problem of consciousness, type-E dualism falls into this category. Type-E dualists concur with type-D dualists in recognizing the distinct existence of phenomenal properties, thus substituting materialist ontology with dualist ontology. Type-E dualists argue, however, that this transition does not carry significant implications for the physical sciences or the broader materialistic perspective. They contend that phenomenal properties lack causal efficacy on the material, preserving the causal closure of the physical. In essence, they maintain that phenomenal properties such as pain arise as mere byproducts of physical processes.

Among responses to the problem of evil, the free will theodicy falls into this category. Free will theodicists concur with atheists in recognizing the distinct existence of evil, thus substituting naïve theistic ontology, which posits only good, with a revised perspective that posits both good and evil. Free will theodicists argue, however, that this transition does not carry significant implications for traditional theism because evil is not in conflict with God's nature. They contend that evil is a mere byproduct of human freedom, which is intrinsically good, and that morally significant free humans, rather than God, are responsible for any occurrences of evil in the world.

(Note that type-E dualism and the free will theodicy do not align precisely, in the following sense. Type-E dualists reject materialism because they acknowledge that the world is not thoroughly characterized as material. Free will theodicists, on the other hand, *do not* reject traditional theism even though they acknowledge that the world is not thoroughly characterized as good. This is because, implicitly or explicitly, they have revised their expectation as follows: the world is *overall* good, which does not necessarily imply that the world is thoroughly good. In any case, the most important point here is that, according to free will theodicists, evil does not have any significant implications for traditional theism because it is a mere byproduct of human free will, in a manner similar to that in which, according to type-E dualists, phenomenal properties do not have any significant implications for the physical sciences because they are mere byproducts of physical processes.)

Approach 3: "The gap is not ontologically significant, so there is no need to worry" (type-A materialism and the privation theory of evil)

Again, the core of the problem of ontological expectation mismatch is the discrepancy between our expectation that the world is thoroughly characterized by *X* and our observation of reality that there is *Y* in the world. The first two approaches that we have seen so far seek to resolve the problem of ontological expectation mismatch by accepting our observations at face value and abandoning (or revising) our expectations. The third approach, on the other hand, seeks to address the problems by abandoning our observations and maintaining our expectations. According to this approach, the apparent ontological mismatch disappears once we recognize

that it is a mistake to perceive *Y* as a distinctive entity defying our expectation that the world is thoroughly *X*.

Among responses to the problem of consciousness, type-A materialism falls into this category. According to eliminativism, a prominent version of type-A materialism that we addressed above, the folk view of reality is incorrect because there is no such thing as consciousness in an ontologically distinctive sense. According to analytical functionalism, another version of type-A materialism, propositions about consciousness express only functional concepts so there is an a priori derivation from phenomenal truths to physical truths. Hence, according to type-A materialists, given that Mary knows everything there is to know about the material, she does not learn anything new upon her release from her black-and-white room. Conversely, she knows exactly what it is like to see color even before leaving the room. Type-A materialists claim that the expectation mismatch tends to arise when we observe—mistakenly—that our phenomenal experiences represent nonmaterial properties. However counterintuitive it may seem, according to type-A materialists, phenomenal properties do not exist as distinctively nonmaterial properties in an ontologically significant sense.

Which response to the problem of evil falls into the third category? Such a response would contend that the problem of evil does not arise because our correct observation should suggest that nothing in the world is evil. Yet such a radical response is rarely defended; even the most firmly committed theists normally acknowledge that there are states of affairs in the world, such as horrific atrocities or catastrophic natural disasters, that are correctly characterized as evil. However, the privation theory of evil can be seen as falling into a broader interpretation of this approach. According to this theory, evil poses no ontological threat to traditional theism because it is merely the absence or privation of good. That is, there is no distinct existence of evil; ontologically speaking, there is nothing inherently evil that contradicts theistic ontology. The expectation mismatch tends to arise when we wrongly observe that there is evil as an entity conflicting with God's goodness. Yet, in the same way that type-A materialists contend that there is an a priori derivation from truths about material properties to truths about phenomenal properties, privation theorists contend that there is an a priori derivation from truths about (what people consider to be) evil to truths about good.

Approach 4: "The gap is only epistemically, not ontologically, significant, so there is no need to worry" (type-B materialism and the greater-good theodicy)

We have observed that Approach 3 dismisses the problem of ontological expectation mismatch by nearly entirely disregarding our observation of the world. Critics argue that this approach fails to take the problem seriously enough, as it essentially "pretends" that the gap between expectation and reality does not exist, despite its obvious presence. In contrast, Approach 4 may be viewed as more modest and sensible. It acknowledges the epistemic significance of the gap while denying its ontological implications.

Among responses to the problem of consciousness, type-B materialism falls into this category. Type-B materialists contend that the gap between the material and the phenomenal is epistemically but not ontologically significant. Mary in the black-and-white room cannot figure out what it is like to see red without having a relevant experience because there is no a priori entailment from physical truths to phenomenal truths. That is why Mary is surprised when she sees color for the first time. This, however, does not suggest that materialism is false, because there is still an *a posteriori* entailment. Hence, according to type-B materialists, while the knowledge argument refutes type-A materialism it does not refute type-B materialism.

Among responses to the problem of evil, the greater-good theodicy falls into this category. According to this theodicy, the gap between our expectation that the world is thoroughly characterized as good and the observation that the world includes evil can be explained away by appealing to the idea that in certain situations instances of first-order evil

are necessary to realize instances of second-order good, such as compassion, forgiveness, and altruism. There may be no a priori inferences from truths about evil to truths about good but there are a posteriori explanations to show how truths about specific instances of evil entail truths about specific instances of higher-order good.

Approach 5: "*The gap* is supposed to *be only epistemically significant, so we should not need to worry*" (type-C materialism/skeptical theism)

We have seen that Approach 4 exhibits a degree of modesty by acknowledging an epistemic, but not ontological, gap between our expectation that the world is thoroughly characterized as *X* and our observation that it includes *Y*. Despite this modesty, adherents to Approach 4 are confident in filling the gap by appealing to an a posteriori entailment from truths about *X* to truths about *Y*. Approach 5 shares similarities with Approach 4 in considering the expectation mismatch to be solely epistemic rather than ontological. Yet, it exhibits an even more modest stance by suggesting that, at least for the time being, we do not have the means to fill the epistemic gap. While adherents to Approach 5 assert that there is a solution that fills the gap, they also recognize our significant epistemic limitations.

Among responses to the problem of consciousness, type-C materialism falls into this category. According to McGinn's version of type-C materialism, although there is no reason to think that the epistemic gap entails the falsity of materialism, we are cognitively closed with respect to the solution to the problem of consciousness (McGinn 1989). Just as dogs can never solve complex mathematical problems, so we can never solve the problem of consciousness given our epistemic limitations. Nagel (1974) has pursued a less pessimistic version of type-C materialism, arguing that, while we cannot currently access the solution to the problem we may be able to reach it if there is a relevant conceptual breakthrough in science.[9] Type-C materialists insist that the ontological expectation mismatch highlighted by the problem of consciousness should, theoretically, be resolvable regardless of whether *our* cognitive capacities enable us to comprehend the solution fully.

Among responses to the problem of evil, skeptical theism falls into this category. Skeptical theists contend that, while there is no reason to think that the epistemic gap entails the falsity of theism, we are cognitively closed with respect to the solution to the problem of evil. Given our limited knowledge of morality and God's nature we may be unable to fully comprehend God's intention for allowing evil to exist. The mere fact that *we* cannot fully comprehend it, however, does not entail that God lacks a valid reason. Skeptical theists typically believe that the relevant limitation of our knowledge cannot be overcome because it is inherent to human nature. In this sense, skeptical theism is analogous to McGinn's, rather than Nagel's, version of type-C materialism. To the best of my knowledge, no theist explicitly defends a view that is strictly in parallel with Nagel's version of type-C materialism. Such a view would suggest that, although comprehending God's rationale for permitting evil is exceedingly challenging, it might become possible through a pertinent conceptual revolution. Nonetheless, some theists may be attracted to a particular strain of mysticism akin to Nagel's perspective. According to such a view, although we might presently struggle to discern why God permits evil, such understanding could become attainable through, for instance, a transformative spiritual experience.

Having classified a set of responses to the problem of consciousness and the problem of evil into five categories, I now introduce another analogy highlighting the problem of ontological expectation mismatch. Imagine the challenge of fitting a carpet that appears slightly larger than the floor space in a room. If you try to push a bump in the carpet to make it fit one side of the floor space, another bump appears on the other side. Here, the carpet represents our

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[9] See footnote 3 above for an alternative interpretation of Nagel's view.

expectation of how the world should be while the floor space represents how the world actually is. The bump represents a gap between the two. In this analogy Approach 1, which is adopted by type-D dualists and atheists, affirms that there is undeniably a bump with significant ontological implications, suggesting that our estimation of the size of the floor space is incorrect. Approach 2, which is adopted by type-E dualists and free will theodicists, affirms that there is undeniably a discrepancy between the size of the carpet and the size of the floor space, yet this is not a serious problem because the bump is only a by-product that does not affect the use of the floor space. Approach 3, which is adopted by type-A materialists and privation theorists, insists that the carpet fits the room perfectly despite the initial appearance. If we correctly grasp the sizes and shapes of the carpet and the floor space we can see a priori that they match perfectly. Approach 4, which is adopted by type-B materialists and greater-good theodicists, contends that, while the appearance of the bump is undeniable, it can be shown a posteriori that the carpet ultimately does fit the floor space. Approach 5, which is adopted by type-C materialists and skeptical theists, implies that although the appearance of the bump is undeniable and, moreover, there may be no way for *us* to figure out how the carpet fits the floor space, there indeed is a way for the carpet to fit the floor space.

We can draw up the following table summarizing the five approaches by focusing on how they attempt to fill the gap between expectation and observation (Table 1).

	Ontological Gap?	Mere byproduct	Epistemic gap?	Entailment?	A priori/a posteriori ?	Accessible ?
Approach 1 (type-D dualism / Atheism)	Yes	No	Yes	No	-	-
Approach 2 (type-E dualism / Free will theodicy)	Yes	Yes	Yes	No	-	-
Approach 3 (type-A materialism/ Privation theory of evil)	No	-	No	Yes	A priori	Yes
Approach 4 (type-B materialism/ greater-good theodicy)	No	-	Yes	Yes	A posteriori	Yes
Approach 5 (type-C materialism /Skeptical theism)	No	-	Yes	Yes	?	No

Table 1. A summary of Approaches 1–5

The key question the above table raises is whether an expectation mismatch suggests a genuine ontological gap between *X* and *Y*. Approaches 1 and 2 take the expectation mismatch seriously and answer this question affirmatively. While Approach 1 holds that the existence of *Y* entails significant practical implications, Approach 2 denies such implications as it considers *Y* to be a mere byproduct of *X*. Approaches 3, 4, and 5 answer the question negatively. Approach 3 insists that the appearance of *Y* is not ontologically significant because there is an a priori entailment from truths about *X* to truths about *Y*. Approach 4 claims that the appearance of *Y* is epistemically but not ontologically significant and that there is an a posteriori entailment from truths about *X* to truths about *Y*. Much like Approaches 3 and 4, Approach 5 claims that the appearance of *Y* is not ontologically significant. Unlike Approaches 3 and 4, though, Approach 5 insists that we are currently precluded, given our cognitive or conceptual limitations, from determining how truths about *X* entail truths about *Y*.

One might argue that my approach extends beyond the problem of evil and the problem of consciousness to other philosophical problems.[10] I am inclined to agree. For example, the problem of reconciling free will with determinism could illustrate this point. If we approach the problem with a deterministic expectation, the apparent existence of free will raises an ontological expectation mismatch. Further investigation is required to assess whether existing responses to this problem also align with responses to the problem of evil and the problem of consciousness. If they do, I would regard this as a significant advancement in meta-philosophy rather than a flaw of my approach.

Application of the Comparison: Assessing Panpsychism

I have argued that the problem of evil and the problem of consciousness are variations of the same problem—the problem of ontological expectation mismatch. Moreover, I have tried to show that existing responses to these problems can be interpreted as parallel attempts to bridge the gap between our expectations and observations of the world that are designed to alleviate the cognitive dissonance these problems evoke. While the parallel structure between the two problems and between the existing responses to them may be intriguing, what insights can we gain from comparing them? In this penultimate section, I advance the debate over the problem of consciousness by utilizing the parallel structure.

The reader may have noticed that, in the above comparisons of responses to the two problems, I have omitted any reference to type-F monism. Here, I focus on panpsychism, a version of type-F monism that has attracted many supporters in recent years. As I explained above, panpsychism posits that phenomenal properties, or protophenomenal properties, correspond to the categorical grounds of dispositional properties, and these phenomenal/protophenomenal properties are ubiquitous. According to a popular formulation of panpsychism, microphenomenal properties that are attributed to micromaterial objects such as subatomic particles can aggregate to yield macrophenomenal properties, corresponding to the conscious experiences that we have. The brain realizes fully fledged macrophenomenal properties because it is an appropriately structured aggregation of micromaterial entities that are themselves phenomenal or protophenomenal.

I did not address panpsychism (or, more broadly speaking, type-F monism) in the previous section because, as far as I know, no one in the philosophy of religion has advanced a counterpart of panpsychism as a response to the problem of evil.[11] I believe this fact

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[10] I am grateful to Meghan Page, Brian Reece, Kevin Schilbrack, and several others for bringing this point to my attention.

[11] One might argue that if we move beyond traditional theism there is a view that is analogous to panpsychism. For example, a version of polytheism or pantheism according to which divinity

underscores the considerable challenge inherent to defending panpsychism despite its initial appeal.

Let us focus on the main thesis of panpsychism: microphenomenal properties are immanent and they can aggregate to yield macrophenomenal properties. By parallelling this thesis, we can develop the following response to the problem of evil, which we might call "panevilism": microevil properties are immanent and they can aggregate to yield macroevil properties. Here, macroevil properties are negative properties that are typically ascribed to pain and suffering realized in horrific events, such as wars, crimes and natural disasters.

Does panevilism succeed as a response to the problem of evil considered as a version of the problem of ontological expectation mismatch? It does not seem so. The main problem is that it is unclear what microevil properties are meant to be. Suppose that microevil properties are themselves evil. In this case, panevilism fails to save traditional theism because it merely replaces the "problem of macroevil," i.e., the problem of evil as it is normally conceived, with the "problem of microevil." Microevil properties, given the assumption that they are themselves evil, are in conflict with the existence of an omnipotent and wholly good God to the same extent that macroevil properties are. Here panevilism does not eliminate the cognitive dissonance caused by the ontological expectation mismatch because shifting the problem of evil from the macroscale level to the microscale level does not make any difference. Suppose, then, that microevil properties are *not* themselves evil. In this case, panevilism faces two problems. First, it is unclear what microevil properties are. They are assumed to aggregate into macroevil properties but they are not themselves evil. We could call them 'protoevil properties' but that does not tell us much about their nature. Second, it is difficult to understand how microevil properties, which are not themselves evil, can aggregate to yield macroevil properties. Crucial information is missing from panevilism. Hence, panevilism fails to provide a compelling answer to the problem of evil.

Consider the carpet analogy again. To succeed in responding to the problem of evil as a problem of ontological expectation mismatch, we need to fill the gap between our expectation, according to which the world is free from evil, and our observation, according to which the world is not free from evil. That is, we need to eliminate the bump in the carpet that makes the carpet appear to be slightly larger than the floor space. In this analogy, we can construe panevilism as an attempt to resolve the bump problem by maintaining that the bump is an aggregate of 'microbumps' which are immanent throughout the carpet. But panevilism does not resolve the problem: on the one hand, if microbumps are themselves bumps, then panevilism merely replaces the problem of a macrobump with the problem of microbumps. On the other hand, if microbumps are not themselves bumps then it is unclear what they are meant to be or how they can aggregate to yield a macrobump. Therefore, the gap that causes the cognitive dissonance remains unfilled.

I have argued that the problem of evil and the problem of consciousness represent variations of the same problem, and I have also crafted panevilism to parallel panpsychism. Consequently, panpsychism, as a response to the problem of consciousness, encounters difficulties paralleling those I introduced against panevilism above. It is crucial to emphasize, however, that, owing to its distinctive characteristics, these difficulties arise even more devastatingly for panpsychism. Allow me to elaborate.

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is immanent appears structurally in parallel with panpsychism, according to which phenomenality is immanent. However, this parallel structure is not directly relevant to our discussion. As I argue in the following paragraph in the main text, a response to the problem of evil that parallels panpsychism must be concerned with the immanence of evil, rather than the immanence of divinity, and contend that macroevil properties arise as an aggregate of microevil properties.

Again, panpsychists maintain that microphenomenal properties can aggregate to yield macrophenomenal properties. Are microphenomenal properties themselves phenomenal? Suppose that they are. In this case, the ontological expectation mismatch remains: how could there be microphenomenal properties in a world that is believed to be thoroughly material? In the same way that panevilism merely replaces the problem of macroevil with the problem of microevil, panpsychism merely replaces the problem of macro consciousness with the problem of micro consciousness. The ontological gap evoking cognitive dissonance remains because the problem of consciousness has only been shifted from the macroscale level to the microscale level. The difficulty that arises for panpsychism here is indeed significant, but it can be further exacerbated by referencing the nature of phenomenal consciousness, making it even more intractable.

Given the assumption that microphenomenal properties are themselves phenomenal there must be something that it is like to be a micromaterial entity, such as a subatomic particle. It is difficult enough for us humans to know what it is like to be a bat given that we do not have a bat's unique sensory apparatus, sonar (Nagel 1974). It is even more difficult, if not outright impossible, to know what it is like to be a subatomic particle. Explaining away the problem of macro consciousness by appealing to types of phenomenal properties that are beyond our imagination and comprehension does not seem to be a promising way to resolve the ontological expectation mismatch. Furthermore, even if we assume that we *can* know what it is like to be a subatomic particle, it is still difficult to defend the idea that microphenomenal properties can aggregate to yield macrophenomenal properties. This is the so-called combination problem.[12] We do not have any familiar examples in which phenomenal experiences of distinct subjects sum to yield phenomenal experiences of another distinct subject. That is, we do not know of any case in which what it is like to be x and what it is like to be y jointly yield what it is like to be z, where x, y, and z are distinct subjects. Hence, under the assumption that microphenomenal properties are themselves phenomenal, panpsychism encounters challenges that parallel those faced by panevilism but in a more troubling manner.

Suppose, then, that microphenomenal properties are *not* themselves phenomenal. In this case, panpsychism, like panevilism, faces two problems. First, it is unclear what microphenomenal properties are. They cannot be ordinary material properties because, if they were, panpsychism would collapse into materialism. Here, it seems that panpsychism finds itself in a more challenging position than materialism. Materialists grapple with explaining how we can obtain phenomenal properties from material properties, but at least they postulate only these two types of familiar properties: material and phenomenal. They do not introduce any mysterious properties into their ontology in their attempt to solve the problem of consciousness. Panpsychism, on the other hand, struggles to explain not only how we obtain microphenomenal properties from microphenomenal properties but also what microphenomenal properties are in the first place. Second, it is difficult to understand how microphenomenal properties, which are not themselves phenomenal, can be aggregated to yield macrophenomenal properties. Panpsychists might argue that the assumption that macrophenomenal properties are not themselves phenomenal allows them to avoid the combination problem. Given that microphenomenal properties are not themselves phenomenal, panpsychists do not need to commit to the thesis that what it is like to be x and what it is like to be y can jointly yield what it is like z. However, making a negative assertion about what microphenomenal properties are not does not add much to panpsychism. Crucial information is missing here.

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[12] The combination problem has been discussed extensively in recent years. Space constraints prevent a detailed discussion here. For further insights, refer to my earlier work (Nagasawa, 2021).

There is an additional challenge for panpsychism, one that does not arise in a parallel manner for panevilism. As mentioned earlier, type-F monism, which includes panpsychism, relies on the thesis that the physical sciences, in their current form, cannot fully explain consciousness because consciousness is not a matter of structure, function and dynamics; it represents the intrinsic nature of material entities and properties about which scientific theories are silent. Panpsychists need this thesis to make microphenomenal properties immanent while distinguishing them from ordinary material properties that the physical sciences can capture. This view makes panpsychism an even more difficult position to defend because it is not only the case that we do not have a clue what microphenomenal properties are but also that explaining how they may aggregate to yield macrophenomenal properties is beyond the scope of the physical sciences to explain. This is analogous to an odd situation in which we have to find out how a certain dish (macrophenomenal properties) is made while both the ingredients (microphenomenal properties) and the recipe (the explanation of how microphenomenal properties can aggregate to yield macrophenomenal properties) are beyond our comprehension. With a touch of exaggeration, what panpsychism essentially posits is a vacuous assertion that *some mysterious properties beyond our comprehension* can *somehow* aggregate to yield macrophenomenal properties through a mysterious process which is beyond the scope of the physical sciences to explain. While this difficulty does not necessarily render panpsychism false, it renders it a profoundly uninformative viewpoint, one that certainly fails to eliminate the cognitive dissonance stemming from the ontological expectation mismatch.

The problem of consciousness, as a version of the problem of ontological expectation mismatch, arises when we expect the world to be thoroughly material but discover it to include apparently nonmaterial entities, such as phenomenal properties. Materialism tries to solve this problem by insisting that, although phenomenal properties appear to be nonmaterial, the world is indeed thoroughly material. Materialism is a consistent and straightforward response to the ontological expectation mismatch: it simply sticks with the expectation and abandons the observation. The challenge for materialism then is to explain how we can obtain phenomenal properties, which do appear to be nonmaterial, from ordinary material properties. Dualism, on the other hand, tries to respond to the problem of ontological expectation mismatch by accepting the observation that phenomenal properties are nonmaterial properties and concluding that the world is indeed partly material and partly nonmaterial. Dualism is also a consistent and straightforward response to the ontological expectation mismatch: it simply abandons the expectation while sticking with the observation. The challenge for dualism is to explain how we can incorporate nonmaterial objects and properties into the causal nexus of a world that appears to be mostly material.

Panpsychists try to have the cake and eat it by introducing macrophenomenal properties and identifying them with the categorical grounds of physical dispositions. This approach does not succeed, however, in eliminating the cognitive dissonance that the ontological expectation mismatch creates. Moreover, it evokes additional problems that proponents of materialism and dualism need not worry about.

Conclusion

The aim of this paper has been to uncover the hidden parallel structure between the problem of evil and the problem of consciousness, which initially appear as distinct issues in distinct areas of philosophy. First, I introduced the problem of evil along with five existing responses to it. Second, I introduced the problem of consciousness along with six existing responses to it. I then argued that those two problems share a common root, which I refer to as the problem of ontological expectation mismatch. Furthermore, I argued that, with certain adjustments, we can show that these problems are essentially the same problem, causing cognitive dissonance for individuals who adhere to certain relevant worldviews. Subsequently, I applied this finding to

evaluate panpsychism, an increasingly popular response to the problem of consciousness. I argued that the absence of panevilism, a response to the problem of evil paralleling panpsychism, underscores the implausibility of panpsychism. I also argued that panpsychism faces further difficulties in virtue of its unique features, by which panevilism is unaffected.

Historically, only limited engagement between the philosophy of religion and the philosophy of mind has occurred. Through this paper I hope to have convinced the reader that intradisciplinary investigations within philosophy can yield engaging and productive outcomes.[13]

References

Campbell, Keith (1970), *Body and Mind*, Garden City, NY: Doubleday Anchor.

Chalmers, David J. (1996), *The Conscious Mind: in Search for a Fundamental Theory*, New York: Oxford University Press.

Chalmers, David J. (2002) 'Consciousness and its Place in Nature'. In his *Philosophy of Mind: Classical and Contemporary Readings*, New York: Oxford University Press, 247–272.

Coleman, Sam (2019), *The Knowledge Argument*, Cambridge: Cambridge University Press.

Cooper, Joel (2007), *Cognitive Dissonance: Fifty Years of a Classic Theory*, London: Sage Publications.

Endo, Shusaku (1980, originally 1966), Silence, Marlboro, NJ: Taplinger.

Festinger, Leon (1957), *A Theory of Cognitive Dissonance*, Stanford: Stanford University Press.

Harmon-Jones, Eddie (2019), *Cognitive Dissonance: Reexamining a Pivotal Theory in Psychology*, Washington DC: American Psychological Association.

Harmon-Jones, Eddie and Judson Mills (1999), *Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology*, Washington, DC: American Psychological Association.

Hyslop, Alec (1998), 'Methodological Epiphenomenalism', *Australasian Journal of Philosophy* 76, 61–70.

Jackson, Frank (1982), 'Epiphenomenal Qualia', *Philosophical Quaterly* 32, 127-136.

Jackson, Frank (1986), 'What Mary Didn't Know', *Journal of Philosophy* 83, 291-295.

Lewis, David (1988), 'What Experience Teaches', in J. Copley-Coltherart, ed., *Proceedings of the Russellian Society*, Sydney, University of Sydney.

Ludlow, Peter, Yujin Nagasawa and Daniel Stoljar (2004), *There is Something About Mary: Essays on Phenomenal Consciousness and Frank Jackson's Knowledge Argument*, Cambridge, MA, MIT Press.

Mackie, J. L. (1982), *The Miracles of Theism: Arguments for and against the Existence of God*, Oxford: Clarendon Press.

McGinn, Colin (1989), 'Can We Solve the Mind-Body Problem?', *Mind* 98, 349-366.

Nagasawa, Yujin (2024), *The Problem of Evil for Atheists*, Oxford: Oxford University Press.

Nagasawa, Yujin (2021), 'A Panpsychist Dead End', *Proceedings of the Aristotelian Society*, *Supplementary Volume* 95, 25–50.

Nagel, Thomas (1974), 'What Is It Like To Be a Bat', *Philosophical Review* 83, 435-450.

Nagel, Thomas (2002), *Concealment and Exposure: And Other Essays*, New York: Oxford University Press.

Nagel, Thomas (2012), *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False*, New York: Oxford University Press.

Plantinga, Alvin (1974), *God, Freedom and Evil*, London: George Allen and Unwin.