# Analyzing Leidenhag's Minding Creation

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ABSTRACT: Joanna Leidenhag's research monograph *Minding Creation: Theological Panpsychism and the Doctrine of Creation* argues that theologians should seriously consider and perhaps even support panpsychism. In light of rekindled interest in panpsychism amongst philosophers of mind and a noteworthy minority of cognitive neuroscientists, which comes in the wake of physicalism's faltering, Leidenhag's thesis is timely. This work briefly analyzes some key aspects of *Minding Creation*.

Leidenhag's *Minding Creation* is a research volume in the T&T Clark Studies in Systematic Theology series. Like countless philosophical works, it addresses how consciousness fits into the natural world. However, Leidenhag's project goes well beyond the typical philosophical project and is distinctly theological. She considers the place of consciousness as it relates to the doctrine of creation and uniquely considers how conscious minds fit into what she calls a cathedral of creation that praises and glorifies its Creator (p. 12). She is interested in what philosophical framework might best facilitate the articulation of theological doctrines regarding secondary matters (i.e., not essential to saving faith) on creation (p. 5). The aim of her reflection on philosophy and theology in *Mind Creation* is to "find a suitable framework upon which doctrinal claims and biblical exegesis can rest and be most clearly articulated" (p. 12). Her proposed candidate is the philosophical framework of panpsychism (p. 12).

'Panpsychism' literally means everything has a mind, but it's often understood today as the idea that the mental is ubiquitous and fundamental throughout nature.<sup>2</sup> Panpsychism's proponents allege that it avoids physicalism's hard problem of explaining how consciousness emerges from mindless matter because it posits the presence of consciousness at the fundamental level of natural reality. If consciousness is present at the most basic levels of natural reality, there is no magical jump from the nonconscious nuts and bolts of neurons to the aurora borealis of consciousness. As Colin McGinn notoriously noted, "Somehow, we feel, the water of the physical brain is turned into the wine of consciousness, but we draw a total blank on the nature of this

<sup>2</sup> Philip Goff, William Seager, and Sean Allen-Hermanson, "Panpsychism," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, accessed May 8, 2023, https://plato.stanford.edu/entries/panpsychism/, section 2.1.

<sup>&</sup>lt;sup>1</sup> Joanna Leidenhag, *Minding Creation: Theological Panpsychism and the Doctrine of Creation* (London, UK: T&T Clark, 2021).

conversion."<sup>3</sup> Not so for the panpsychist. On her framework there is no such conversion, which relieves evolutionary theory of the burden of explaining how biological life crossed the channel between the nonconscious and the conscious by riding the winds of natural selection and random mutation in a mindless sea. These points proffered in panpsychism's favor have prompted some notable philosophers and cognitive neuroscientists interested in consciousness to seriously ponder panpsychism in recent decades, as physicalism's paradigmatic status has waned.<sup>4</sup>

Christian theologians,<sup>5</sup> Leidenhag argues, should likewise seriously consider panpsychism not only because of its recent revival and historical lineage but also because of its philosophical merit and consistency with contemporary theories in the natural sciences (p. 12). She also suggests theologians might even have a responsibility to support panpsychism, if it accounts for consciousness in God's created world in a way that coheres with evolution and avoids requiring special divine action to bring about consciousness (p. 85). Although Leidenhag explicitly exhorts theologians to consider or support panpsychism, I trust she would say the same to theologically interested philosophers, especially Christian philosophers.

Elsewhere, I have provided a review essay that outlines each chapter of *Minding Creation* and notes points where I agree with and appreciate Leidenhag's work.<sup>6</sup> This piece focuses on briefly analyzing specific aspects of *Minding Creation*. In the first section, I will provide a sketch of Leidenhag's theological panpsychism before analyzing her panpsychist hermeneutic in section two and her objection to substance dualism in section three. By the end, it will be apparent that I disagree with Leidenhag on substantive points. But let me begin by acknowledging that I know of no more thoroughly researched book on panpsychism and the doctrine of creation than *Minding Creation*. Anyone researching this topic cannot bypass it. With that said, I hope the brief analysis provided here will elicit some doubt about whether Christian theologians and philosophers ought to lend their support to Leidenhag's theological panpsychism.

### 1 Theological Panpsychism

In its most benign form, panpsychism is a view in the philosophy of mind that suggests consciousness is far more common than often thought since it's ubiquitous throughout nature. Leidenhag is interested in panpsychism as it relates to the metaphysics of mind (see section 3). Yet, as the term "Theological Panpsychism" in the extended title of her book suggests, Leidenhag

<sup>&</sup>lt;sup>3</sup> Colin McGinn, "Can We Solve the Mind-Body Problem?," *Mind* 98, no. 391 (1989): 349.

<sup>&</sup>lt;sup>4</sup> See Christof Koch, "Re-Enchanting the World," *The American Journal of Psychology* 133, no. 4 (2020): 519-22, doi: https://doi.org/10.5406/amerjpsyc.133.4.0519; William E. Seager, ed., *The Routledge Handbook of Panpsychism* (New York, NY: Routledge, 2020); Godehard Brüntrup and Ludwig Jaskolla, eds., *Panpsychism: Contemporary Perspectives* (New York, NY: Oxford University Press, 2016).

<sup>&</sup>lt;sup>5</sup> Though she typically refers to "theologians," it's clear Leidenhag principally has in mind Christian theologians.

<sup>&</sup>lt;sup>6</sup> See Matthew Owen, "Joanna Leidenhag, 'Minding Creation: Theological Panpsychism and the Doctrine of Creation'," *International Journal for Philosophy of Religion* (2023).

proposes a theologically loaded version of panpsychism that includes far more than the idea that countless material objects are sentient.

According to Leidenhag, theological luminaries such as Augustine of Hippo and Gregory of Nyssa have considered the theological benefits of panpsychism (p. 87). Yet, Leidenhag focuses on the work of Gottfried Wilhelm Von Leibniz, whom she relies on as an exemplar in philosophical theology. On Leidenhag's interpretation of Leibniz, panpsychism was derived from his theological commitments to God's transcendence and rationality (p. 103). Moreover, panpsychism was "employed to bolster his affirmation of creation ex nihilo, the view of creation as a complete and comprehensive order, and a sacramental ontology" (p. 103). Panpsychism is said to yield a sacramental ontology in which all creation points beyond itself to its supernatural source, as all creation is "filled with praise and with knowledge of the glory of God" (pp. 100-101). Not only is the proposed panpsychism sacramental; it's also ecclesial. In a section entitled "Creation as community: One body, one spirit and one church," Leidenhag proposes that Christ's Spirit is present throughout the entire universe, communicating Christ and transforming "the universe into his ecclesial body" that's connected to Christ through the Spirit's presence in "even the most fundamental subjects of creation" (p. 165). On this view, all creation is not only conscious but also indwelt by the Holy Spirit as part of Christ's Church, which is a unique position that elicits both philosophical and theological questions.

<sup>&</sup>lt;sup>7</sup> Unfortunately, no citations of their works are provided to substantiate the claim. In the first footnote on page 87, she also claims: "As a common feature within most ancient Greek philosophies, panpsychism can be described as a part of the intellectual foundation upon which European thought and Christian theology have developed." Here, too, it would have been helpful to have citations of the Greek philosophers she has in mind. This could have quieted doubts about whether she interpreted such philosophers and their schools of thought accurately, which is needed. For example, though she distinguished panpsychism from Aristotelian hylomorphism on page 2, at the beginning of the footnote on page 87, she claims panpsychism was "a widespread and foundational explanatory principle" in the Aristotelian school of thought. Yet, Aristotelianism is often presented as positing two fundamentally different kinds of forms, accidental forms and substantial forms, and then multiple kinds of substantial forms—vegetative, sensory, and rational. Given this scheme, it would seem that if consciousness is (or involves) phenomenal experience inherent to sentience, then consciousness would be a capacity not of aggregates externally unified by an accidental form nor living substances internally unified by a mere vegetative form, but only of living substances with a sensory form. The Aristotelian can happily acknowledge that there may be many living substances that appear to have sensory substantial forms—dogs, goats, spiders, Armadillidiidae, and so on. While this may be a generous ascription of consciousness, it's far from panpsychism. On this Aristotelian picture, there are still countless natural entities devoid of consciousness that are living beings with mere vegetative forms (e.g., trees, flowers, etc.) as well as aggregates with accidental forms, such as atoms, piles of rocks, snow drifts, Mount Rainier, Shi Shi Beach and piles of driftwood on its shore, etc.

For example, if the indwelling of the Holy Spirit is a distinguishing mark of the salvifically redeemed community of God—which passages like Ephesians 1.13-14 and Romans 8.9-11 suggests—then one wonders if Leidenhag's proposal entails soteriological universalism, since it says all creation is indwelt by the Spirit (see p. 158). Although Leidenhag does not discuss such apparent soteriological entailments, she cashes out the implications of her theological panpsychism for environmental ethics. The final chapter of her book relies on a panpsychist view which rules out ontological human uniqueness (p. 174), and excludes any exclusive claim to consciousness to circumvent an unbalanced anthropocentrism (p. 155). Leidenhag argues that there's a single rotten thread in theological depictions concerning how humans relate to creation and its Creator and our nature as bearers of the *imago Dei* (p. 149). The rotten thread is the notion that humans alone have conscious minds, as the sole experiencing subjects in the universe, which allegedly implies "that humans alone carry intrinsic value, and all else can be used as instruments for human benefit" (pp. 142, 149). The result is theological warrant for the mistreatment of creation by humanity, a manifestation of our indwelling sin (pp. 149, 147). Leidenhag's proposed solution to this problem is her theological panpsychism that says all creatures throughout creation have intrinsic value since they're subjects with minds which communicate and praise God together as an ecclesial congregation (pp. 151, 155, 160, 165, 168).

## 2 Leidenhag's Panpsychist Hermeneutic<sup>8</sup>

Some might reasonably worry that Leidenhag is proposing a novel addition or revision to Christian theology for a pragmatic reason, to deal with the ecological crisis. Yet, that would be a theological method Leidenhag claims should be avoided (p. 139 n. 3). By contrast, she argues in chapter five that "Panpsychism is the metaphysic that is presupposed in the Scriptural depiction of the voices of nature..." (p. 168). The biblical passages she appeals to are predominantly from books that are of either poetic or prophetic genres, both of which utilize poetic or metaphorical, non-literal language (pp. 161-162, 164 n. 102). She correctly clarifies that poetic language can nevertheless point to true realities (p. 161). Yet, she gives very literal interpretations of what most would see as non-literal, as she is concerned that labeling passages as poetic is a way of dismissing panpsychist sounding passages that present a rich theology of nature (p. 161). She primarily cites verses in the highly poetic book of Psalms, and her argument rests heavily on Psalm 19.1-4a (NRSV):

The heavens are telling the glory of God; and the firmament proclaims his handiwork. Day to day pours forth speech, and night to night declares knowledge. There is no speech, nor are there words; their voice is not heard; yet their voice goes out through all the earth, and their words to the end of the world.

<sup>&</sup>lt;sup>8</sup> The phrase 'panpsychist hermeneutic' is from page 159.

Based on the theological panpsychism Leidenhag presents, that which makes illocutionary speech acts is a subject with a mind; and she thinks Scripture is attributing illocutionary speech acts to the created phenomenon mentioned here in Psalm 19.1-4a (pp. 161-163).

It is important to consider the phenomenon mentioned in these verses, such as the day and the night. Even apart from explaining how the natural phenomena of day and night are subjects with a mind, it is hard to know exactly what the day and night are ontologically. Is the day anything more than sunlight shining on one side of the earth, and is the night anything more than the lack of such light? Even a hardcore Platonist could be excused for understanding 'day' and 'night' in a non-realist way. Yet, according to Leidenhag's panpsychist hermeneutic, these natural phenomena not only have real ontological existence but are also subjects with conscious minds. I think this would be a hard truth to swallow even for modern philosophical proponents of more mild versions of panpsychism. Yet, even if Leidenhag's panpsychist reading of Scripture made Holy Writ more palatable during the current heyday of panpsychism, I worry that it could make it appeal equally ridiculous if panpsychism's fanfare passes tomorrow due to philosophical counter arguments. Augustine's warning about another issue but a similar hermeneutic unbefitting of the genre of the Psalms is instructive: "Let no one think that, because the Psalmist says, He established the earth above the water, we must use this testimony of Holy Scripture against these people who engage in learned discussions...Ignorant of the sense of these words, they will more readily scorn our sacred books than disavow the knowledge they have acquired by unassailable arguments or proved by the evidence of experience."10

One must also wonder how realistically the Psalmist intends the first four verses of Psalm 19 to be understood when reading the immediate context. Leidenhag quotes through the first half of verse four. The second half of verse four, along with verse five, mention a "tent for the sun, which comes out like a bridegroom from his wedding canopy, and like a strong man runs its course with joy" (Psalm 19.4b-5). A few verses later the ordinances of the Lord are said to be "sweeter also than honey, and drippings of the honeycomb" (Psalm 19.10b). Are we also supposed to think that the sun has recently been married, or that the Lord's rules have a taste? It is far more reasonable to understand the Psalmist as expressing an important truth but in a poetic way, so that some elements of these verses would be misunderstood if interpreted literally.

Leidenhag and I agree that one thing of importance that Psalm 19 teaches is that creation communicates, which is why theologians often call creation 'general *revelation*.' Leidenhag sees the communication of creation as supporting her theological panpsychism. However, Michelangelo's Sistine Chapel also communicates, and so do street signs and traffic lights, radios, billboards, my iPhone's Siri, and so on. But it does not automatically follow that they are conscious.

<sup>&</sup>lt;sup>9</sup> Cf. Philip Goff, *Galileo's Error: Foundations for a New Science of Consciousness* (New York, NY: Pantheon Books, 2019), 113.

<sup>&</sup>lt;sup>10</sup> Augustine, *The Literal Meaning of Genesis*, trans. J.H. Taylor (New York, NY: Newman Press, 1982), 47-48, quoted in David R. Montgomery, *The Rocks Don't Lie: A Geologist Investigates Noah's Flood* (New York, NY: W.W. Norton & Company, 2012), 37-38.

Throughout her book, Leidenhag never defines consciousness, which is fine if the term is always used consistently to refer to the same mental phenomenon, such as only experience or only intentionality or only certain behaviors such as communication. When referring to consciousness throughout *Minding Creation*, Leidenhag sometimes has in view experience, at other times knowledge, and then in the fifth chapter speech or communication. Yet, because there are different ways and senses in which things communicate, we cannot assume that everything that communicates is conscious. Everyone agrees that in some sense our current computers and technological gadgets are capable of speaking—think of Siri's kind yet authoritative voice. Yet, philosophers and neuroscientists disagree about whether such technological entities are conscious. 11 If theologians are to follow Leidenhag's reasoning from the communicative nature of creation to panpsychism, she owes them rationale for why communication necessarily entails consciousness. As Siri speaks in the way its engineers designed it too, creation most certainly speaks in the way its Creator designed it to. This implies that all creation has significance, as it reveals truths about God that are good for any sentient soul with the capacity to consider what is being revealed. This is, in part, what motivated John Muir's preservationist efforts as someone profoundly influenced by his Scottish Calvinist upbringing. 12 As meaningful as it is that entities all throughout nature communicate, it does not follow that they are conscious.<sup>13</sup>

### 3 Metaphysics of Mind

Leidenhag carefully clarifies that she is not arguing that panpsychism should be embraced simply because of its implications regarding ecological responsibility, but rather because of what

<sup>&</sup>lt;sup>11</sup> Cf. Stanislas Dehaene, Hakwan Lau, and Sid Kouider, "What Is Consciousness, and Could Machines Have It?," *Science* 358, no. 6362 (2017): 486-92, doi: 10.1126/science.aan8871; Olivia Carter, Jakob Hohwy, Jeroen van Boxtel, Victor Lamme, Ned Block, Christof Koch, and Naotsugu Tsuchiya, "Conscious Machines: Defining Questions," *Science* 359, no. 6374 (2018): 400, doi: 10.1126/science.aar4163; Stanislas Dehaene, Hakwan Lau, and Sid Kouider, "Response," *Science* 359, no. 6374 (2018): 400-402, doi: 10.1126/science.aar8639.

<sup>&</sup>lt;sup>12</sup> Dennis C. Williams, *God's Wilds: John Muir's Vision of Nature* (College Station, TX: Texas A&M University Press, 2002).

<sup>13</sup> Though I disagree with Leidenhag on whether all creation is conscious, I nevertheless agree that non-human aspects of creation are intrinsically valuable. I arrive at this position not on the basis of a premise about consciousness being ubiquitous, but based on my reading of Genesis 1, where it is said of what God created on days three, four, and five that "...God saw that it was good." If entities created prior to humanity's creation (on the sixth day) were only instrumentally valuable insofar as they were useful to humanity, then they could not have been good prior to humanity's existence. But God saw that nonhuman aspects of his creation are good even before creating humans. If God saw creation as good prior to its instrumental use by humans, it must be good independently of (or prior to) its instrumental value for humanity—it must be intrinsically valuable. Whereas Leidenhag thinks consciousness is necessary for intrinsic value (pp. 144-146, 148-149, 155-156), I think entities that simply reflect God in some way can be intrinsically valuable apart from being conscious.

she sees as its theological, biblical, and philosophical merit (pp. 139-140, n. 3, 168). Leidenhag correctly points out that panpsychism shouldn't be discarded merely because it's counterintuitive. If it has advantages over its main contenders, it should be considered. Nevertheless, Leidenhag is aware that panpsychism is a "bizarre topic" and undeniably counterintuitive (pp. ix, 60-61). Hence, she claims that if panpsychism suffers from the same explanatory weakness that she thinks besets substance dualism, "...then it would seem sensible – especially for a theologian – to defer to the more intuitive and economic position, substance dualism" (p. 70).

However, she thinks substance dualism suffers from the problem of providing no explanation as to why conscious minds are coupled with material bodies. She writes:

Since substance dualists also posit minds as fundamental, but only in conjunction with the human (or animal) organism, brute accompaniment is often seen as one of the main explanatory weaknesses of substance dualism. Substance dualism states that human minds and bodies just happen to go together and causally interact. Since human minds are fundamental in a way that is radically discontinuous with the rest of the (non-panpsychist) natural order, substance dualists can offer little explanation from within the natural order as to why this might be the case...The main reason that the panpsychist can claim explanatory power over the substance dualist, despite its own instance of brute accompaniment, is that the panpsychist gives an account of the human person that is not radically different from the rest of the universe. (p. 70)

There are multiple points worth considering about Leidenhag's critique of substance dualism here. First, Leidenhag's critique of substance dualism ironically echoes Christof Koch's critique of panpsychism, in which he refers to consciousness as intrinsic and matter as extrinsic: "Besides claiming that everything has both intrinsic and extrinsic aspects, panpsychism is barren and has nothing constructive to say about the relationship between the two." As Leidenhag points out in the quote above, the panpsychist's explanation for why humans are conscious is the same as the explanation for why every other conscious being in the universe is conscious. It's straightforward: all substances are conscious and therefore human substances are conscious. As Koch suggests, this tells us something about the extent of consciousness but nothing about how, why, or in what way consciousness relates to material substances.

<sup>&</sup>lt;sup>14</sup> Christof Koch, "Reflections of a Natural Scientist on Panpsychism," *Journal of Consciousness Studies* 28, no. 9-10 (2021): 73.

<sup>&</sup>lt;sup>15</sup> This is not to say that the various versions of panpsychism say nothing unique about the relationship between consciousness and material substances. For example, constitutive micropsychism posits fundamental consciousness at the micro-level of physical entities out of which conscious macro-level entities are constituted, whereas constitutive cosmopsychism posits fundamental consciousness at the cosmic level. Each is saying *that* consciousness relates to material entities in a unique. But this still leaves significant questions about how, why, and the precise way in which consciousness relates to material entities, and especially particular material entities (if one subscribes to a version of micropsychism that claims some but not all material entities correspond to consciousness). Cf. Philip Goff, "Cosmopsychism, Micropsychism, and

Second, Leidenhag does not cite a single philosopher, cognitive neuroscientist, nor theologian who defends a version of substance dualism that subscribes to the problematic tenets she attributes to substance dualism. Examples of substance dualists are easy to find. <sup>16</sup> So, if substance dualists truly subscribe to the problematic tenets Leidenhag accredits to them, one wonders why she didn't cite even a single example. This is compounded by the fact that there are versions of substance dualism that provide explanations for why consciousness corresponds to particular physical states and processes. <sup>17</sup>

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the Grounding Relation," in *The Routledge Handbook of Panpsychism*, ed. William E. Seager (New York, NY: Routledge, 2020), 144-156.

<sup>&</sup>lt;sup>16</sup> See William Hasker, *The Emergent Self* (Ithaca, New York: Cornell University Press, 1999); Andrea Lavazza and Howard Robinson, eds., Contemporary Dualism: A Defense (New York, NY: Routledge, 2014); Jonathan J. Loose, Angus J.L. Menuge, and J.P. Moreland, eds., *The* Blackwell Companion to Substance Dualism (Oxford, UK: Wiley Blackwell, 2018); E.J. Lowe, Personal Agency: The Metaphysics of Mind and Action (New York, NY: Oxford University Press, 2008); E.J. Lowe, Subjects of Experience (New York, NY: Cambridge University Press, 1996); J.P. Moreland, "A Critique of and Alternative to Nancey Murphy's Christian Physicalism," European Journal for Philosophy of Religion 8, no. 2 (2016): 107-28; Liad Mudrik and Uri Maoz, "Me & My Brain: Exposing Neuroscience's Closet Dualism," Journal of Cognitive Neuroscience 27, no. 2 (2014): 211-21; David S. Oderberg, "Hylemorphic Dualism," in Personal Identity, eds. Ellen Frankel Paul, Fred D. Miller Jr., and Jeffrey Paul (New York, NY: Cambridge University Press, 2005), 70-99; Brandon Rickabaugh, "The Primacy of the Mental: From Russellian Monism to Substance Dualism," Philosophia Christi 20, no. 1 (2018): 31-41; Brandon Rickabaugh and J.P. Moreland, The Substance of Consciousness: A Comprehensive Defense of Contemporary Substance Dualism (Oxford, UK: Wiley-Blackwell, 2023); Richard Swinburne, Mind, Brain, and Free Will (Oxford, UK: Oxford University Press, 2013); Ralph Stefan Weir, The Mind-Body Problem and Metaphysics: An Argument from Consciousness to Mental Substance (New York, NY: Routledge, 2023). Moreland's work is particularly relevant because Leidenhag interacts with his work in the near context (pp. 68-69). Unfortunately, she seems to misunderstand his position as a form of property dualism (see p. 69), when Moreland actually holds to a Thomistic leaning version of substance dualism, which is most evident in J.P. Moreland, "In Defense of a Thomistic-Like Dualism," in The Blackwell Companion to Substance Dualism, eds. Jonathan J. Loose, Angus J.L. Menuge and J.P. Moreland (Oxford, UK: Wiley-Blackwell, 2018), 102-122. See also the discussion of dualism in Kuei-Chen Chen and Jeff Yoshimi, "The Metaphysical Neutrality of Cognitive Science," Synthese 201, no. 2 (2023): sections 5.3-4, doi: https://doi.org/10.1007/s11229-023-04046-0. <sup>17</sup> See E.J. Lowe, "Non-Cartesian Substance Dualism and the Problem of Mental Causation," Erkenntnis 65, no. 1 (2006): 5-23, doi: https://doi.org/10.1007/s10670-006-9012-3; Moreland "In Defense of Thomistic-Like Dualism"; Eric LaRock, "Hard Problems of Unified Experience from the Perspective of Neuroscience," in Consciousness and the Ontology of Properties, ed. Mihretu P. Guta (New York, NY: Routledge, 2019), 223-40; Eric LaRock, Jeffrey M. Schwartz, Iliyan Ivanov, and David Carreon, "A Strong Emergence Hypothesis of Conscious Integration and Neural Rewiring," International Philosophical Quarterly (2020), doi:

For example, neo-Thomistic hylomorphism claims consciousness is a capacity of certain kinds of living organisms that naturally relies on physical mechanisms with sufficient properties. Yet, this view is a version of substance dualism, which is apparent from the fact that it permits the possibility of the soul existing and functioning apart from the body in a metaphysically possible (though not natural) mode in the intermediate state, after bodily death and before bodily resurrection. Neo-Thomistic hylomorphism and the metaphysics of Aristotelian causation undergird the Mind-Body Powers model of neural correlates of consciousness. This model provides a metaphysical explanation of the consistent correspondence between particular conscious states and neural states and processes. In short, based on the idea that there are interdependent mental and bodily powers that co-manifest, the model suggests that conscious states are the manifestation of mental powers that naturally co-manifest with bodily powers manifested by sufficiently structured neural mechanisms. The Aristotelian philosophy, which the Mind-Body Powers model and hylomorphism are rooted in, has a prominent pedigree in the history of theology, most notably in Thomas Aquinas's works. Aristotelianism is also enjoying a revival of interest in contemporary philosophy that is beginning to impact contemporary theology.

https://doi.org/10.5840/ipq202016146; Eric LaRock and Mostyn Jones, "Consciousness and the Self without Reductionism: Touching Churchland's Nerve," in *Taking Persons Seriously: Where Philosophy and Bioethics Intersect*, eds. Mihretu P. Guta and Scott B. Rae (Eugene, OR: Pickwick Publications, forthcoming).

<sup>&</sup>lt;sup>18</sup> Matthew Owen, "Aristotelian Causation and Neural Correlates of Consciousness," *Topoi* 39, no. 5 (2020): 1113-24, doi: https://doi.org/10.1007/s11245-018-9606-9; Matthew Owen, *Measuring the Immeasurable Mind: Where Contemporary Neuroscience Meets the Aristotelian Tradition* (Lanham, MD: Lexington Books, 2021).

<sup>&</sup>lt;sup>19</sup> Owen, *Measuring the Immeasurable Mind*, 12-13, 105-9, 145-47, 193 endnote 13; Owen, "Aristotelian Causation and Neural Correlates of Consciousness," 1116-17.

<sup>&</sup>lt;sup>20</sup> Owen, "Aristotelian Causation and Neural Correlates of Consciousness," section 6; Owen, *Measuring the Immeasurable Mind*, chapter 7; Matthew Owen, Aryn D. Owen, and Anthony G. Hudetz, "An Aristotelian-Thomistic Framework for Detecting Covert Consciousness in Unresponsive Persons," in *Taking Persons Seriously: Where Philosophy and Bioethics Intersect*, eds. Mihretu P. Guta and Scott B. Rae (Eugene, OR: Pickwick Publications, forthcoming), section 5.

<sup>&</sup>lt;sup>21</sup> E.g., Thomas Aquinas, *The Treatise on Human Nature: Summa Theologiae 1a 75-89*, trans. Robert Pasnau (Indianapolis, IN: Hackett, 2002); Thomas Aquinas, *Questions on the Soul*, trans. James H. Robb (Milwaukee, WI: Marquette University Press, 1984).

<sup>&</sup>lt;sup>22</sup> See Christopher J. Austin, Essence in the Age of Evolution: A New Theory of Natural Kinds. (New York, NY: Routledge, 2019); John Haldane, "A Return to Form in the Philosophy of Mind," in Form and Matter: Themes in Contemporary Metaphysics, ed. David S. Oderberg, 40-64 (Malden, MA: Blackwell Publishers, 1999); Ross D. Inman, Substance and the Fundamentality of the Familiar: A Neo-Aristotelian Mereology (New York, NY: Routledge, 2018); William Jaworski, Structure and the Metaphysics of Mind: How Hylomorphism Solves the Mind-Body Problem (New York, NY: Oxford University Press, 2016); Robert C. Koons, Is St. Thomas's Aristotelian Philosophy of Nature Obsolete? (South Bend, Indiana: St. Augustine)

Based on Leidenhag's presentation of substance dualism, one cannot help but wonder if there has been a fundamental misunderstanding about the view. And as I read the pages leading up to the paragraph quoted above, which is on page seventy, a question nagged me: Why doesn't Leidenhag think the panpsychism she presents is a version of substance dualism? To understand why this question would arise, it's important to understand some basic tenets of substance dualism, and it's helpful to contrast the position with property dualism. The property dualist acknowledges that there are nonphysical mental properties in addition to physical properties and physical substances. What distinguishes substance dualism from property dualism is that substance dualism goes beyond positing the existence of nonphysical mental properties to positing the existence of nonphysical mental substances.<sup>23</sup> However, this does not mean the mental substances cannot bear physical properties. For example, according to E.J. Lowe's Non-Cartesian Substance Dualism, a human mental substance bears non-essential physical properties of the body.<sup>24</sup>

Press, 2022); Anna Marmodoro, Aristotle on Perceiving Objects (New York, NY: Oxford University Press, 2014); Matthew Owen, "Exploring Common Ground between Integrated Information Theory and Aristotelian Metaphysics," Journal of Consciousness Studies 26, no. 1-2 (2019): 163-87; Javier Sánchez-Cañizares, "Integrated Information Theory as Testing Ground for Causation: Why Nested Hylomorphism Overcomes Physicalism and Panpsychism," Journal of consciousness studies 29, no. 1 (2022), 56-78; Javier Sánchez-Cañizares, "Formal Causation in Integrated Information Theory: An Answer to the Intrinsicality Problem," Foundations of Science 27, no. 1 (2022): 77-94, doi: https://doi.org/10.1007/s10699-020-09775-w; Joshua Sijuwade, "Monarchical Trinitarianism: A Metaphysical Proposal," *TheoLogica: An International Journal for Philosophy of Religion and Philosophical Theology* 5, no. 2 (2021): 41-80, doi: https://doi.org/10.14428/thl.v5i2.54483; William M.R. Simpson, *Hylomorphism*, Elements in the Philosophy of Biology (New York, NY: Cambridge University Press, 2023), doi: https://doi.org/10.1017/9781009026475; William M.R. Simpson, Robert C. Koons, and James Orr, eds., Neo-Aristotelian Metaphysics and the Theology of Nature (New York, NY: Routledge, 2021); William M.R. Simpson, Robert C. Koons, and Nicholas J. Teh, eds., Neo-Aristotelian Perspectives on Contemporary Science, Routledge Studies in the Philosophy of Science (New York, NY: Routledge, 2018). For an extensive bibliography of recent sources regarding Aristotelian philosophy, see Anna Marmodoro and Michele Paolini Paoletti, "Introduction to the Special Issue on Form, Structure and Hylomorphism," Synthese 198, no. 11 (2021): 2647-56, doi: https://doi.org/10.1007/s11229-019-02441-0.

<sup>&</sup>lt;sup>23</sup> Timothy O'Conner and David Robb, eds., *Philosophy of Mind: Contemporary Readings* (New York, NY: Routledge, 2003), 4; Owen, *Measuring the Immeasurable Mind*, 12-13; Howard Robinson, "Dualism," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, accessed May 12, 2023, https://plato.stanford.edu/archives/spr2023/entries/dualism/, section 2.3; John Spackman, "Consciousness and the Prospects for Substance Dualism," *Philosophy Compass* 8, no. 11 (2013): 1054.

<sup>&</sup>lt;sup>24</sup> E.J. Lowe, "Dualism," in *The Oxford Handbook of Philosophy of Mind*, edited by Brian P. McLaughlin, Ansgar Beckermann and Sven Walter (New York, NY: Oxford University Press, 2009), 68.

Substance dualism is *dualist* since it posits more than physical entities, and it is *substance* dualist since it posits that some nonphysical entities are substances. When substance dualism is accurately understood, it is difficult to see how the panpsychism presented in *Minding Creation* is not a substance dualist position.<sup>25</sup> On the first page, Leidenhag says one could "construe panpsychism as a form of dualism all the way down." Leidenhag describes panpsychism as a family of theories that contrast with physicalism and explain consciousness in human persons by positing mentality as fundamental throughout the natural world (p. 1). But, as Mihretu Guta points out, consciousness is not a free-floating property devoid of a bearer, but rather conscious states are mental states of subjects.<sup>26</sup> In both philosophy of mind and consciousness science, consciousness is far too often discussed without any regard for the subject who is conscious. Contemporary panpsychists often have something to say about consciousness while nothing is said about the bearer of consciousness, the subject of experience. It was refreshing to see that Leidenhag does not follow this trend. The panpsychism her book discusses posits "enduring substances or subjects" beneath experiences (p. 7). If these fundamental substances beneath experiences are physical, Leidenhag's panpsychism would fall prey to the same problems she points out in chapter one for those who maintain the fundamentality of physics.<sup>27</sup> Therefore, a coherent interpretation of Leidenhag at this point suggests that the "enduring substances" that are "beneath experiences" are not physical substances. Consequently, it is difficult to see how such a panpsychism is not itself a version of substance dualism.<sup>28</sup>

Leidenhag might want to argue that the panpsychism she presents differs from substance dualism because it maintains that the mental and the material "always come together and cannot be separated" (p. 3; see also p. 89). Yet, a substance dualist who does not think the mind or soul persists after biological death could say the same. More importantly, the idea that the mental and material always come together and cannot be separated raises serious questions from the Christian theological framework Leidenhag is working within. For one, if God is a nonphysical spirit, how could God have any mental thoughts? If the mental and material always go together, it would seem that whatever is mental in God would require a physical counterpart, which would seem to make God's mental states (even his intention to create a material world) dependent on matter. Such a

<sup>&</sup>lt;sup>25</sup> Here I'm referring to the tenets of the panpsychism Leidenhag presents which pertain specifically to the metaphysics of mind, not the theological tenets (e.g., the idea that the Holy Spirit indwells all creation).

<sup>&</sup>lt;sup>26</sup> Mihretu P. Guta, "The Non-Causal Account of the Spontaneous Emergence of Phenomenal Consciousness," in *Consciousness and the Ontology of Properties*, ed. Mihretu P. Guta (New York, NY: Routledge, 2019), 132.

<sup>&</sup>lt;sup>27</sup> These problems include what is often called the hard problem of consciousness, the exclusion of irreducible consciousness from making a causal difference, and the theological problem of rendering God as dependent on fundamental physics.

<sup>&</sup>lt;sup>28</sup> See Robinson, "Dualism," section 2.3 for a very similar line of reasoning used to determine whether someone's view is a version of substance dualism. Relatedly, Weir argues that Goff's panpsychism cannot avoid substance dualism and that this is no problem for the view, in Ralph Stefan Weir, "Can a Post-Galilean Science of Consciousness Avoid Substance Dualism?," *Journal of Consciousness Studies* 9-10 (2021): 212-28.

consequence resembles the implications of the emergent theological positions Leidenhag did an excellent job of critiquing for rendering God dependent on matter that's considered ontologically fundamental (pp. 35-45). To counteract this theological oddity that threatens to raise an inconsistency in her view, Leidenhag could deny that God has mental thoughts, even though this might compromise the idea that God is personal.

Yet, perhaps a more palatable way to avoid the theological problem would be to confine the idea that the mental and material always go together and cannot be separated to created beings such as humans. At this point, it is important to note that if the mental and the material are always coupled and cannot be separated, this would compromise the possibility of a disembodied existence in an intermediate state when the human soul exists apart from the body, following bodily death and prior to the general resurrection. And there are biblical passages that have often been understood as teaching that such a state is not only possible but actual.<sup>29</sup> In light of passages such as 2 Corinthians 5.1-8, Philippians 1.21-25 and others, the Westminster Confession of Faith summarizes the position prevalent throughout church history:

The bodies of men, after death, return to dust, and see corruption: but their souls, which neither die nor sleep, having an immortal subsistence, immediately returned to God who gave them: the souls of the righteous, being then made perfect in holiness, are received into the highest heavens, where they behold the face of God, in light and glory, waiting for the full redemption of their bodies.<sup>30</sup>

If Christian theologians and philosophers are to lend support to Leidenhag's theological panpsychism, she owes them an explanation of how her suggestion that the mental and material cannot be separated are compatible with this historically prominent position, or why the position is mistaken. To her credit, Leidenhag acknowledges the need for further work in this area (p. 172). Until such work is finished, the Christian theologian and philosopher has no obligation to support her panpsychism.

#### **4 Conclusion**

Minding Creation is in a league of its own as a research monograph that applies panpsychism to the doctrine of creation. The physicalist who moves in the direction of Leidenhag's theological panpsychism is moving in the right direction, but the same cannot be said for the hylomorphist or substance dualist. If panpsychism were the only other game in town besides physicalism, Leidenhag's case for taking it seriously and supporting it might be more potent. Yet, hylomorphism and versions of substance dualism that look very different from the version Leidenhag depicted provide solid alternatives. Like panpsychism, both hylomorphism and

<sup>29</sup> William G.T. Shedd, *Dogmatic Theology*, 3rd ed., ed. Alan W. Gomes (Phillipsburg, NJ: P&R Publishing, 2003), 831-50.

<sup>&</sup>lt;sup>30</sup> Westminster Assembly, *The Westminster Confession of Faith and Catechisms: As Adopted by the Presbyterian Church in America* (Lawrenceville, GA: Christian Education & Publications, 2007), 147 (chapter 32.1).

substance dualism are receiving renewed interest as physicalism's problems become more pronounced. While there are also questions related to environmental ethics, biology, and cognitive neuroscience discussed elsewhere,<sup>31</sup> the concerns considered in this analysis of *Minding Creation* should provide some motivation for Christian theologians and philosophers to count the cost before embracing Leidenhag's theological panpsychism.<sup>32</sup>

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<sup>&</sup>lt;sup>31</sup> See Owen, "Joanna Leidenhag, 'Minding Creation'," *International Journal for Philosophy of Religion* (2023).

<sup>&</sup>lt;sup>32</sup> I would like to thank Betty Talbert and Eric LaRock for their helpful comments on a prior draft of this work.