### Comment and Response

with Travis Dumsday, "Palamism and Dispositionalism: Comment on Flavius Raslau's Integration of Orthodox Theology with Contemporary Metaphysics of Science" and Flavius Raslau, "Response to Dumsday's 'Palamism and Dispositionalism."

# RESPONSE TO DUMSDAY'S "PALAMISM AND DISPOSITIONALISM"

by Flavius D. Raslau 🕩

*Abstract.* Recently, I proposed a theory of ontology for the Godworld relation that draws inspiration from: Deacon's emergent dynamics where absence plays a role in causal work; dispositionalism as the most suitable philosophical tradition for accommodating absence as a mode of being; and Palamism as the most suitable theological framework for articulating the absence of God as presence. Dumsday's "Palamism and Dispositionalism" in the present issue of *Zygon* is a cogent breakdown of that thesis, exposing philosophical and theological worries that touch on pan-dispositionalism, bundle theory, Platonism, divine essence, created–uncreated distinction, God–world synergy, and more. This response article engages with the landscape of ideas that Dumsday surveys in an attempt to clarify and extend the proposed thesis that nature's powers are God's energies.

*Keywords:* bundle theory; Terrence Deacon; dispositionalism; divine essence; essence–energies distinction; Palamism; Platonism; powers; synergy

### Introduction

In "Nature's Powers and God's Energies" (Raslau 2022a), I offer a theory about the God–world relation that builds on a realism about unmanifested actualities and a view about causation that requires the interplay between manifested and unmanifested actualities. This theory draws inspiration from (1) Deacon's emergent dynamics where absence plays a role in causal work; (2) dispositionalism as the most suitable philosophical tradition for accommodating absence as a mode of being; and (3) Palamism as the most suitable theological framework for articulating the absence of

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God as presence. The result in a novel dual-aspect metaphysics framed within the theological rubric of the Christian East.

By way of summary, dispositionalism holds that the relata of causal relations is a unity of two poles in the process of transforming from unmanifested to manifested. But the dispositionalism endorsed here is atypical in that it acquires key features from Deacon's defense of absence as a mode of being. I have followed the intuition that Deacon's absence substantiates the unmanifested pole of powers. The working idea is that Deacon's orthograde dispositions are identified with manifested powers, and his absences are identified with unmanifested powers. The startling implication of this integration is that unmanifested powers as such participate in causation. In other words, their causal role is not merely to manifest themselves, but even while remaining unmanifested, they have bearing on what manifests. If we take Deacon's insights seriously, we will discover a previously absent ingredient to a new kind of dual-aspect dispositionalism. What makes it dual-aspect is that there is a commitment to both manifested and unmanifested poles of powers as equally real actualities with a mutuality in causation, but it's a monism because they hold together in virtue of representing two poles of one temporally extended process.

I share Moritz's intuition that Deacon's absence finds consonance with Eastern Christianity:

This tension which Ephrem [a contemporary of Gregory of Nyssa] maintains between the two poles of God's absence and presence is none other than the tension between the transcendence and the immanence of God. God's absence in creation is a revelation of God's presence in creation. While Ephrem describes this relationship between God's absence and presence as a paradox, we might ask if Ephrem's point can be better illuminated through Deacon's teleodynamical discussion of constitutive absence, where such is treated as a genuine mode of being. (2016, 451)

Byzantine theologian Gregory Palamas provides the vocabulary of the essence–energies distinction that makes possible the bold identity thesis that nature's powers are God's energies, without collapsing into pantheism. If such an integration is indeed sustainable, it amounts to a Palamite Powers Theology (PPT).

A key motivation behind my formulation of PPT is to close the gap between God and world. The encroachments of science into nearly every field of study have furnished a devastating God-of-the-gaps assault, such that if God is placed in competition with other explanations, as more proximate explanations become available, God's more mysterious role in explanation gradually recedes and is replaced. It seems to me that a satisfying God-world relation should require that God is necessary to the workings of the world. Discontinuous divine interventions at initial creation and sporadic miracles are inadequate; God must be necessarily present and active always. This impulse finds expression in Ritchie's "theistic naturalism" such that "for nature to be fully natural, it must be involved with, or participate in, God" (2019, 232; see also 24–29), thus making divine action the rule, not the exception. Similarly, Smith's Radical Orthodoxy sets the stage for PPT. He lands his central critique of secular modernity and the consequent corrective at the level of ontology:

...the unwarranted epistemology of secular modernity is generated by an ontological framework that must be called into question, an ontology grounded in the univocity of being that grants an autonomy to things such that it is supposed that the world can be properly understood in itself—that is, without reference to its transcendent origin, the Creator... The root of both RO's critique of secular modernity and the articulation of its alternative theological vision are found at the level of ontology... RO proposes a *participatory* ontology that understands transcendence as an essential feature of material reality. (2004, 185)

If the solution indeed lies with a participatory ontology where the life of the world is located in the life of God—Smith speaks approvingly of "the theurgical Neoplatonism of Iamblichus" (2004, 104)—then PPT may be seen as an important step in the right direction.

As PPT is admittedly in need of development, Dumsday (2022) has provided a valuable service with a cogent breakdown of my original PPT presentation. As someone who is, in his words, sympathetic to my overall approach, I found his tone magnanimous and his methodical analysis both accurate and profitable. Responding to his commentary is like an invitation to a feast.

Dumsday's assessment flags possible internal tension within PPT, inviting either further clarification or modification. His concerns are both philosophical and theological. On the philosophical side, he is leery of my endorsement of pan-dispositionalism + bundle theory,<sup>1</sup> and correspondingly my dismissal of alternative versions of dispositionalism and substance ontologies. The three counterarguments to which he brings attention are arguments (1) placing a higher burden of proof on bundle theory, (2) in favor of the indispensability of categorical properties, and (3) in favor of Platonism. On the theological side, he highlights the incompatibility of bundle theory (1) with the human soul as found in historical Christian creeds and (2) with the divine essence. And regarding my identity thesis that nature's powers are God's energies, he raises concerns about (3) the collapse of the created–uncreated distinction and (4) whether there can be genuine synergy.

I take the theological concerns as primary. Dumsday seems to think so too when he says of the theological matters, "here there are more serious reservations to be raised" (2022, 17). His earlier survey of the philosophical landscape serves as preparatory work for the consideration of options other than pan-dispositionalism + bundle theory and thereby paves the way for his proposed fixes, which are primarily intended to address the theological concerns. His chief concern, I believe, is with my identity thesis between nature's powers and God's energies, that "the balancing act of the transcendence versus immanence dialectic is weighted much too heavily on the side of immanence" (2022, 18). And therefore, a recurring theme in his proposed fixes involves adding something extra to avoid the strict identity. Let us take stock of his proposed amendments:

Option 1: drop the identification of nature's powers with God's energies in favor of a view in which nature's powers need the cooperation of God's energies

Option 2: retain the identification of nature's powers with God's energies, but drop pan-dispositionalism in favor of mixed-view dispositionalism

Option 3: retain the identification of nature's powers with God's energies, but drop bundle theory in favor of another substance ontology

Option 4: modify the view such that only some, not all, of nature's powers are identified with God's energies

Option 1 amounts to a Palamite version of the double causation that is found in Thomism, which I find disagreeable because it exposes God-ofthe-gaps worries and ensures the very God-world distance that I'm motivated to undo.

Options 2 and 3 supply a solution that I fear is only helpful in a technical sense. In an effort to add something extra, thereby ensuring the nonidentity between creatures and divine energies, option 2 adds categorical properties and option 3 adds substratum (or some other substance theory) as the identifying mark of creatureliness. But once dispositional properties are removed from the mark of creatureliness, one wonders if what remains is adequate. After all, it leaves only denuded shapes and sizes and directional vectors, or worse, featureless bare particulars. When we think of the people and things in our lives, the properties that seem most salient are the dispositional ones, those which characterize capacities: a friend's ability to empathize, music's capacity for ecstatic rapture, the aroma of a homecooked meal. It strikes me as exceedingly odd if we cannot bring ourselves to call these things creaturely but instead only divine on account of their being divine energies. Moreover, since only powers (i.e., God's energies) do all the work, and creatureliness is rendered powerless, then these proposed fixes only seem to make the problem of synergy (and theodicy) even more intractable. My affinity to bundle theory is that it invites a process view, and a process view more successfully evades the worry of reductionism and naturalistic determinism. Insofar as options 2 and 3 entail occasionalism, as Dumsday notes, we are left with theistic determinism.

Option 4 is an intriguing one whose merits I too have weighed (Raslau 2022b, 17). While nature's powers are God's energies, it may be that some of nature's powers are not God's energies. Dumsday acclaims, "the creature/divinity distinction would be retained, occasionalism would be sidestepped, the Orthodox notion of synergy would still be upheld, and Raslau could keep his key metaphysical commitments to pan-dispositionalism and bundle theory" (2022, 19). My proposal for the demarcation between powers that are and those that are not God's energies is this: if a power predisposes toward evil, then it is not God. This amendment would provide a satisfactory theodicy too. Option 4 is viable, but it has its own difficulties that temper my enthusiasm for it. First, what makes a power evil is more context driven than essential to it. Breaking someone's bone is evil if done to hurt but good if to heal. Another general problem with option 4 is that it leaves unexplained where the powers that are not God's energies come from. If these other powers are created, then the view introduces a strange inconsistency, because the same metaphysical entities-powers-are asserted to be necessarily uncreated in one instance (God's energies) but necessarily created in another (other powers). On the other hand, if these other powers are also uncreated, at least in their unmanifested actuality, then new questions press with earnest: are they sourced in another god? This would amount to Manichaean or Zoroastrian dualistic cosmology. And why just two? Why not a different god for each power? While option 4 solves some problems, it loses parsimony and threatens to unravel.

One topic that is conspicuously absent from Dumsday's review is the work of Deacon, which has a crucial place in PPT. Deacon is an iconoclast; his views don't fit neatly into existing categories. And so to incorporate his views into dispositionalism will necessarily alter dispositionalism. Standard-fare dispositionalism has much to say about orthograde dispositions, that is the spontaneous directedness of causation, but its concept of constraints is underdeveloped. The constraints that are thought to restrict the manifestation of some orthograde dispositions are other orthograde dispositions on their hopeful way toward manifestation. There is not a well-articulated conception for a causal role of unmanifested dispositions as unmanifested dispositions. And yet, that is precisely what Deacon does articulate with impressive sophistication—a causal role for absence where absence is a mode of being, which I connect to unmanifested powers. To be clear, the causal role for absence is not of the same sort. It is better described as formal causation, whereas efficient causation is the mode found among manifested actualities. According to Deacon, presence and absence constitute an integrated whole, such that both are necessary to describe the workings of the world.<sup>2</sup> As will become clear, I believe Deacon's insights are an essential part of PPT, shaping it into a dual-aspect

kind of dispositionalism, where the dipolarity of manifested/unmanifested (i.e., presence/absence) is interrelated in causation.

In this response article, I accept the invitation to engage with the landscape of ideas that Dumsday surveys, fielding some exploratory thoughts that might prove to resist some of the proposed amendments but also demarcate the more malleable places, all the while distilling the core commitments of PPT. Given its infancy, it is worth exploring the possibility that the ideas deftly identified by Dumsday as "marked out for clarification, and perhaps alteration" (2022, 2) might still be resolvable within the bounds of the original PPT thesis.

### FIRST PHILOSOPHICAL OBJECTION: BUNDLE THEORY

Dumsday seeks to moderate my robust formulation of the Eleatic principle, which is the claim that causal role is a necessary and sufficient condition for existence, by considering the virtues of substance ontology, categorical properties, and Platonism. The first is taken up in this section. Dumsday argues, "Common-sense suggests that there are things with characteristics, not just characteristics. Of course, everyday pre-philosophical intuition is hardly infallible; the point is simply that bundle theory, as an anti-realist account of substance, seems to have at least a marginally higher burden of proof than do its realist competitors (substratum theory, hylomorphism, and primitive substance theory)" (2022, 16).

But why should bundle theory amount to antirealism about substance? As Dumsday himself notes elsewhere, "some bundle theorists self-identify as realists about substance" (2020, 996). It is not a primitive account, to be sure, but it need not be eliminative. I take bundle theory to provide a realist account of substance and object, just one derivative of powers.

Property for a dispositionalist, compared to a categoricalist, is an ontologically thick and different sort of entity. Consider Armstrong's challenge: "Causality becomes the mere passing around of powers" so that "the world never passes from potency to act...*nothing ever happens*" (2005, 314). But as Mumford explains, "The claim that *nothing ever happens*" is, however, sustainable only if a potency is nothing at all... But such a claim is false, or at least we can say that potencies, as understood by the dispositionalist, are something real and substantial" (2009, 99). Particularly on pan-dispositionalism + bundle theory, what the dispositionalist means by property, potency, or power is *substantial* insofar as objects are substantial and the fundamentals that constitute objects must themselves be substantial. Moreover, powers do the job of substances as bearers of properties insofar as bundling entails bearing. This is evident when objects, which are bundles of powers, take on new powers. The more general point is that powers mutually bear one another.

Taking on the offensive, I will argue that primitive substance theory and substratum theory have difficulty explaining emergence and/or evolution. Primitive substance theory is well suited to explain why an object has its properties, since a primitive substance should possess only the properties that are appropriate to its kind. But this trades for a disadvantage when radically new properties display after an emergent transition, since the substance should have ruled out such new property ascriptions. The problem is made more acute by showing its incompatibility with evolutionary history. Where does the substance of a cat come from? It is one thing to say that a kitten's substance comes from a parent cat's substance by some traducianism means, but how does one explain cat substance coming into being from distant ancestors who were nothing like cats? It will not do to say that substances also evolve, because according to primitive substance theory, substance is supposed to delimit the set of properties it bears, such that it should not deviate into another genus of substance. To the degree that emergence and/or evolution are true, primitive substance ontology is undercut.

Cats also do damage to substratum theory. Consider that a cat doesn't have a single substratum. Dumsday himself agrees, "it is not the case that a cat is a single organism because all of its parts share a common substratum. Rather, a cat is a unified organism because somehow the many smaller substances composing that cat-and ultimately its component fundamental particles, themselves the real bearers of the substrata-are structured and animated in a certain (very difficult-to-specify) way" (2016, 624). This is an improvement upon primitive substance. Since an emergent/evolved object is not a single substance but rather a "bundle" of substances, emergent/evolutionary changes may supervene on recombinations of these fundamental substances. But the Achilles heel of substratum theory is the specter of reductionism because it renders strong emergence impossible to sustain. Any property attributed to the emergent whole is already possessed by its fundamental parts at the substratum level, and it is redundant to attribute properties to both whole and parts (Raslau 2022a, 66-67). Therefore, if strong emergence is true, then reductionism is false, and since substratum theory entails reductionism, substratum theory is false.

By contrast, on dispositionalism + bundle theory, emergent/ evolutionary changes are cashed out in terms of interacting powers. Powers are properties but also essentially processes. A process view safeguards against reductionism to the base parts. Interacting processes also accord well with the scientific understanding of how living bodies work, namely, systems of systems. Intracellular molecules interact together to produce an emergent transition to cells, which interact for the emergence of organs, which interact for the emergence of organisms. Emergence comes and goes as these processes are either preserved, disrupted, or repaired. Interacting processes as systems of systems is precisely what is meant by bundles of powers.

### SECOND PHILOSOPHICAL OBJECTION: CATEGORICAL PROPERTIES

The second philosophical objection leverages the explanatory virtue of categorical properties, such as shape, size, structure, distance relations, spatial and temporal relationships. The familiar arguments against categorical properties attempt to sustain that they too are powers. Sphericity disposes toward rolling, but of course soap bubbles are spherical yet do not roll. Mumford and Anjum retort, "The soap bubble is indeed disposed to roll in a straight line in virtue of being spherical and the reason it doesn't is because it has a countervailing power of stickiness that is stronger than its rolling power" (2011, 4). I would add that categorical properties have developmental histories that root them in powers. Soap bubbles are spherical because their surface tension pulls on water molecules into the tightest possible cluster, which is a sphere. Similarly, planets are spherical because their gravitational forces are so massive that matter is compressed in all directions, molding the planetary mass into a sphere. Property ascriptions that appear categorical may simply be emergent features of clusters of powers operating over a developmental history.

The argument for categorical properties is that while they are not powerful, powers need them. Dumsday quotes Ellis in support, "structural properties neither add to, nor subtract from, the powers, but determine the structural frameworks within which the powers operate" (Ellis 2002, 174). Ellis recruits examples of molecular structure to show that its spatial arrangement is necessary but not as a causal power. He explains, "Methane (CH4), silane (SiH4), and carbon tetrachloride (CCl4) all have a tetrahedral structure. Nevertheless, these substances have different causal powers, due to the different causal powers of their constituent atoms" (2002, 173). But it's a mistake to locate causal power in atoms only and not in molecular structures. Isomers and chirality prove it. Isomers are molecules that have the same constituent atoms but arranged in different structures, and importantly, they have different molecular properties. Therefore, structural differences do confer property differences. To understand chirality, imagine a tetrahedral molecule with four different atoms (A, B, C, D) branching out from a central atom. Now imagine fixing atom D in the back, such that the other three branching atoms face you at the noon, 4 o'clock, and 8 o'clock positions. Reading the atoms in that order, one version of the molecule has the atoms spelling ABC, whereas the other is ACB. Chiral molecules have the same atoms and the same geometric structure. Only the relative orientation of the atoms differs, and that's enough to produce different effects on polarized light. Ellis cites that "these [structural] properties determine where the active properties of things may exist, or

be distributed, and, consequently, where the effects of these activities can be felt" (2010, 136). But it seems that more is going on with molecular structure than just where the atoms are having their effects.

And yet, there may be a conciliatory move available that affirms deep structure (i.e., relations between properties), and the resources to accommodate it may already be present in dual-aspect dispositionalism. Consider a possible merger of pan-dispositionalism with ontic structure realism. Ontic structural realism (OSR) is the metaphysical view that relations are fundamental. Ainsworth (2010) surveys three versions of OSR.

OSR1: relations are ontologically primitive, but objects and properties are not

OSR2: relations and objects are ontologically primitive, but properties are not

OSR3: relations and properties are ontologically primitive, but objects are not.

Ainsworth is the first to articulate OSR3. Though he doesn't mention dispositionalism, it seems to me that they belong together. Dispositionalism can sustain both properties and relations as ontologically primitive given their conceptual interdependence insofar as dispositionalism + bundle theory entails structural relations between properties.

Chakravartty entertains the proposal of incorporating OSR into a dispositionalist framework. By contrast, he argues that categoricalism is incompatible with a realism about the ontological priority of relations. But he sees hope in dispositionalism, explaining that "property on this [dispositionalist] view is identified as the property that it is in virtue of its possible relations to other properties" (2011, 194). Relational structures are implicit in powers ontology. Chakravartty explains,

...what makes a property the property that it is, or in other words, what constitutes the essence of a property, are the dispositions for relations it contributes to the objects that have it. It is now obvious, perhaps, why such a view might be tantalizing for a structural realist... If we were to marry this structural view of properties to the view that objects are simply groups of properties that cohere...the very natures of properties are understood simply in terms of potential relations, and objects are simply groups of properties. (2011, 195)

He encapsulates his proposed synthesis as the "the combination of a bundle theory of objects and a view of properties that describes their identity conditions in terms of dispositions for relations" (2011, 196). Note that the relational structures in view here are not macroscopic features like shape, but rather have to do with how powers group together and collude to do causal work, and therefore might best be characterized as mathematical relations. But ultimately, Chakravartty laments that dispositionalism was "so close, and yet not close enough" (2011, 196). Here's how he puts it:

Now the bad news: the compatibility of this view of properties and noneliminative OSR, it turns out, is only skin deep...it does not emphasize relations in quite the right way for OSR... The intrinsic dispositions of objects exist quite independently of whether or not they are manifesting in other words, independently of whether they or the objects that have them are standing in any particular relations at any given time. Therefore, on this view, it is simply incorrect to say that the relata depend on their relations for the determination of their identity... (2011, 195–196)

On standard dispositionalism, relations such as bundles are only recognized between manifesting powers. The problem is that powers have their directedness prior to relations having any purchase on the process. In other words, the unmanifested pole of powers does not participate in the relation.

That's precisely where dual-aspect dispositionalism comes to the rescue because it does affirm relations to unmanifested actualities. Given that we can already claim a causal relational structure between manifested actualities (standard dispositionalism) as well as between manifested and unmanifested actualities (Deacon's presence of absence), then why not between unmanifested actualities themselves? The latter would satisfy Chakravartty's search. Dual-aspect dispositionalism plausibly entails a primitive notion of dispositional properties and a primitive notion of the relational structure between them.

### THIRD PHILOSOPHICAL OBJECTION: PLATONISM

The possibility that Platonism could be true factors into Dumsday's push to moderate my eagerness to restrict fundamental ontology to powers only. Reflections on this topic are admittedly only preliminary stabs. The thread that I will pull on is the intuition that a realism about unmanifested actuality has the resources to make sense of abstract entities, since like unmanifested actualities, 2+2 = 4 is timelessly real whether or not that mathematical relation ever instantiates in the world.

A traditional starting place for the abstract-concrete distinction is the criteria of causation and location, according to which abstract entities are causally inert and without spacetime location. By contrast, a concrete entity participates in causation and has spaciotemporal location. Trees are concrete; numbers (of trees) are abstract. The intractable question is whether abstract entities should be accorded the same ontological status as concrete entities. The strongest argument for abstract entities, such as mathematical relations, is their indispensability to scientific theories, and scientific realism, as Putnam famously said, "is the only philosophy that doesn't make the success of science a miracle" (1975, 73).

According to the universal-particular distinction, universals are multiply exemplified in more than one location at the same time, while particulars are wholly present in one spaciotemporal location. A specific tree is a particular, but the number 2 is a universal because it's shared by every pair of trees. There is also the Platonic-Aristotelian distinction, according to which Platonic is uninstantiated, whereas Aristotelian is instantiated within particulars and thus has concrete spatiotemporal location.

Consider the canvass of the variety of positions that have been carved out. Armstrong (1978) defends concrete-universals. His metaphysics only allows for concrete entities within spacetime. Therefore, abstract entities cannot exist. He admits some universals (e.g., numbers, mass, energy) on the basis of scientific realism but only bound to particulars. Thus, he endorses an Aristotelian immanence about universals.

Tropes typify another recombination, namely, abstract-particulars. This view rejects multiple instantiations and therefore denies universals but accepts abstract entities. According to trope theory, the twoness in a pair of trees and the twoness in a pair of dogs are distinct entities. There are innumerable identical "universals" each instantiated only once.

Moreland challenges typical Platonic-Aristotelian ascriptions with a hybrid position: "I am a Platonist about uninstantiated universals but a constituent ontologist regarding the way universals are in ordinary objects" (2013, 249).

The most exotic position is Lewis' modal realism, according to which every possible world is as real as ours. Lewis ponders whether he should call these worlds abstract or concrete. Abstract would convey location outside spacetime and causal relations, so that could work since their spacetime manifolds are isolated from one another. But each world is just as concrete and causally efficacious within its own spacetime. In the end, Lewis opts for concrete, but he decries the abstract-concrete distinction as being in "disarray" (1986, 171) and laments that it fails the nuances of his metaphysics.

Cowling meticulously chronicles the various ways of demarcating the abstract-concrete distinction and abandons the prospects of shared neutral criteria for their disambiguation (2017, 69–92). He identifies two alternative approaches. The eliminativist route (Cowling 2017, 97–101) is expressed best by Sider (2013, 287):

The abstract/concrete distinction...is just a theory, nothing more. It's not sacrosanct; nothing supports it other than tradition; and it should stand aside if it obstructs an attractive simplification of ideology.

With that backdrop, I propose that some of the work attributed to entities regularly categorized as abstract might indeed be real, but the category as such is not. This amounts to an abandonment of the abstractconcrete distinction in lieu of the simplification of our ontology. Following precedent, I propose a new recombination that mixes features of abstract and concrete, tentatively called "concrete-abstract," to encapsulate the concrete presence of uninstantiated universals. Like concrete-particulars, they participate in causal relations and have spaciotemporal location. But unlike concrete-particulars, they are multiply instantiated. And unlike concreteuniversals which are instantiated (i.e., manifested), these are uninstantiated (i.e., unmanifested). These concrete-abstract hybrids are uninstantiated (i.e., unmanifested) and so could be called Platonic, yet they have concrete spaciotemporal location and causal participation and so might be Aristotelian. Standard terminology fails us.

Could such an entity exist? If uninstantiated, it must be absent, and yet if spaciotemporally located and causally relevant, it must be present. Can absence be present? Being able to answer *yes* is the brilliance of Deacon's work. He argues persuasively for the presence of absence, and for its indispensability in causation. The dual-aspect monism that I'm proposing offers a principled way of conceptually bridging the abstract-concrete divide by identifying concrete-particulars and concrete-universals with the manifested pole of powers, and concrete-abstracts with the unmanifested pole of powers.

This proposal has a sort of precedent with Bird, who endorses realism about unrealized possibilia (2007, 111–14). Bird explains this view in terms of Platonism, "The best way to understand them is as akin to Platonic abstract objects-except that they are contingently abstract. They could be realized and so could be concrete. That is the distinction between the realized and unrealized...not the distinction between the actual and the (merely) possible, but between the concrete and (contingently) abstract" (2007, 113). Tugby considers Bird's view in his search to ground the directedness of dispositions, which is the feature that dispositions point beyond themselves, so it's worth detouring briefly into Tugby's work. He identifies the main challenge being "that our account must explain dispositional directedness in a way that accommodates cases of disposition instantiation in which the relevant manifestations never come about" (2013, 456), all the while avoiding the Meinongian worry of relating actual things to nonexistent things. In the end, he concludes that the necessary resources are provided by preferring universals over tropes, and additionally preferring Platonic universals over Aristotelian approaches. He argues that at least some disposition instantiations are intrinsic, meaning that they do not depend on their relation to surrounding particulars. He argues that the Aristotelian will have difficulty grounding a vase's fragility, whose disposition is to break, in a world where there is no other instance of breaking, and so concludes, "Thus, a clear problem for the Aristotelian view under consideration is revealed: its commitment to immanent universals is inconsistent with the intrinsicness platitude," whereas "on the Platonic

picture proposed, manifestation universals exist even if they are never instantiated" (2013, 467).

Returning to Bird's realism about unrealized possibilia, Tugby simply asserts that a theory of Platonic universals is metaphysically preferable to the "oddness of unrealized entities" (2013, 458) for doing the work of grounding the directedness of intrinsic dispositions. But I would contend that the ontological chasm between abstract and concrete is unpreferred to the monism of dual-aspect dispositionalism, which is attractively parsimonious. Moreover, it champions a mechanism for the causal participation of unmanifested actualities, which is worth highlighting because it does more than he imagines Bird's unrealized possibilia do. Tugby entertains problems that emerge with Bird's view on the scenario that a manifested property would have its unrealized counterpart as its universal or trope (2013, 458–59). But his worries are not insurmountable, especially if a realism about unmanifested actualities can be put to do additional work, namely, emergent dynamics cashed out with Deacon's absence. A property's manifestation depends not only on its spontaneous intrinsic disposition and on its relation to other manifested actualities but also on its relation to unmanifested actualities, which together structure a landscape of relations that channel the process of manifestation.

Dumsday has got it exactly right: "No one has really delved into the ontological status of uninstantiated universals that figure in some way in the identities of instantiated universals" (2013, 139). Tugby leans on Platonism. Dumsday points to the realism that lurks behind *ceteris paribus* clauses (2013). I join their company with the proposal of dual-aspect dispositionalism, which promises a parsimonious accounting of the features that typically go in favor of Platonism, with a simpler monism that could potentially do away with the abstract-concrete chasm.

FIRST THEOLOGICAL OBJECTION: BUNDLE THEORY AND SOULS

Despite beginning with the philosophical discussion, it is the theological objections that undergird those concerns. Dumsday raises four good theological challenges that deserve a preliminary response here and additional development in the future.

The first objection is with the alleged incompatibility between bundle theory and the human soul as expressed in the creeds of historic Christianity. Unfortunately, the details of this objection are not specified, so I'm left to interpret where to locate the alleged problem. I assume the Chalcedonian creed is in mind:

<sup>...</sup>truly God and truly man, of a reasonable soul and body; consubstantial with the Father according to the Godhead, and consubstantial with us according to the Manhood...

Clearly, the text commits us to a realism about souls, though without further specification. The word consubstantial is *homoousios* in Greek, meaning "same substance." Perhaps the contention is that the incarnate Christ shares "same substance" as human nature, and therefore a substance ontology of some kind must be affirmed of human nature.

But if this is the extent of the dispute, then it falls to history and hermeneutics rather than philosophy and ontology. It would be a difficult case to make that the application of *homoousios* in the creed was intended to immortalize a specific philosophical theory, much less a modern one. The church fathers appealed to the term for its theological utility alone. Recall that *homoousios* was first used in the Nicene creed in opposition to the Arian controversy, and subsequently defended against a competing term, *homoiousios* ("like substance"). Stead provides an extended analysis of substance language in the Arian controversy and its usage in the creed, explaining,

the phrase was not designed to make the directly ontological statement about the Son, that he is 'of' the *ousia* (i.e., rank, dignity, status) which is proper to the Father; but rather to show that he derives from the Father by a process comparable to natural generation, as opposed to some process of 'making', like that of God's created works... [therefore] he is equal to, and one with, his Father as a true natural son, and not just a creature adopted or dignified with the name of Son. (1977, 233)

Relevant to the issue at hand, this application of *homoousios* to Christ's human nature is that he is thoroughly human in every respect, similarly without committing us to a specific substance ontology.

The Cappadocian fathers are particularly interesting because they were strong defenders of the Nicene formulation, and they actually wrote on the nature of matter. While Neoplatonic and patristic church history testifies to widespread agreement about the existence of a formless material substrate as the bearer of qualities (i.e., hylomorphism), the Cappadocian fathers take notable exception. In his homilies on Genesis [Hexaemeron I.8], Basil writes, "Try to take away by reason each of the qualities it possesses, and you will arrive at nothing. Take away black, cold, weight, density, the qualities which concern taste, in one word all these which we see in it, and the substance vanishes." Then, Gregory of Nyssa [On the Making of Man XXIV.2] adds, "it would seem to follow that we may suppose the concurrence of those things, the absence of which we found to be the cause of the dissolution of the body, to produce the material nature." Van Riel and Wauters conclude, "Gregory thus subscribes to a 'bundle theory,' not only on the level of the individual body (the individuality of which is due to the specific constellation of qualities), but also on the underlying material level... That is to say: matter itself is a 'bundle' of qualities' (2020, 404).

Of what, then, does Gregory think the world consists? Schooping answers, "an instantiated composite of uncreated *logoi*" (2015, 599). This prompts another question: what are the *logoi*? The connection of *logoi* to the divine energies is incontrovertible. Palamas' conception of the divine energies draws together a plurality of portrayals from earlier patristic sources that have this in common: God's acts of selfmanifestation (Bradshaw 2004, 271–73). Among these different ways of speaking about the energies are the *logoi*. Bradshaw explains straightforwardly, "There is one other traditional notion that Palamas embraces under the concept of *energeia*: that of the divine *logoi*" (2004, 239). The aspect of the energies that is underscored by the term *logoi* is "God's creative act" (Bradshaw 2004, 239) and "that God is present in creatures" (2004, 206). Gregory not only seems to endorse bundle theory, but moreover, identifies these composites as *logoi*, which are basically God's energies.

Let's return to the initial worry, which was the application of bundle theory to the soul. Here, we find yet another key touchpoint with Deacon's emergent dynamics that will prove helpful. Deacon discusses the implications of constitutive absences as spatiotemporally extended unrealized potentials (i.e., unmanifested powers) and ultimately concludes that the core identity of the self is a nonmaterial actuality (2012, 484). Insofar as soul entails a self, the soul is grounded in the presence of unmanifested powers. So while I'm willing to circumvent the more familiar substance ontologies for the soul, it appears that even pan-dispositionalism + bundle theory operating with a process logic can furnish the resources for a realism about the soul when combined with a realism about unmanifested powers.

## Second Theological Objection: Bundle Theory and Divine Essence

The second objection is with the incompatibility between bundle theory and the divine essence. Considering the Eastern Orthodox distinction between essence and energies, even if bundle theory could be applied to the divine energies, surely it could not to the divine essence. Insensitivity to this concern would amount to a collapse of the essence–energies distinction.

I do agree with the worry when articulated in this way. Yet, Dumsday already provides the solution when he says, "on apophatic grounds it might be argued that none of the standard substance ontologies could properly be literally affirmed as applying to the ineffable divine substance" (2022, 17). I need only add one small clarification. Dumsday reasons, "it may be that Raslau intends to restrict the scope of bundle theory to the created realm rather than extend it to the divine substance" (2022, 17), but in fact I don't restrict the scope of bundle theory to the created realm only.

I do apply it to the uncreated realm too, yet only to the uncreated divine energies, not to the uncreated divine essence.

This begs the question: how should we think of the divine essence<sup>23</sup> Two points can be made briefly. First, the designation *essence* cannot be recruited in support of any philosophical theory of substance ontology because that would undermine its ineffability. The essence is an inscrutable mystery that is beyond reductive or comparative analysis. Second, the best way to think of the divine essence is the source of the energies. In other words, it's what holds the activities together such that they are unified, rather than making them out to be an infinitude of separate things that somehow interact. The essence is the wellspring of the divine energies, that to which the divine activities belong.

But of course, we must remember that the divine essence is to be understood on personal terms, not just as a metaphysical principle. Therefore, we should add that the essence, which is the source, is God Himself. But it is important to note that whatever positive affirmations we can make about God, such as His attributes or His triune designations, are actually features of the divine energies, which though distinct from the essence proper yet is still revelatory of the One being revealed. With that in mind, we may note how the ontological distinction between essence-energies, on the one hand, and the triune personal God is both preserved and collapsed in a nuanced way. It depends on the intent behind the language. If by God, one is referring to the positive affirmations about God, this is subsumed in the divine energies, so there is no ontological distinction between that use of God and the divine energies. But if by God, one is referring to the Triune One to whom God refers as the One to whom the energies belong, this is subsumed in the divine essence, so in this case there is no ontological distinction between that use of God and the divine essence.

### Third Theological Objection: Created–Uncreated Distinction

The third theological concern has to do with the theological tenability of the identity thesis that nature's powers are God's energies. The worry is that it might collapse the created–uncreated distinction. Put succinctly, nature's powers are created, yet the divine energies are uncreated. How, then, does the identity thesis remain coherent?

It remains coherent in this way. God's energies are uncreated insofar as there was no time without unmanifested actualities. Creation may be understood simply as the coming into presence of what was previously absent. And this is, in effect, powers coming into manifestation. Therefore, creation has to do with energies manifesting. Here is the clarification that results from recasting creation in terms of manifestation: the created world is not identical with God's energies but only with the *manifested* pole of God's energies.<sup>4</sup> The manifestation of powers are creation events and so properly identified as "world," whereas the unmanifested pole of powers are uncreated and properly identified as "not world."

Two important ideas emerge from this. First, Schooping's assessment: "Creation *ex nihilo* is thus not merely a doctrine related to history, but to the fundamental nature of 'things' in and of themselves" (2015, 586). God's ongoing presence and activities create and sustain all being, everywhere and always. This view of unmanifested absence coming into manifested presence provides a mechanism for the theological claim of creation, and additionally brings both God's creating and sustaining into concordance with one another because the same mechanism underlies both. A further ambition of such a view may be its reconciliatory profit since it can offer explanatory value to both science and theology without crowding out one or the other.

The second major implication is the understanding of *creatio ex nihilo* that results. This doctrine is typically expressed as creation "out of nothing," but that is surely not what the Christian doctrine means to say. The complete thought would be that the world came into being from God's creative act. God is the source, not nothingness. Being to come from nonbeing is incoherent. With these considerations in mind, if only God exists prior to creation, then creation can only come out of God, creatio ex Deus. The view being articulated here, namely, that creation is the coming into manifested being out of God's unmanifested actualities, provides the resources to make better sense of the act of creation and God's involvement in it. Karamanolis summarizes the theology of creation articulated by Gregory of Nyssa: "God created the world by instantiating his thoughts," the logoi, into the world, and in this sense God did not need matter and did not create anything different from himself" (2021, 190). Schooping graces poetically, "without God there is no more a universe than there is a wave with no ocean" (2015, 598).

### FOURTH THEOLOGICAL OBJECTION: SYNERGY

The last objection is similarly concerned with the identity thesis that nature's powers are God's energies. The worry here is whether such an identity thesis can support genuine synergy, which is a core commitment in Eastern Orthodoxy. I concur that PPT could not truly be Palamite unless synergy is defended. Yet, how can there be cooperation between the world and God when a bundle view of the world casts them entirely in terms of God's energies, since it would appear that "created things have no powers of their own" (Dumsday 2022, 18)?

We continue where we left off, with the affirmation that the world is coextensive with God's *manifested* energies. There are two reasons why this view does not entail theistic determinism. First, at least some of God's powers could be disposed toward their manifestation with indeterminate probabilities (e.g., quantum fluctuations). Some, though not all, of God's activities could be random. The distinctive feature of free will is uncoerced action from a range of possibilities, with the additional theological perspective that free will is a gift ultimately sourced in God. Even randomness like quantum fluctuation can be recognized to be uncoerced action that is God's gifting to creation, and therefore should count as free will, even if only in a primitive sense. Randomness can enjoy the same value as the canonical sense of free will (i.e., free will of rational creatures), namely, "a means of exploring the range of inherent potentialities," which when bound in relation to God, such exploration results in the "great emerging drama" of "a narrative that begins in chaos and ends in harmony" (Wessling and Rasmussen 2015, 295 and 297). With randomness incorporated into God's activities, theistic determinism is averted.

The second reason that the identity thesis espoused here does not entail theistic determinism is in virtue of the complexity of the interplay between manifested and unmanifested powers. Deacon describes an autogenic system (Deacon and Cashman 2016, 414-20), in which two interdependent processes (i.e., powers obtaining manifestation) each have the effect of preventing the other one from actualizing its broader range of potential, thereby each introducing into the other one unrealized potential (i.e., unmanifested actuality) that is incorporated as constitutive absences into the emergent system. The resulting emergent system of reciprocally generating absences has the net effect that its absential presence is preserved over time. While its material components may come and go, its nonmaterial form is persevered. Once such a self emerges within an autogenic system, any further actions by that system may be said to be with respect to itself, or self-directed. The self, therefore, arises from constant flux, contextual dependence, and lacking its own intrinsic self-existence, self-sufficiency, or self-subsisting substance. And yet, when interdependent processes are suitably arranged, we may speak of a nonmaterial self within this higher order dynamical system. Deacon plausibly sustains that a "strong emergence of life and mind is possible through inter-dependent co-origination as long as the relevant dependent forms of being can interact with each other in such a way that they each prevent the other from going out of existence" (Deacon and Cashman 2016, 406). The remarkable conclusion is that even if nature's powers are coextensive with God's energies, it appears that nature's powers can exercise a certain degree of self-directedness within the life of God. Given these three affirmations that creation has noncoercive activity (randomness), that creatures have self-directed activities (Deacon's emergent dynamics), and that God exercises activities proper to Himself (the divine energies), then we may further affirm that genuine synergy between creatures and God is preserved.

Although Dumsday has not formulated a concern about an adequate theodicy, that must certainly not be far from view. If the identity thesis holds, then wouldn't God's energies share in the blame for the evil perpetrated by nature's powers? I have raised this concern myself (Raslau 2022b, 17) and suggested two possible paths forward: (1) affirm that at least some of nature's powers are not God's energies (identical to Dumsday's Option 4); (2) substantiate a sufficiently robust defense of free will. As mentioned earlier, the first lacks parsimony. I prefer the second, which dovetails nicely with the earlier comments about synergy. Creatures have integrity in virtue of emergent dynamics that generate self-directedness, so their evil actions are their own. And while it is the case that all creatures must borrow God's energies to accomplish anything, they bear accountability for how they use or misuse God's energies. Yong hints at this: "Insofar as demonic [or any evil] realities are emergent from and supervenient upon originally good things, they lack their own being or onticity and thus emerge only parasitically" (2011, 219). Even evil finds its sustenance in the life of God, but only parasitically. Evil finds expression when God's energies are bundled in an improper or imbalanced way. For example, too much authority becomes tyrannical, but too little devolves into anarchy; both are evil. But authority can approach goodness when balanced by humility. Good energies in the absence of other good energies amount to a corruption of their original purpose. Evil is, therefore, a privation insofar as it lacks something, or put differently, it incorporates absence that should instead be presence. Such a view articulates an Augustinian view of evil as privation [City of God XI.9] embedded within a Palamite powers metaphysics.

### Conclusion

If a PPT is to be worthy of its name, we will have to bite the bullet and affirm the identity thesis that nature's powers are God's energies. While pan-dispensationalism + bundle theory is not necessarily essential to sustain the project, nonetheless it does afford some advantages that I would not want to relinquish quickly, and it does make the theological claim most unavoidable, thereby inviting a deep engagement with the thesis. There may be good philosophical reasons to prefer a more complex dispositional ontology, but I hesitate to do it for the purpose of diluting the theological claim, which I think deserves to be wrestled with. The core commitment of PPT is that nature's powers/energies are sourced in God's powers/energies in virtue of God's uninterrupted presence and activity in the world. Nature's fundamental ontology is constituted by the activities of God, though not the essence of God, such that the workings of the world cannot be adequately explained independent of the God-world relation and genuine synergy between them. The exciting part of this research program is seeing how far this identity thesis can take us, what unique

challenges present themselves—as Dumsday has ably labored to identify and what new solutions may be uncovered to address old impasses.

Most promising, in my view, is the prospect of PPT to subsume the sciences and all other fields of study and human experience into theology proper. To study nature's powers is to study God's energies. Living well and worshiping well are bound up together. Awareness of the powers that empower us has sanctific salience because the world at a local scale of analysis manifests either the image of God or a distortion of it. The defeat of evil, then, is the restructuring of dynamical emergent systems in nature such that its newly rebalanced bundles of energies manifest fidelity to Christ, who is the paradigmatic revelation of the image of God. My exploration into the neurotheological perspective of Christus Victor atonement theory (Raslau 2021) and the scientific understanding of spirits including demonic powers (Raslau 2021, 2022b) may be seen as natural outgrowths of applied PPT.

#### Notes

1. Pan-dispositionalism is the view that only dispositional properties (i.e., powers) exist, not categorical "powerless" properties. Bundle theory is the view that substance is derivative and sufficiently described as a cluster of powers.

2. For a discussion of Deacon's causal role of absence, see Deacon (2012), Deacon and Cashman (2016), and Raslau (2022a, 2022b).

3. See Bradshaw (forthcoming) for a complex and nuanced critical review of the various ways the term essence (*ousia*) was deployed in argument by four influential Alexandrians (Philo, Clement, Origen, and Athanasius) and how it's being rightly or wrongly explicated by recent scholars.

4. Akindynos had argued that energies must be created since they can be seen to start and stop, but Palamas defuses this argument by citing that "starting and stopping belong to manifestation, but not the energy itself" [Against Akindynos 6.20.75].

5. There is potential here for a new formulation of divine conceptualism, wherein unmanifested powers serve as the actualities underlying what often goes by "God's thoughts." Divine thoughts cannot be taken literally for reasons expressed in Raslau (2022b), but God's creative activity of "thinking" the world into being can serve as an effective metaphor for divine energies coming into manifestation.

#### References

Ainsworth, Peter Mark. 2010. "What Is Ontic Structural Realism?" Studies in History and Philosophy of Modern Physics 41:50–57.

Armstrong, D.M. 1978. Nominalism and Realism: Universals and Scientific Realism, Vol. I. Cambridge: Cambridge University Press.

-. 2005. "Four Disputes About Properties." Synthese 144:309-13.

Bird, Alexander. 2007. Nature's Metaphysics: Laws and Properties. Oxford: Oxford University Press.

Bradshaw, David. 2004. Aristotle East and West. Cambridge: Cambridge University Press.

———. Forthcoming. "Afterword: Essence and Energies Revisited" In Divine Energies and Divine Action. St. Paul, MN: IOTA Publications.

Chakravartty, Anjan. 2011. "Ontological Priority: The Conceptual Basis of Non-Eliminative, Ontic Structural Realism." In *Structural Realism: Structure, Object, and Causality*, edited by E. M. Landry and D. P. Pickles, 187–206. Dordrecht, Netherlands: Springer.

Cowling, Sam. 2017. Abstract Entities. London: Routledge.

Deacon, Terrence W. 2012. Incomplete Nature. New York: Norton & Company.

- Deacon, Terrence W, and Cashman, Tyrone. 2016. "Steps to a Metaphysics of Incompleteness." *Theology and Science* 14 (4): 401–29.
- Dumsday, Travis. 2013. "Laws of Nature Don't Have Ceteris Paribus Clauses, They Are Ceteris Paribus Clauses." *Ratio* 26:134–47.

———. 2016. "Natural-Kind Essentialism, Substance Ontology, and the Unity Problem: Two Dispositionalist Solutions." *Dialectica* 70:609–26.

- . 2020. "How to Be a Pluralist in Substance Ontology." *Erkenntnis* 85:995–1022.
- Ellis, Brian. 2002. The Philosophy of Nature: A Guide to the New Essentialism. Montreal & Kingston: McGill-Queen's University.
  - ——. 2010. "Causal Powers and Categorical Properties." In *The Metaphysics of Powers: Their Grounding and Their Manifestations*, edited by A. Marmodoro, 133–42. New York: Routledge.
- Karamanolis, George. 2021. The Philosophy of Early Christianity. New York: Routledge.
- Lewis, David. 1986. On the Plurality of Worlds. Oxford: Basil Blackwell.
- Moreland, J. P. 2013. "Exemplification and Constituent Realism: A Clarification and Defense." Axiomathes 23:247–59.
- Moritz, Joshua M. 2016. "How Absence Makes Things Grow: Absential Metaphysics and the Teleodynamics of God as Love." *Theology and Science* 14 (4): 449–55.
- Mumford, Stephen. 2009. "Passing Powers Around." The Monist 92 (1): 94-111.
- Mumford, Stephen, and Anjum, Rani Lill. 2011. *Getting Causes from Powers*. Oxford: Oxford University Press.
- Putnam, Hilary. 1975. *Mathematics, Matter and Method*. Cambridge: Cambridge University Press.
- Raslau, Flavius D. 2021. "Updated Christus Victor: A Neurotheological Perspective." Journal of Psychology and Christianity 40 (4): 329–43.
  2022a. "Nature's Powers and God's Energies." Zygon: Journal of Religion and Sci-
- ———. 2022a. "Nature's Powers and God's Energies." Zygon: Journal of Religion and Science 57:60–82.
- ———. 2022b. "In Search of the Scientific Accounting of Spirit and God's Spirit: Recent Critiques and New Inspirations." *Theology and Science* 20 (3): 307–27.
- Ritchie, Sarah Lane. 2019. Divine Action and the Human Mind. Cambridge University Press.
- Sider, Theodore. 2013. "Against Parthood." Oxford Studies in Metaphysics 8:237-93.
- Smith, James K. A. 2004. Introducing Radical Orthodoxy: Mapping a Post-Secular Theology. Grand Rapids, MI: Baker Academic.
- Stead, Christopher. 1977. Divine Substance. Oxford: Oxford University Press.
- Tugby, Matthew. 2013. "Platonic Dispositionalism." Mind 122:451-80.
- Van Riel, Gerd, and Wauters, Thomas. 2020. "Gregory of Nyssa's Bundle Theory of Matter." Journal of Early Christian Studies 28 (3): 395–421.
- Wessling, Jordan, and Rasmussen, Joshua. 2015. "Reasons for Randomness: A Solution to the Axiological Problem for Theists," *Theology and Science* 13 (3): 288–304.
- Yong, Amos. 2011. The Spirit of Creation. Grand Rapids, MI: Eerdmans.