The Many Faces of Panentheism

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HOW RADICALLY CAN GOD BE RECONCEIVED BEFORE CEASING TO BE GOD? THE FOUR FACES OF PANENTHEISM

by Philip Clayton

Abstract. Panentheism has often been put forward as a means for bringing theology and science into dialogue, perhaps even resolving some of the major tensions between them. A variety of "faces" of panentheism are distinguished, including conservative, metaphysical, apophatic, and naturalist panentheisms. This series of increasingly radical panentheisms is explored, each one bringing its own core commitments, and each describing very different relationships between religion and science. We consider, for example, the diverse ways that the radical panentheisms construe emergent phenomena in the natural world. In the end, comparing the increasingly radical forms of panentheism yields a new understanding of the state of the religion/science dialogue today.

Keywords: apophatic theology; Robert Corrington; ecstatic naturalism; emergence; David Ray Griffin; Catherine Keller; metaphorical theology; naturalism; panentheism; pantheism; radical theologies

God and science are at war. Or at least this is standard narrative, usually with New Atheists placed on the one side and Intelligent Design defenders dropped on the other. The roots of the war metaphor have grown deep into Western consciousness, influencing thought and action more strongly than many realize. Although many authors deny that it is a battle to the death, it certainly has that appearance in the many combative publications that have appeared over the last several decades.

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Clearly, there will be less tension between God and science if one can find a way to show the compatibility of the term "God" with a naturalistic worldview—the kind of naturalism that science seems to require. Many of us believe that *panentheism* can help to accomplish this task.

But *which* panentheism? It's a rather large market. Panentheisms on the conservative end of the spectrum don't appear to preserve the autonomy of the natural order that science assumes. Panentheisms on the far left appear to leave God behind altogether, which means that they don't actually reconcile God and science. So where are the limits on the one side and the other? How radically can God be reconceived before ceasing to be God?

My contribution to this discussion will be to identify the four major faces of panentheism—conservative, metaphysical, apophatic, and naturalist and then see how each one affects the relationship of science and religion.

WHAT IS PANENTHEISM?

First a simple definition. In its most concise formulation, panentheism is the claim that *the world exists within the Divine, although God is also more than the world*. With a relative small number of exceptions, this view was either denied or incorporated into Christian theology from the New Testament documents until the eighteenth century. One finds an early formulation in Gotthold Ephraim Lessing, who had been influenced by Spinoza. He wrote that God's unity "must be a transcendental unity that does not exclude a sort of plurality"; God must have "the most perfect conception of himself, i.e. a conception that contains everything that is in him" (Lessing 1956, paras. 73–74). Fichte, Schelling, and Hegel developed forms of panentheism with increasing conceptual rigor. The first use of the term is credited to Karl Christian Friedrich Krause in 1829.

The need for developing such a position was clear. In the early modern period, as skepticism grew about the medieval synthesis of natural philosophy and theology (viz., theology as *scientia*), Protestant theologians began to appeal to the subjective encounter with God as the grounding point for theology. By the later seventeenth century, philosophical theologians were emphasizing the almost complete transcendence of God (*deus absconditus*) in order to avoid conflicts with the mechanistic interpretation of natural systems that was then dominant. The hyper-immanent and the hyper-transcendent approaches obviously needed to be synthesized, and the context of idealism appeared to offer the means.

In the twentieth century, a century or so after Krause, the term came into increasing prominence and has been widely affirmed by theologians. In his history of panentheism, Michael Brierley lists "a whole host of theologians" who identify themselves as panentheists. He argues that panentheism "has represented a middle path between two extremes, and so it has explicitly become one of the three essential types of the most fundamental of doctrines, the doctrine of God" (Brierley 2004, 3).

By the second half of the century, the significance of panentheism for the science-theology discussion was more clearly recognized. A century or so after the term "panentheism", it was being widely applied as a potential solution to a number of apparent conflicts between theology and the sciences. Among the topics debated in the quest for common ground are naturalism, divine action, consistency with science, process vs. substancebased metaphysics, harmony with the Western theological tradition, and adequacy for religious practice (indeed, whether that should even be a criterion).

In retrospect, one can see more clearly that, in fact, *many different versions* of panentheism were being offered in order to reconcile theological claims with scientific knowledge. Nor were the considerations that support panentheism limited to science. Biblical theologians have argued that this view expresses the thrust of scriptural texts better than patristic thought; comparative theologians have appealed to panentheism as common ground between traditions; and students of religious experience have found it useful in interpreting their data. Thus Michael Brierley argues that "religious experiences have indeed often been panentheistic in orientation. This is characteristic of the intense religious experiences more generally, as seen not least in the New Age movement and in the counterpart interest, within Christian faith, in Celtic spirituality" (Brierley 2006, 643).

Conservative Panentheism: The Rest Go Too Far

Over the decades, several conflicting approaches to panentheism became visible. Conservative scholars argued that many of the more "liberal" panentheisms amounted to *de facto* materialism or atheism. In any case, they said, such views are neither Christian nor biblical. One thinks in particular of John Cooper's *The Other God of the Philosophers*. His title makes clear that, in his view, panentheists affirm a different God than the biblical God—a God created by philosophers, an idolatrous God. Cooper looks in detail at the various positions, including the work of the present author, and concludes that "Such claims have no basis in Scripture. No biblical text suggests or implies that the world is part of God, either of his eternal nature or of his actual existence" (Cooper 2006, 323).

Cooper is critical in particular of what I have called the Panentheistic Analogy, which argues that God's relation to the world is analogous to the relationship of the mind to the body. Of course, to affirm that God has a body is not exactly an unorthodox position. Cooper believes that one can use this idea only as a (highly constrained) metaphor: "References to God's body metaphorically represent his powers to act in the world, not the world as his body.... Their canonical source is Plato's *Timaeus*" (Cooper 2006, 323). Cooper also takes on David Ray Griffin's notion of God's freedom, to which we will return in a moment. He writes, "Ironically, the notion of divine freedom that is embraced by most panentheisms actually deprives God of choice about creation" (Cooper 2006, 326).

For most conservatives, the only acceptable panentheism is classical theism, which they find rooted in the New Testament and reflected in the orthodox Christian tradition. Thus Cooper writes, "Thus the mere assertion that creatures are 'in God' cannot be dismissed as unbiblical. There is a *prima facie* 'biblical panentheism.' But this fact does not settle the issue because classical theism readily explains these texts with its own account of being in God" (Cooper 2006, 322). More specifically, "In classical theism, God can be *absolutely immanent*—unconditionally omnipresent in creation—precisely because he is *absolutely transcendent*. It is simply false to suggest that classical theism denies or ignores the immanence of God" (Cooper 2006, 330).

This view, which we might call *orthodox* or *creedal panentheism*, holds that God is transcendent, yet also immanent in the world through the Holy Spirit, the Third Person of the Trinity. The orthodox Christian tradition, they maintain, has always asserted this position; hence contemporary theologians are mistaken when they argue that panentheism is a departure from classical theism. But only this form of panentheism—panentheism in the narrowest sense, we might say—qualifies as acceptable for Cooper and his allies. Anything else is too extremist. It is to these extremists that we now turn.

DO THE CLASSICAL THEOLOGIANS GO FAR ENOUGH?

Not surprisingly, another group of scholars has expressed strong dissatisfaction with the constraints that Cooper and company impose on the discussion. Their twentieth-century source is Charles Hartshorne, whose impressive scholarship, such as in his *Omnipotence and Other Theological Mistakes* (1984), established the fundamental distinction between the timeless, transcendent God of the scholastic tradition and the idea of a responsive, changing God who exists as radically immanent within the flow of time.

In order to distinguish these new positions from orthodox panentheism, let us call the panentheisms to which we now turn *radical panentheisms*. They actually represent not *a* position but a wide spectrum of positions. One way to define this spectrum is to consider *how much* of the inherited traditions they revise. One first finds the rejection of biblical constraints, and then a series of increasingly radical rejections: of creedal or orthodox theology, of the ontological primacy of God over world (including *creatio ex nihilo*), of the transcendence of God, of all supernaturalism, and finally

of *any* claims that move beyond the constraints of naturalism. At this far end of the spectrum, as we will see, it's no longer clear that the word "panentheism" should be used at all.

In the effort to get a clearer sense of this broad range of positions, it is useful to concentrate on three representative samples. Each of these radical panentheisms works at the boundaries between theism and scientific naturalism. Here, I will suggest, some of the most interesting work on theology and science is being done today. To make progress, we must consider not only the positions themselves, but also the movement through them—the movement toward increasingly radical panentheisms—and perhaps beyond. Tracing this movement, I suggest, is an effective way to approach the question in my title: *How radically can God be reconceived before ceasing to be God?*

INCREASINGLY RADICAL PANENTHEISMS

Reason Lifts Us from Science to Metaphysics

David Ray Griffin claims to offer a panentheism that is nonsupernatural, and hence naturalistic. For example, divine interruptions of the natural order are not possible. For "there was no stage at which God could unilaterally determine the state of affairs" (Griffin 2004, 143). Hence "divine creativity can never obliterate or override the creativity of creatures" (Griffin 2004, 143).

But such a view is "naturalistic" in ways that make many naturalists squirm. This disconnect deeply influences Griffin's position on religion and science.

According to Griffin, there are two specific and distinct senses of naturalism, which he separates using subscripts (Griffin 2004, chapter 3). Naturalism_{sam} is sensationalist, atheist, and materialist. That is, Griffin identifies an epistemology based on direct empirical input (sensations) an epistemology that he says is still widely held among scientists—with atheism and materialism. By contrast, his naturalism_{ppp} affirms prehension, panentheism, and panpsychism. Setting the two naturalisms side by side creates three pairings, each of which is supposed to represent a dichotomy: one is either a materialist or a panpsychist, an atheist or a panentheist. Knowledge is either acquired through raw sensations à *la* David Hume *or* through prehensions in the sense of Alfred North Whitehead. Since prehensions sit at the very center of Whitehead's metaphysics (and to my knowledge nowhere else), this dichotomy is even more strict: one is *either* an early modern empiricist *or* a Whiteheadian.

It thus turns out that Griffin is defending a very peculiar form of naturalism. His naturalism allows for veridical religious experience; for example, it recognizes intuitions of Platonic truths and immediately knowledge of common sense moral beliefs. It supports the view of God affirmed by process theology: "If as the discussion of 'panentheism' in chapters 4–5 will suggest, we are encompassed by a loving, holy actuality, we would feel this actuality in every moment" (Griffin 2001, 83). Griffin later puts the point even more strongly:

The existence of religion is rooted in the twofold fact that (1) all people at all times, albeit usually only at an unconscious level, prehend the existence of Holy Actuality, which accounts for what is sometimes called "the religious dimension of experience," and (2) in some people this direct prehension rises to the level of conscious awareness, producing what is called an "experience of the Holy" or a "mystical experience." (Griffin 2001, 85)

Griffin's starting point leads to rather robust theological claims, albeit ones with a strongly process-Whiteheadian accent. "God is internal to the world [and] the world is internal to God" (Griffin 2001, 141). In fact, "God is essentially the 'soul of the universe" (Griffin 2001, 140). The Panentheistic Analogy holds: "Just as the brain is in the soul, the universe is in God" (Griffin 2001, 141).

Griffin believes that his process theological language is completely consistent with contemporary science—as long as the prejudices of sensationalism, atheism, and materialism are removed. There is no Creation from nothing-because God is always and necessarily accompanied by some world. Quantum physics is accurate—as long as we grant that each subatomic particle actually possesses its own internal experience (it "prehends"). Natural evolution can be affirmed-but with a twist: "The process has taken so long as to reach its present state because the divine power, being persuasive rather than coercive, needed continually to coax creatures to overcome long-entrenched habits in order to embody novel forms of experience" (Griffin 2001, 213). Divine action is compatible with scientific theory and practice—as long as we understand it in Griffin's sense: "God acts in the world by, as it were, whetting the creatures' appetites for new forms" (Griffin 2001, 214). Actually, this particular connection of naturalism and divine action is intriguing; we will return to it below. Here's how Griffin attempts to connect the two:

Divine activity is *continuous* because it exerts influence always and everywhere in terms of initial aims. Divine activity is *gradualistic* because the divine aims cannot induce creatures to actualize possibilities that are radically discontinuous with what they have already realized. (Griffin 2001, 215)

In short, Griffin gives a serious process-theological exposition of what it might mean for God to lure the evolutionary process without the coercion or "fine tuning" that supernaturalists appeal to. On Griffin's view, God does not directly bring about any results in nature; yet God is actively and continuously involved with the natural world and all the agents in it. Serious philosophical disputes are not however won by excluding live options. Griffin attacks a kind of naturalism that is sensationalist, atheist, and materialist, and he offers a process philosophy of "prehension, panentheism, and panpsychism" in its place. No mention is made of the more complex forms of naturalism that are receiving attention in recent philosophy of science. One thinks in particular of "broad naturalism" (Goetz and Taliaferro 2008, 71; Visala 2011). The type of naturalist philosophy that deserves our closer attention, and the type that will be presupposed in the remainder of this article, is not a naturalism that is Whiteheadian philosophy relabeled. Even Catherine Keller, herself a process philosopher, wrestles with the more urgent challenges of a naturalistic science that appears to be incompatible with theological assertions in anything like their traditional form.

Science Suggests but Does Not Entail the Pervasive Divine

Catherine Keller's recent book, *The Cloud of the Impossible*, defends an apophatic panentheism. Her metaphysic is attractive: "Divinity here trades omnipotence and impassivity for the sensitive interdependence of panentheism: God's own experience, God's open becoming, depends upon the becoming of creatures" (Keller 2015, 33).

Science, and in particular the physics of entangled particles, plays a crucial role. Although the well-known entanglement experiments work with specially prepared pairs of entangled particles, naturally occurring entanglement could create these coordinated systems across astronomic distances. In fact, some theorists have speculated that some kind of entanglement relation might hold across massive numbers of particles and cosmic distances. It is this notion that Keller finds most attractive, especially the possibility of a "planetary entanglement." If we know ourselves to be entangled with all other things and agents on this planet, she believes, we are more likely to treat other persons, animals, and the planet in a more just and ethical manner. Indeed, ethics plays a big role in her view:

And in this world-transforming entanglement, let us note that the ethic does not arise as *just do it*, but from a full-fledged relational ontology of which there may be no more important wording than this: "all life is interrelated, and we are all caught in an inescapable network of mutuality, tied in a single garment of destiny." (Keller 2015, 35)

The phrase "tied in a single garment of destiny" is of course drawn from Dr. Martin Luther King, Jr.; it enlists the interrelatedness of humans and all of nature in service of justice for all races.

Keller's theology adds God to the physical story of entanglement. Panentheism means that God is entangled with the world. Here the science has clearly been an inspiration to her theology, on the model of Kirk Wegter-McNelly's well-known book, *The Entangled God: Divine* *Relationality and Quantum Physics* (2011). Still, Keller's work is definitely not a case of "theology from below" (as if any theology really is); Keller has apparently gone looking for scientific examples of the kind of interconnectedness to which she was already committed as a process philosopher.

The Cloud of the Impossible is of course a word-play on the famous fourteenth-century mystical text, The Cloud of Unknowing. What makes Keller's panentheism more "radical" than Griffin's is that it balances on this knife's edge between apophatic and kataphatic. Her panentheism does not just disappear into mystical silence. It is spoken-indeed, spoken in great detail, for it is after all a constructive theology. Yet it is spoken in the liminal language of postmodernism and poststructuralism. Like Jacques Derrida and like Nicholas of Cusa, who is a major influence on her-Keller practices a speaking that is at the same time an unsaying. Her language is invariably translucent and evocative; it never allows one to grasp a proposition, to pin down a truth. (The result reminds one of the line from a well-known song, "How do you hold a moonbeam in your hand?") Griffin fights to show how his metaphysics and epistemology are compatible with the scientific worldview. By contrast, Keller turns to poetry, to aesthetic and ecstatic experiences, to evoke something that cannot be said, something that evaporates as soon as you try to hold it:

But there is another hint, pronounced as one of the most concentrated utterances of what we may properly name *apophatic panentheism* in the history of Christian thought: "He is all things in all things and he is no thing among things. He is known to all from all things and he is known to no one from anything." "In all things" marks the difference from a simple "is all things," and so of panentheism from pantheism... In an apophatic panentheism may precisely coincide the radicality of absolute transcendence with that of pure immanence. (Keller 2015, 75, quoting Gayatri Spivak)

In the end, however, Keller does not want to be held down by the constraints of scientific theory. From her study of David Bohm, she concludes that electrons are "behaving as if they were part of a larger and interconnected whole" (154). With Wegter-McNelly she concludes that "Quantum entanglement ... points to the ecstatic character of creation at the level of physical existence" (153). And, as with Griffin, God plays a central role in this scientific story: "The process panentheism pullulates, however, with an open cosmos of creatures, entangled in one another even as they are divinely enfolded" (75).

Note that this move from actual research on entangled particles to the "interconnected whole" (with religious overtones) is not so much a careful step of inference as it is a leap to another genus ($\mu \varepsilon \tau \dot{\alpha} \beta \alpha \sigma \iota \sigma \varepsilon \iota \varsigma \dot{\alpha} \lambda \lambda \sigma \gamma \dot{\varepsilon} \nu \sigma \varsigma$). Perhaps the science suggests a kind of panentheism, a pervasive Divine, but it does not *entail* this theological move. In contrast to Griffin's clearly metaphysical position on the God–world relation, this

more mystical and aesthetic connection is as much ethical and experiential as it is metaphysical. And political as well; as Keller writes late in the book, "An apophatically darkened panentheism keeps political theology *theological*—and therefore *possible*—in the face, the double face, of authoritarian exceptionalism and liberal failure" (261).

A science/panentheism relationship that is more evocative, as here, can move in multiple directions. Some will see this flexibility as a positive sign; others will criticize it for relativism and lack of rigor. For example, Keller (like Gilles Deleuze) uses this apophatic synthesis of panentheism and science to defend the equality and value of each creature: "A universe of unbounded, decentered connectivity cuts or contracts perspectivally into each creature. Each creature is a fold, an actualization itself enfolding and unfolding its own relations" (153). The flow of the exposition takes the reader to a place that is as much experiential as conceptual; she offers in the end "a panentheism in which the mystical *ekstasis* finally floods into the relationality of the material universe" (153).

In what sense does Catherine Keller offer us a radical panentheism? Radical here does not have its traditional meaning of digging away to find the roots of the science–religion relationship, which is a very different type of project. Instead—to continue the botanical metaphor—Keller's scientifically tinged panentheism seeks to graft together two seemingly disparate plants in order to see what new kinds of growth result. Remember the title of the present section: *Science suggests but does not entail the pervasive divine*. If Keller and her like-minded colleagues are right about the science–religion dilemma today, approaches such as this one are the only way to express the sense that God is immanent in all things and all things are immanent within the divine.

Beyond Panentheism: Pantheism qua Ecstatic Naturalism

Multiple theorists in the contemporary discussion argue that naturalism must set the context for any discussion of religious experience. *Something* sets religious language apart, they say, but it cannot *really* be an encounter with God, no matter how immanent and integrated the divine might be in the world around us. The work of Robert Corrington offers a particularly interesting example of this final type. Over the years Corrington has transitioned from panentheism to "ecstatic naturalism," or what he also calls "deep pantheism" or "religious naturalism." Whereas Keller seeks a God who is maximally entangled with the world, for Corrington *all* talk of the transcendent is merely misplaced immanence.

The quickest way to understand this position is to consider Corrington's autobiographical essay, "My Passage from Panentheism to Pantheism." God-language for him is a distraction, even a sign of laziness: "To call the extra-human ... pull of certain strongly relevant traits by the name

'god' is to intrude a transcendental argument just when more strenuous phenomenological effort is demanded" (Corrington 2002, 136). We should seek to understand what motivates such language, where it comes from, rather than gracing it with a metaphysical or even a poetic account.

Once religious language has been freed from all non-naturalistic referents, we can begin to understand its functions. For Corrington, Godlanguage appears to function as a way to amass and hold power: "Starkly put—there are no non-natural traits or orders. A god who creates out of nothingness is no god at all, but merely functions as a linguistic artifice to render and secure certain personal and social power structures in an asymmetrical dependency relation" (Corrington 2002, 137). To recognize this, says Corrington, is to leave panentheism permanently behind, replacing it with (at most) a purely naturalistic pantheism:

Naturalism, which asserts that nature is all there is, psychosemiotics, which traces all humanly used signs to their unconscious projective fields, and a naturalized pneumatology, all point toward rejection of the halfway measure of panentheism. Naturalism does not require the "in and above" relationship between a divine being and nature... There is thus no need for a god, fourfold or otherwise, in and yet somehow beyond nature. (Corrington 2002, 149)

With everything even remotely non-natural safely out of the way, Corrington turns to the task of explaining how the language of transcendence might have arisen. All categories can be traced back to their functions in the evolutionary process. Humans first use language to signify the world around them, to pick out (and thereby to create) objects. Gradually human symbolic language becomes less and less tied to anything in the world; speakers extend it to God, the heavens, Platonic realities, Trinities, and Incarnations. But the imagined referents of language can never explain its true origins, as Corrington notes in his book *Ecstatic Naturalism*:

First is the recognition that all categories are in and of an evolving universe that contains genuine novelty. The evolutionary perspective has become binding for thought precisely because of its sensitivity to the natural enabling conditions of all living organisms. All sign users are part of a vast evolutionary matrix that contains innumerable suborders and evolutionary niches that may or may not be hostile to the needs of the given sign user. Within these orders, forms of novelty (variation) occur that open up semiotic possibilities while canceling others. (Corrington 1994, 5)

Corrington then turns to the study of the categorial structures that arise out of human evolution and the natural order, seeking to understand how they come to signify (4). His is an ambitious and sophisticated analysis, and I commend it to the reader. In order to get to the "ground" of the process (in the sense of Charles Sanders Peirce), one must seek a "phenomenological insight into all of nature" (Corrington 2002, 132). We find both an active principle and the natural phenomena that result from it analogous to *natura naturans* and *natura naturata* in Spinoza. Perhaps the word "God" can be used pantheistically as a descriptor for both of these, indeed for nature as a whole, as in Spinoza's famous phrase, *deus siva natura*. But beyond that we cannot go: "the word 'God' [should] be gently purged from the fundamental query into the ontological abyss between *nature naturing* and *nature natured*" (Corrington 2002, 132) Here we see the near identity of pantheism and naturalism. As in most of Western history, the two come together so closely that they seem to merge into a complete identity.

With this outcome we reach the limits of what panentheism can do to integrate scientific and religious language; indeed, we have now moved beyond those limits. Like Corrington, advocates of this school presuppose that science requires a strict naturalism, a naturalism without transcendence. We are sometimes outside our normal state (*ecstatic naturalism*); we sometimes plumb the depths (*deep pantheism*); we sometimes imagine nonexistent forces and entities (*God, spirits*). But always we remain within the natural order, for only it exists:

Nature itself is an encompassing that has no outer shape or circumference. The understandable human need to find an outer edge for the world, thus giving us some illusory sense of a center, must be undermined by a thoroughgoing naturalism that fully grasps the elliptical nature of our categorical structures. The centrality of the ontological difference puts continuing pressure on any perspective that would attempt to bound nature or reduce it to an aspect of the human. (Corrington 1994, 9)

How the Many Faces of Panentheism Affect Science and Religion Debates

So what have we learned from this examination of the four faces of panentheism: conservative, metaphysical, apophatic, and naturalist?

- (1) Conservatives like Cooper are ready to reject parts of science that don't fit with the Bible. The pseudoscience of Intelligent Design represents a painful example of this tendency. One survey shows that over 50 percent of American evangelicals do not accept the principles of Darwinian evolution. They also challenge empirically established correlations between neurology and mental experience; many are classical dualists.
- (2) Philosophers such as Griffin make the strongest claims for a comprehensive synthesis of religion and science. For them, every area of science is better understood when it is placed within this broader context. Of course, that means that they face a challenging set of potential conflicts and have the most work to do in order to establish compatibility.

Usually theological accounts of science depend on classical theism and direct divine action; for example, on miracles and "directed evolution." Griffin's case is more subtle. Because it relies on panentheism, he claims it as a form of naturalism. The plausibility of his claim is undercut by his idiosyncratic definitions, however. Either one accepts sensationalism, atheism, and materialism (naturalism_{sam}), or one endorses prehension, panentheism, and panpsychism (naturalism_{ppp}). Also, he seems to offer only one flavor of panentheism: the Whiteheadian one; no others are countenanced.

(3) Thoroughgoing naturalists such as Corrington stand at the other end of the spectrum. Their fundamental assumption is that a naturalistic ontology is the only credible one. Recall Corrington's phrase, "Starkly put—there are no non-natural traits or orders. A god who creates out of nothingness is no god at all" (Corrington 1994, 9). Corrington is one of a number of theologians (or posttheologians) for whom it is axiomatic that there is no God and no knowledge of any transcendent realities. God-language may still serve a variety of functions, some of them positive, but it does not *refer* to anything. Thus their interpretations of quantum physics, biological evolution, neuroscience, or the cognitive science of religion tend not to vary at all from philosophers of science who have no interest at all in religion.

To put it bluntly: it is not so much that theologians like Corrington have established a compatibility between science and theology; instead, in their work science seems simply to have won the war, making no concessions whatsoever to religion. Remember the famous claim by E. O. Wilson in his well-known book, Consilience: as you stand on the beach watching the sunset, you are free to enjoy the feelings that arise—of beauty and grandeur, of the sublime. You may entertain whatever thoughts arise, including for example the sense that there is a God behind all this beauty. But these are only thoughts and feelings. As the moment passes, you recall that all knowledge is scientific knowledge, that nothing you experience counts as knowledge unless it can be traced back to scientific foundations (Wilson 1999). If some claim about God, some "face" of panentheism, extends beyond what science can establish, it may be useful, but it cannot be true. Theological sentences about science may be poetic and philosophical, but they are not real assertions; they have nothing to add to the scientific project. Knowledge is the domain of science alone.

(4) Theologians of metaphor, such as Sallie McFague's *Metaphorical Theology* (1982); of poetics, such as Roland Faber's *God as Poet of the World* 2008); and of apophasis, such as Catherine Keller's *The Cloud of the Impossible: Negative Theology and Planetary Entanglement* (2015),

offer an intriguing fourth case. In one sense they can appear to be naturalists in the genre of Corrington, since they do not make any explicit claims about creation, miracles, or a divine guidance of history. Scientific results may be "colored" in certain ways—not in the sense of strict entailments, but through broad connections with aesthetics or ethics or a sense of "interconnectedness." But this position must not interfere with the interpretation of scientific results, in contrast to conservatives such as Cooper or metaphysicians like Griffin. By its own account, apophatic panentheism is not a metaphysical worldview.

In another sense, however, the theologians of mystery don't sound at all like theological naturalists. They affirm panentheism; they write about God, the immanent divine, a universe permeated by a divine presence, and so forth. In contrast to conservatives, however, they put forward only minimal truth claims. Naturally, those who make fewer and less direct knowledge claims have an easier time defending them. For this school, then, any potential conflicts with the natural sciences are minimized—perhaps to the disappearing point.

APPLYING THE RESULTS TO THE EMERGENCE DEBATE

I have spent much of my career defending strong ("ontological") emergence (Clayton 2006a, 2009), including an article that first appeared in the pages of this Journal (Clayton 2006b) and will therefore resist the temptation to summarize those arguments here. Instead, I wish to turn, finally, to a different task: to show how completely the discussion of emergence is transformed depending on which of the four panentheisms one espouses.

- (1) Conservatives usually reject emergence. God directly created the creatures. The emergence of mind in humans was not the product of natural evolution. God directly created Adam and Eve with souls, which made them qualitatively different from the animals. For years, the famous conservative Christian philosopher of religion, Alvin Plantinga, denied the theory of common ancestry, which is central to modern biology, arguing instead that God separately created the different species. Even macroevolution is suspect. The only emergence one finds here is the emergence of less significant biological traits, which only arise within the overarching framework of God's creation.
- (2) Naturalistic panentheists fall at the other end of the spectrum. Their panentheism verges on pantheism, and is sometimes indistinguishable from it. Almost by definition, therefore, there can be no conflict between the "weak" emergence that one usually encounters within the philosophy of science and their quasi-pantheistic version of

panentheism, which we might call "weak panentheism." The downside, however, is that here panentheism cannot contribute in any serious way to the interpretation of emergent complexity in the natural world. Gordon Kaufman's book, In the Beginning ... Creativity (2004), offers an interesting example. He names the natural process as a whole "creativity" because it is, well, creative; but his scientific naturalism does not allow him to say much more about it. Perhaps the same is true of Stuart Kauffman's book, *Reinventing the Sacred* (2008). Kauffman has made significant contributions to understanding emergent complexity in natural systems; we have been coauthors, and I am deeply indebted to his insights. But because his work on natural emergence is not paired with any broader metaphysical framework, what he has to say about religion is a bit thin. The same is true of his recently published book, *Humanity in a Creative Universe* (2016). Kauffman's social critique and his hopeful vision for the future are moving, but one fears that they are not substantiated by anything more solid than his optimistic spirit.

(3) Metaphysical panentheists are in a different position. Our theories can align closely with the empirical data, so that we develop metaphysical answers only for nonempirical questions. This is the claim I make for my own work, beginning with *Mind and Emergence* (2004). My allies and I make a case that we think should be acceptable to scientists who work in this field. We accept a broader interpretive framework that some scientists do not share. But it is not one that clashes with the best emerging science on these topics.

Other metaphysical panentheists, by contrast, allow their metaphysics to intrude into the domain of science, producing theories of emergence that are metaphysical in character. Griffin, for example, is a panpsychist, which means that he asserts that every particle has some level of experience, even electrons. He also holds that minds have paranormal powers. These two commitments (and there are others) lead him to endorse research programs that seek to establish the priority of the mental over the physical, searching, for example, for signs of creativity in prebiological systems. Griffin continues to use the term *emergence*. But he employs a distinctive interpretation of emergence, heavily influenced by Whitehead. This leads him to reinterpret the science, sometimes radically, in order to make it compatible with his metaphysical position.

(4) And what, finally, about the mystical panentheists? The apophatic nature of their language eliminates any direct conflicts with scientific results, making them more similar to naturalists. Theologians like Keller offer a rich and evocative midrash on the science that they read. Their poetic and mystical language expands one's imagination, and their metaphors and unexpected connections and turns of phrase open up new ways of imaging the world.

Of course, insofar as they deny that their theology makes any direct assertions about empirical reality, one cannot employ it to do better science, for instance in the areas of quantum entanglement, the mathematics of chaotic systems, the difficulties of biological macroevolution, or the interpretation of neurological data. Still, like the more mystical writings of Albert Einstein, the retelling of scientific stories within the mystical context of panentheism does catch one's attention; it certainly captures the imagination.

Consider just one example. One can picture the pain of God as the divine presence permeates all parts of the world. One can imagine that God suffers along with the suffering of humanity. "The pain of God" can then become a metaphor that enables human beings to imagine themselves as participating in God's activity; as Kazoh Kitamoni writes, "Our pain is actually healed when it serves the pain of God" (Kitamori 1965, 52). Traditional christologies add further richness and variety to the metaphor. For naturalists, these sentences would be fictions, and for metaphysicians they are truths. For apophatic panentheists, by contrast, they are possibly true, metaphorically true ... and unknowable at the same time. We may view this as a kind of theology that, although it does not contribute to science, does not conflict with it either. In some sense that is hard to put one's finger on, such language enhances the scientific quest, as it also enhances our being in the world.

CONCLUSION

In these pages it has been our quest to determine whether the battle between God and science is a battle to the death, or whether some level of compatibility can be established. We have also sought to understand in what sense panentheism might contribute to the interpretation of scientific results.

I have argued that the answers to these questions vary greatly depending on which face of panentheism one is looking at. Conservative, metaphysical, apophatic, and naturalist panentheisms offer very different answers, as we have seen. Some clash with science, some help to interpret it, some leave it unchanged, and some (potentially) enrich our humanity without directly contributing to science in any way. Together, I suggest, the radical panentheisms that we have examined have now become the playing field on which the fate of theology and science is being played out in our day.

Note

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