

DIVINE ACTION

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THE GOD OF CHANCE AND PURPOSE: Divine Involvement in a Secular Evolutionary World by Bradford McCall. Eugene, OR: Wipf & Stock, 2022. 156 pages. Paperback; \$24.00. ISBN: 9781725283831.

Bradford McCall is a young but prolific scholar, having completed his PhD in 2022 at the Claremont School of Theology, yet having published five books and about fifty articles. In this slim volume of six chapters, McCall proposes the elements of a complementary relationship between science, particularly evolutionary biology, and Christian faith. His proposal is rooted in a panentheistic theology of God that I will consider further below. On a first reading, I confess that I often lost the thread of McCall's argument amid his dense prose and fascinating tangents. On my rereading of the book, I distilled from the concluding chapter an outline of McCall's argument, so as to maintain a sense of direction throughout chapters 1–5.

The relation between science and theology is broadly considered in chapter 1, using the typology of Mikael Stenmark. McCall then proposes that science and theology overlap in terms of both social practice and subject matter. A metaphysical monist, he does not distinguish between mental and physical processes. This connects with the assertion (via Arthur Peacocke) that there is no "causal joint" to look for, either in solving the mind-body problem or in a theory of divine action. McCall is influenced by process philosophy and proposes pan-experientialism—the idea that everything, from people to fundamental particles, has experience, a "subjective interiority." This is not to say that electrons think, nor does McCall tend toward anthropomorphism, but his is not the disenchanted universe of Jacques Monod. His theology of God is "intermediate between the omnipotent God of classical theism and the absentee god of deism" (p. 9). God, in this view, is "persuasive, not coercive" toward the creation. McCall views complex phenomena as emergent, invoking John Haught's notion of "layered explanations" that operate simultaneously without conflict.

The second chapter offers a consideration of evolutionary thought and the philosophy of biology—common ancestry, selectionism, adaptationism, and units of selection. Subtle controversies are investigated, such as the falsifiability of adaptationism, pluralism as an alternative, and the concept of spandrels introduced by Stephen Jay Gould and Richard Lewontin. This was deep and informative reading. In some ways, it was my favorite chapter; yet it seems disconnected from the thread of McCall's overall argument.

McCall's third chapter is entitled "The God of Chance," but oddly contains no discussion of God. Rather, he investigates how scientific thought has developed the idea of chance. As a twenty-first-century scientist, I take statistical reasoning for granted. It had never occurred to me that biologists in Darwin's time would lack this category of reasoning. Let me digress for a moment to make a connection with physics, since that is my own area. The theory of statistical mechanics developed rapidly between 1857 and 1905. In 1859, the same year Darwin published *On the Origin of Species*, James Clerk Maxwell presented a paper in which he described the random motions of gas molecules with the distribution that now bears his name. This history is well summarized in a 1997 paper by Dieter Flamm.¹ It should therefore not have surprised me to learn from McCall that, in Darwin's time, statistical thinking had as yet gained no purchase in the biological sciences.

Darwin introduced chance as shorthand for undirected variation within a species, the raw material upon which selection acts. He used the word "chance" 67 times in *On the Origin of Species*. Darwin's writing reflects an inner struggle over how to conceptualize random phenomena. Like the pre-quantum physicists, Darwin did not think of chance as a cause in itself; rather, it reflected the ignorance of a human observer attempting to describe a dauntingly complex natural world, with too many moving parts to track—be they molecules or finches. Nevertheless, in many places Darwin appears to ascribe causal power to chance. This is an apparent break with the thinking of his contemporaries. By the time Gould and Niles Eldredge articulated the theory of punctuated equilibria, random processes were commonplace in all the sciences.

Relying heavily on Grant Ramsey and Charles Pence,² McCall summarizes the development of thought about chance, contingency, probability, and the variability (or fixity) of species. Working from Democritus to Aristotle and up to Darwin's time, he sketches the context in which Darwin's ideas took shape. Darwin's innovation was to show how selection bridges from what seems purposeless (chance variation) to what seems purposeful (adaptation). In this regard, Darwin's writing over time increasingly appropriated the language of purpose. Nonetheless, Darwin adopted the agnosticism of Huxley, and he resisted the attempts of Asa Gray to pull him toward natural theology.

From Darwin, McCall traces the outlines of the modern synthesis in the first half of the twentieth century and thence to Gould. Contingency, operating at a host of levels from large environments to small populations and microscopic mutations, has played a growing role to the present day. McCall raises the question of

Book Reviews

whether chance is “fundamental and irreducible,” but he addresses this question more through the lens of twentieth-century philosophy than twentieth-century science, quoting, for example, Bertrand Russell’s 1913 essay “On the Notion of Cause.” To me, this was a surprising choice. Critiques of the sort raised by Russell and others have exerted little influence on scientific discourse, as a search for recent mentions of causal(ity) in contemporary journals will show. McCall seemingly returns to a more typical picture of causation in chapter 5 (e.g., in the conclusion of his discussion of teleology on p. 113).

In chapter 4, McCall invokes Philip Clayton and Jürgen Moltmann to set forth a scientifically informed theology of God. The journey begins with the question of how God relates to the universe. McCall adopts panentheism, in which the universe is within God, but God is more than the universe. God’s role as creator argues for the universality of what scripture teaches. The monist approach of panentheism entails that God works in and through the creation. On this view, natural law is divine action by which the universe is sustained. Yet McCall acknowledges the need for a theory of divine action, at least to account for miracles. Some have proposed that randomness (quantum or classical) leaves room for a “bottom up” style of divine influence in the world. McCall eschews any such “causal joint,” preferring to “leave the notion of divine involvement in the world ambiguous, nebulous, and indefinite.” He prefers “top-down causation,” à la Arthur Peacocke and Jaegwon Kim. I longed for a deeper dive into why McCall rejects divine omnipotence and why he posits that God works exclusively through secondary causes. I perceive unresolved tension between these assertions and McCall’s acknowledgment of miracles and his expressed eschatological expectation of re-creation.

This chapter may aim at an audience already immersed in Philip Clayton’s work, which I am not. I found myself repeatedly puzzled. For example, quoting Clayton, arguing for panentheism: “The infinite may without contradiction include within itself things that are by nature finite, but it may not stand outside of the finite” (p. 99). A counterexample sprang immediately to mind: the (infinite) set of rational numbers is outside the finite set $\{\pi, e\}$. Perhaps infinite is here understood to mean entirely comprehensive, containing everything; but on that interpretation, Clayton’s words would be a definition of panentheism rather than an argument for it.

Traditionally, Christian theology has employed a dualist metaphysics in which God is distinct from creation. Faced with McCall’s adoption of a monist panentheism, one might wonder how created beings who are part of God have freedom or moral agency. Do scriptural

themes such as sin or judgment belong in a universe that is conceived as a strict subset of God’s being? McCall does not address such potential inconsistencies. The answers may depend on what McCall (via Clayton and Moltmann) actually means by panentheism, a category that has perhaps expanded beyond its original definition. See, for example, Roger Olson’s perceptive essay on panentheism and relational theology.³

McCall turns to natural theology in chapter 5. Following Alister McGrath, the task of natural theology is to read nature from a Christian theological perspective. Natural theology should engage in constructive “sense-making,” not to convince the unbeliever, but to perceive the divine within and behind nature. McCall articulates but peremptorily dismisses Aquinas’s teleological argument for the existence of God from regularities in nature. This form of natural theology and its modern analogues McCall abruptly denigrates as “notoriously ambiguous, conceptually fluid, and imprecise” (p. 105). This illustrates a shortcoming of the book: McCall revels in intellectual history, but his assessment of the ideas is frequently unclear or incomplete.

There follows a detailed summary of McGrath’s *The Open Secret*, but this summary makes too little contact with McCall’s argument. Better is his engagement with *Darwinism and the Divine*, which leads into a critique of Paley’s natural theology and a contrast with T. H. Huxley. Often quoted as a categorical denier of purpose in evolution, Huxley saw incontrovertible teleology in some “primordial molecular arrangement”—an initial condition from which the present state of the world would inexorably develop. McCall likens this to Ernst Mayr’s observation that “the occurrence of goal-directed processes is perhaps the most characteristic feature of the world for living systems” (p. 113). The thread of natural theology is then reintroduced, proposing a picture in which divine purpose manifests in the world through natural processes. I was left wanting a deeper consideration of this idea. For example, when viewed through a Christian lens, what specific purposes are implicit in the evolutionary process, and how does natural history resonate with the character of God revealed in scripture? Finally, considering that McGrath sees no conflict with orthodox Christian theology, why should the reader opt for McCall’s monist panentheism?

Chapter 6 seemed too brief a conclusion. I wanted to see the implications drawn more clearly from the first five chapters, and their integration into a coherent picture. For example, how does the foundation laid in chapter 4 for a theology of God connect to the importance of chance investigated in chapter 3? Do the imperatives for natural theology that emerge in chapter 5 support the

theology of God proposed in chapter 4? The work also makes scant contact with scripture, leaving important themes and obvious questions unconsidered. The form of the conclusion colors this work as a project proposal, rather than the project itself. Nevertheless, the book was thought provoking, made connections with a galaxy of important thinkers, and gave me a host of provocative ideas to follow up. This made it worth my (repeated) engagement.

Notes

¹Dieter Flamm, "History and Outlook of Statistical Physics," paper presented at the Conference on Creativity in Physics Education, on August 23, 1997, in Sopron, Hungary, <https://arxiv.org/pdf/physics/9803005.pdf>.

²Grant Ramsey and Charles Pence, "Chance in Evolution from Darwin to Contemporary Biology," in *Chance in Evolution*, ed. Grant Ramsey and Charles Pence (Chicago, IL: University of Chicago Press, 2016), 1–11.

³Roger E. Olson, "Relational Theology Yes; Panentheism No," The Patheos Evangelical Channel, September 26, 2022, <https://www.patheos.com/blogs/rogereolson/2022/09/relational-theology-yes-panentheism-no/>.

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DIVINE AND HUMAN PROVIDENCE: Philosophical, Psychological and Theological Approaches by Ignacio Silva and Simon Maria Kopf, eds. New York: Routledge, 2022. 156 pages. Paperback; \$52.95. ISBN: 9780367632267.

This volume of nine essays seeks to clarify the meaning of divine providence by employing the analogy of human providence, understood here as the prudent execution of deliberation and planning. Although the contributors cover fields as diverse as philosophy, natural and social sciences, and theology, this review covers only the chapters that engage with contemporary scientific research.

In the fourth chapter, Ignacio Silva is concerned with the ways in which contingent events provide a challenge to our conceptions of divine providence. He develops the thought of Aquinas in contrast to those who locate God's providential acts in the causal gaps in our current scientific understanding of creation (e.g., in quantum mechanics and evolutionary theory). The latter view is taken by those who subscribe to an approach called NIODA (non-interventionist objective divine action). An example of the NIODA approach to divine providence is Thomas Tracy's view that God acts through the structures of nature "non-miraculously," a view which Silva thinks effectively renders God as one cause among countless other causes. Another example of the NIODA approach is Robert Russell's view that at the quantum level God may be seen to act as a cause

of both general features and specific events alongside purely natural causes. Silva's primary critique here is that it compromises God's transcendence by making God's causal activity ontologically indistinguishable from natural causation.

To draw out what he thinks are the implications of Aquinas's view of contingent events for our understanding of divine providence, Silva first clarifies Aquinas's understanding of contingency. Indeterminism exists because of the hylomorphic composition of being—that is, matter establishes the range of possibilities for how it will be integrated by the organizing principle called "form," even though the intelligibility of form is irreducible to the material it integrates. Silva provides a brief but helpful analogy from human providence, showing how contemporary military strategy accommodates contingencies by building the occurrence of both foreseen and unforeseen events (the "material") into the overall battle plan (the "form"). He also finds that Aquinas's understanding of indeterminism is congenial to our new understanding of physical reality. Noting how Heisenberg himself used Aristotle's concepts of potency and act, Silva explains that differently actuated potency explains the existence of indeterminism without the need for complementary (i.e., divine) causation. The indeterminism that permeates the created order is part and parcel of the secondary causes through which God, the primary cause, achieves his intended effect.

In the fifth chapter, Connie Svob examines current findings in psychology on the cognitive mechanisms of memory, judgment, and decision making and how our cognitive (in)capacities might provide a series of metaphors or models for human providence that finds its end in God. Svob begins by highlighting recent psychological research that suggests a great deal of human cognition is irrational (though sometimes beneficially so). Svob summarizes the "dismal picture of the rational human mind" with a list of seven "cognitive illusions"—including over-confidence, magical thinking, and the tendency to reduce probabilities to certainties—and a note on the unreliability of memory. Perhaps the most interesting insight Svob discovers in the research is how both bottom-up and top-down theories of memory contribute to a model of human providence directed toward finding its end in God: the events that shape our sense of identity can reveal God's providential action, while our sense of self can direct us toward specific ends, including the end of friendship with God.

Another possibly fruitful avenue of research is how involuntary and unconscious memory retrieval might provide a model for how the cultivation of virtues such