

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/>.

Reviewed by Charles Kankelborg, Professor of Physics, Montana State University, Bozeman, MT 59717.

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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

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as prudence can take place even when the subject is not conscious of such cultivation. The tip-of-the-tongue phenomenon provides for Svob an analogy for our dependence on God. Just as we find ourselves helpless when facing the inability to recall a forgotten name and thus must wait upon some external aid, so too we find ourselves helpless in discovering God and so must wait passively upon God's help. Similarly, Svob suggests that as human cognition reaches a limit of self-definition, it may thereby find itself wholly dependent upon God: "to will consistently to live in the truth requires the grace of God" (p. 87). In short, Svob's chapter is peppered with fruitful insights into how the life of the mind in relation to its natural objects provides ample analogies for the life of the mind that has God as its supernatural object.

In the sixth chapter, Emily Burdett approaches divine providence from the perspective of developmental psychology, pointing out that despite millennia of writing on divine providence little attention has been given to how individuals develop their understanding of God's action and providence. Burdett's method is to examine how children develop their understanding of God's involvement in the world, finding that from an early age children conceive of God as engaged in the world in active, responsive, and (possibly) benevolent ways. This research suggests to Burdett the existence of an intuitive notion of divine providence among humans that God should act benevolently in the world. By measuring the time infants look at different animate and inanimate objects, psychologists have been able to verify that infants are able to distinguish between agents and non-agents and can grasp the existence of intention motivating observed acts. By the time the child is 3–5 years of age, they can distinguish between ordinary agents (e.g., a parent) and extraordinary agents (e.g., God). Burdett then shows how children distinguish between human and supernatural agency through reference to a fascinating set of studies on children and prayer, which finds that as children grow older, they tend to place greater restrictions on the types of prayers that are acceptable or answerable. Still further research confirms that children at a relatively young age can discern between human and supernatural agency, including Burdett's own research that children believe God can perform acts that they think impossible for humans. Burdett then describes how research has shown that infants and children are drawn to benevolent actors and are averse to malevolent ones, leading Burdett to hypothesize that children are likely to conceive of supernatural agents as benevolent. Burdett concludes with some intriguing suggestions for further research, outlining potential methodologies for testing the above hypothesis.

As is often the case in volumes that incorporate a wide variety of disciplinary approaches, the editors' promise of a cohesive argument—in this case, that human providence functions as an effective analogy of divine providence—is not entirely met. However, this is not a significant weakness of the volume, as many of the essays are in themselves helpful contributions to an understanding of divine providence. What stands out to this reviewer is that, regardless of disciplinary perspective, both the thought of Thomas Aquinas and the method of analogical understanding continue to be rich resources to mine in the development of our understanding of providence, human and divine.

Reviewed by Scott Halse, Lecturer in philosophy and humanities at Vanier College, Montreal, QC H4L 3X9.

GENERAL SCIENCE

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NAVIGATING FAITH AND SCIENCE by Joseph Vukov. Grand Rapids, MI: Eerdmans, 2022. 179 pages. Paperback; \$19.99. ISBN: 9780802879615.

Joseph Vukov, Assistant Professor of Philosophy at Loyola University Chicago, takes on the relationship between sciences and Christian faith in his engaging book *Navigating Faith and Science*. Written for a popular audience, Vukov discusses three models for the sciences-faith relationship: conflict, independence, and dialogue.

Ongoing conversation always takes place in the context of a relationship, and I like to think of the sciences-faith relationship as such an ongoing conversation. Conversation in any relationship can be challenging. Similarly for the sciences-faith relationship. Human conversations are dynamic, full of surprising twists and turns, frustrations, joys, and pains. Similarly for conversations among sciences and faith.

Intellectual arrogance negatively affects sciences-faith conversations. Vukov's helpful starting point in chapter 1 frames intellectual humility as crucial to navigating the sciences-faith relationship. He argues that intellectual humility involves "a cognitive aspect (accurate self-assessment), an emotional aspect (not being caught up in one's own desire to be right), and most importantly, a purposeful aspect (aiming at the truth)" (p. 15). Vukov has insightful things to say about intellectual humility as a human virtue reflecting appropriate appraisal (Rom. 12:3) of our finitude. He rightly points out that a confident faithful Christian "is not intellectually arrogant," but trusts deeply in God's promises and wisdom (p. 25). How does this help with