

Jeffrey Koperski. *Divine Action, Determinism, and the Laws of Nature*. London and New York: Routledge, 2020. 160 pp. \$160 (hbk); \$48.95 (paper).

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Can God act within nature without violating a law of nature? For many theologians, the answer is no if determinism is true. But if God can't act in nature and, as many theologians believe, determinism is true, then deism seems to follow. If deism is to be avoided then these theologians must identify an indeterministic "gap" in nature in which God may act. In *Divine Action, Determinism, and the Laws of Nature*, Jeffrey Koperski challenges this popular framing of the debate regarding divine action. God can act within nature without violating a law of nature, according to Koperski, even if determinism is true. By paying special attention to issues in the philosophy of science, a domain of inquiry largely ignored by many theologians and scientists working on the question of divine action, Koperski develops a model of special divine action that combines a conception of the laws of nature prominent in the modern period with a physicist's (as opposed to a theologian's or philosopher's) conception of determinism. The proposed "*neoclassical model*" (3) is a *via media* between divine interventionism and noninterventionism, upholding, on the one hand, God's special divine action within nature without reference to God's violation of any laws of nature and, on the other hand, without any reference to some indeterministic causal gap in which God must act.

On a natural reading of Scripture, God sometimes breaks the laws of nature. Thus, the "default position" (11) for the theists is some version of divine interventionism. In Chapters 2 and 3, Koperski maps the conceptual terrain regarding special divine action by first considering reasons to reject the default position and then by exploring noninterventionist and nonviolationist alternatives. There are theological and scientific reasons for rejecting divine interventionism. Regarding theology, Leibniz argued that a universe created by a perfect God would be in no need of tinkering or upkeep via divine intervention. Moreover, if God did intervene, say to prevent an evil from occurring, it becomes utterly mysterious why he doesn't prevent more, or all, evils. Regarding science, we are told that the universe is causally closed. Physical effects require a physical cause and for this reason, divine interventionism is difficult to uphold scientifically. Koperski thinks none of these reasons are decisive. They do, however, motivate the need to explore alternative conceptions of divine action.

Koperski considers two versions of divine noninterventionism and three versions of nonviolationism. According to the two noninterventionist views, Thomism and pantheism, God does not immediately bring about any effects within the physical universe. For the Thomist, God and the world are distinct and God, the primary cause, acts in and through secondary causes. According to pantheism, God and nature are not distinct, rather nature is "in" God in some sense, rendering divine intervention metaphysically impossible. Koperski thinks that neither of these noninterventionist models are attractive since they leave God with

little to no freedom to act; in the former God is constrained by secondary causes, in the latter, God has no freedom whatsoever to act in nature, leaving God impotent to prevent evil.

Three versions of nonviolationism—pneumatological naturalism, emergentism, and divine quantum determination—hold that God acts in the world without violating any laws of nature. According to pneumatological naturalism *all* natural events are divine events, the result of the Spirit's work in and through nature. An emergentist model of divine action employs the ideas of ontological (strong) emergence and downward causation to identify a top-level from which God acts in the world without violating any (lower-level) laws. Regarding divine quantum determinism, the idea is that God can get the outcome he wants by selecting between ontologically random quantum possibilities which then “amplify” from the microworld to the macroworld. While each of these models have certain good-making features, in the end, Koperski thinks that they all are unattractive: pneumatological naturalism collapses into occasionalism, emergentism is probably unworkable due to causal drainage issues since higher level causes depend on lower level causes, especially if the idea of “levels” in nature is reified, and the prevalence of macroscale insensitivity to changes at lower levels leaves little room for God genuinely to effect nature via quantum randomness. For at least these reasons, Koperski thinks a new model of divine action is needed. To develop this new model, Koperski turns to the historical development of the concept of a “law of nature.”

While it is common today to explain the orderliness of nature in terms of laws, it was not always so. In the pre-modern era, as Koperski explains in Chapter 4, the orderliness and stability of nature was thought to be grounded in the creaturely essences of finite substances, complete with their causal powers and dispositions. This Aristotelian understanding of nature began to unravel, perhaps surprisingly, during the thirteenth century over theological worries. If essences exist, it was argued, then there are unacceptable limits to what God can do. Furthermore, if the order and stability of nature is grounded in creaturely essences, then God's governance of the world is remote; God governs through intermediaries. This too is thought to be unacceptable, running afoul of the doctrine of divine sovereignty. These worries, along with a growing unease about “occult” and unknowable essences, resulted, by the seventeenth century, in a fundamental shift in man's understanding of the universe. Talk of substantial forms, teleology, and the like were jettisoned and replaced with a conception of a mechanistic universe governed by divine decree. Laws of nature, for the early moderns, were nothing but the direct rule of God over the universe.

This early modern conception of laws as divine decrees soon gave way to the more common conception of laws as entities in their own right. In Chapter 5, Koperski surveys the four main contemporary views in philosophy of science regarding the nature of laws. While Humeanism, dispositionalism, and counterfactualism are considered live options by Koperski, he thinks that some version of the fourth contemporary theory of laws, nomological realism, is most attractive. According to nomological realism, laws are fundamental; they “have their own metaphysical standing” (97). Not only does this conception of laws fit best with what most people think about laws when not in the philosophical seminar room, it has also shown itself over the last three centuries to be incredibly fruitful in advancing science. But contemporary versions of nomological realism (Koperski considers David Armstrong's universals account and Tim Maudlin's primitive laws account) are theologically unacceptable for the same reason the early moderns thought essences were unacceptable: they have “a kind of metaphysical autonomy over and responsibility for why the universe runs the way it does” (99) that weakens God's sovereignty. But there is a version of nomological realism that identifies laws with divine decrees—held by the early moderns and recently dubbed “decretalism” by Alvin Plantinga—that deserves greater attention.

Koperski thinks that decretalism is an attractive theory regarding laws since it is a version of nomological realism requiring no increase in ontological economy for the theist (since God is already in the picture anyhow) yet without appeal to intermediaries. Koperski asks, “What ultimately accounts for changes of state within a system that occur according to fixed regularities?” (101). With respect to change, there is no reason, according to Koperski, to turn to metaphysics for an answer. “Forces and energy are responsible for moving systems from state to state, including forces that come into play at higher levels” (103). Koperski realizes, however, the need for metaphysics when it comes to explaining orderliness. “Laws are not needed to account for the change part of the question. They are needed to account for fixed regularities” (104). But, in order to avoid occasionalism, laws don’t govern nature in virtue of “some sort of metaphysical *oomph* that makes things happen” (104). Taking his cue from Murray Gell-Mann’s *totalitarian principle*, i.e., any non-forbidden process in a physical system occurs, Koperski suggests that one plausible way of understanding *how* laws—i.e., divine decrees—govern is in terms of *permission* rather than *production*. At every level of concrete material reality, “laws impose constraints. When God decrees a law of nature, a range of possibilities is being fixed” (104).

Even with a concept of laws as divine permissions in place, the central question of how God acts in the world to bring about a specific effect remains. In Chapters 6-8, Koperski provides a scientifically informed answer to this question, filling out his neoclassical model of divine action and defending it from objections. Contrary to the common belief of theologians and philosophers, determinism is not a genuine barrier to divine action. This is because the kind of determinism in view for the physicist allows for contingency in the initial conditions of physical states within a system. Just as my placing a stick in a river would change the flow of water without violating any laws of nature, God’s influence of contingent elements in physical systems would change the future state of that system without violating any laws. As Koperski nicely summarizes: “The laws never break; they flow” (135).

The distinction between nonnomic features of physical systems and laws of nature is key to understanding Koperski’s proposal. God can tweak the nonnomic conditions of a physical state without violating any laws, and in this way, God can bring out a desired effect in nature. How God in fact acts on this model depends on ontology. If some version of reductionism is true, then God acts by exciting or dampening the fundamental quantum field which in turn will affect higher level phenomena. If emergentism is true, then God acts at multiple levels within the universe in ways appropriate to that level. In either case, God does not violate any laws of nature. The resultant model of divine action is immune to the changing winds of contemporary physics and does not depend on identifying some indeterministic joint through exotic physics in which God acts. Whether determinism or indeterminism in nature turns out to be true, God is free to act by influencing nonnomic conditions of physical states without violating any laws.

One strength of Koperski’s book, and his work in general, is his penchant for bringing philosophical clarity and precision to various debates taking place at the intersection of theology and science. Upon reading his book, I’m left wondering if the whole discussion over divine action that has so animated the Divine Action Project over the last couple decades—with its continuous appeal to what Koperski dubs “exotic physics”—could have been averted, or at least not bogged down in the singular quest for some indeterministic gap in nature. *Of course*, or so it seems to me, the theologians involved in this Project would have benefited (and now: will benefit) from conceptual clarity on key concepts related to special divine action, including those so lucidly analyzed by Koperski such as “law of nature” “violation” and “determinism.”

As Koperski notes, however, not everyone will sign off on every move he makes. Nor will everyone be happy, in the end, with his proposed nonviolationalist model. As someone who finds much to love about the book, I too can—and will—quibble over some moves made along the way and raise some worries with the resultant model. I'll confine myself to three worries.

First, a metaphysical worry: some parts of the world present themselves to us as *fundamentally powerful* in a way inconsistent with Koperski's decretalism. To give one example, David Oderberg notes that biological organisms display *immanent causation*, "causation that originates with an agent and terminates in that agent for the sake of its self-perfection."¹ Immanent causal activity occurs, for instance, in the metabolizing of matter/energy by a biological agent for its sustenance, maintenance, and development. The important point is that this immanent causation indicates that there is a deep unity in biological organisms that is difficult to explain with only categorical (i.e., non-modal) properties distributed throughout spacetime and external non-productive laws of nature. Moreover, it seems that on decretalism, finite, bodily, personal causal *agents* are left out of the picture. Koperski is free, of course, to postulate Cartesian souls to account for conscience experience and agency. But this points to my deeper worry. It seems to me that Koperski is trying to fit the science of physics and chemistry into his philosophy of science (all commendable), but without much attention to issues in first philosophy. Questions related to fundamental ontology (and fundamental mereology) are either secondary or ignored all together. I think this is a mistake. Serious foundational work in ontology is needed if Koperski hopes to develop a robust account of God's action in the world.

My second worry is about the consistency of Koperski's decretalism with current science. With his focus on physics and chemistry, Koperski has neglected key insights from the special sciences of biology, neuroscience, and psychology that provide evidence of genuine manifestations of capacities or powers within biological organisms. In particular, as Carl Craver and W. Bechtel note, "The biological world, and most of the world besides, is populated by multilevel mechanisms."² These mechanisms, according to the defenders of the new mechanist philosophy, are pervasive and *causally* anti-reductive, and thus inconsistent with Koperski's decretalism.

My final worry is theological: I worry that Koperski's decretalism is unstable, threatening to collapse into either deism or occasionalism. This worry will surprise Koperski given his explicit desire to avoid deism and occasionalism. In the final section of the book, Koperski addresses the charge that his decretalism is a form of occasionalism. He states, "A law is a one-time decree that needs no further action on God's part. There is no special work regarding the laws for God to do apart from sustaining the universe in existence" (154). Apart from the initial decree, there is nothing, it seems, for God to do to "move things along" (156). Thus, it's not clear, on decretalism, that God providentially controls the world. Natural laws, unlike the Humean non-governing view, *do* govern, we are told, via permission. I can't shake the thought that this is a distinction without much of a difference, however. On the Humean view of laws, there is just one event followed by another, period. On Koperski's view of laws, there is just one event followed by another, constrained only by the fixed range of possibilities. This

¹ David S. Oderberg, "The Great Unifier: Form and the Unity of the Organism," in *Neo-Aristotelian Perspectives on Contemporary Science*, edited by William M. R. Simpson, Robert C. Koons, and Nicholas J. Teh (New York: Routledge, 2018), 211.

² Carl Craver and William Bechtel, "Top-down Causation Without Top-down Causes," *Biology and Philosophy* 22:4 (2007), 562.

seems close to deism. Of course, God is free to meddle within nature without violating laws, given the nonnomic conditions of physical systems. But that is occasionalism since God is the only genuine causal agent or power that acts within the material universe! In the end, I'm left wondering how God in fact governs the world beyond mere permissions of (ontologically opaque) energy and force.

I have no doubt that Jeff has plausible replies to my worries. Those replies, I believe, would continue to move this fruitful dialogue forward. For that reason, I highly and heartily recommend Koperski's work to philosophers, scientists, and theologians working on divine action theory.