

The End of Law? Law, Theology, and Neuroscience.

By David W. Opderbeck. Eugene: Cascade Books, 2021.

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In his ambitious book, *The End of Law? Law, Theology, and Neuroscience*, David W. Opderbeck takes on the difficult question of the relationship between religion and science. He is particularly concerned with what he calls “neurolaw,” a term that refers to the attempt to reduce all legal phenomena to psychology (2–3). Reduction of the subtle art of legal judgment to psychological determinism is, for him, an exemplar of the goal of natural sciences, and it has resulted in materialist ontologies that dispense with transcendence (51).

Relying on *The Last Human: A Guide to Twenty-Two Species of Extinct Humans*,¹ Opderbeck argues that the anthropological record does not find evidence of an essence of human nature (107–17). Human beings, he believes, are defined by their cultural and social traits, which include language and law. To understand human nature, he argues, one must examine the sociocultural features of human groups. Reduction is impossible. He argues instead, following Steven Horst, for a “cognitive pluralism” in which reduction of each academic discipline constitutes its own domain of theories about how creatures survive and evolve (139–41).² Science itself is a sociocultural phenomenon that, for Opderbeck, has no special or unique epistemological or metaphysical claim. In this way, he attempts to domesticate science by positioning it alongside other cultural forms, such as art, music, and theology.

Opderbeck’s theological method seeks knowledge of the transcendent by examining the limits of knowledge of moral rectitude. This is not an apophatic theory, however, for he argues that theology seeks knowledge of the transcendent through sociocultural phenomena that arise from the struggle of a people to find a sense of moral righteousness (104). For him, neo-Aristotelian metaphysics is the site for the development of Christian understanding, and thus, he believes, advances a recovery of Aristotle’s hylomorphism (substance and form) and moral teleology (final causes). His claim appears to be that an Aristotelian hylomorphism is necessary to maintain a metaphysically teleological conception of the moral good (171–73).

¹ G. J. Sawyer and Viktor Deak, *The Last Human: A Guide to Twenty-Two Species of Extinct Humans*, with text by Esteban Sarmiento, G. J. Sawyer, and Richard Miller (New Haven: Yale University Press, 2007).

² Citing Steven Horst, *Beyond Reduction: Philosophy of Mind and Post-Reductionist Philosophy of Science* (New York: Oxford University Press, 2007).



Christianity, he argues, developed knowledge of the moral good through the evolution of sociocultural systems, especially law. For him, a natural law theory that is supported by a metaphysically teleological axiology (concept of the moral good) is the foundation for understanding the common good. A return to the traditional Christian natural law jurisprudence is necessary, he argues, because the essential nature of distinctly human moral purposes can be discerned within the natural law tradition (200–02).

A Century of Change

The argument could be improved by closer engagement with the information revolution and its scientific foundations over a century of change. The relatively sudden success since the 1940s of Shannon information theory (named after Claude Shannon, its founder) and the advances in computer science are transforming the sciences and social sciences. Notably, recent work in population genetics (impossible without computational genetics) suggests that human beings developed with tremendous diversity, and it makes little sense to look for an eternal essence. The information revolution is founded on early twentieth-century philosophy, which was shaped by new concepts like non-Euclidean geometry and Hilbert spaces. As a result, philosophers rejected the naïve realism of Aristotelian metaphysics that Opderbeck seeks to recover, for Aristotelian metaphysics is not useful for contemporary mathematics or information science. Indeed, Ludwig Wittgenstein's first book review was a thoroughgoing rejection of Aristotle's metaphysics.³

In the first decades of the twenty-first century, the science of information has been transforming the sciences and the social sciences. Information is now viewed as a fundamental physical property related to the second law of thermodynamics in classical physics with significance in interpreting complex systems theory. The importance of information to ontology has led some philosophers (for example Luciano Floridi⁴) to advocate for a metaphysics of *ontic* structural realism that views fundamental physics as mathematically specified structures without self-individuating objects. For example, the physicist Carlo Rovelli argues that the essence of fundamental particles is less significant than the order that arises from them, and the measure of order and chaos is information. Entropy and information are united in a single formulation, and this unfolding of order into disorder is time's arrow: the only nonreversible process in classical physics. The passing of time appears to mark the increase in entropy and increase of information in a system. Time seems central to the information revolution.⁵

Opderbeck touches only lightly on these concerns, but they are the foundational debates in the contemporary mainstream of jurisprudence. For example, H. L. A. Hart draws from Wittgenstein's account of following a rule.⁶ Wittgenstein's logic was developed by Rudolf Carnap's logical positivism,⁷ Willard Quine's naturalism in epistemology is founded on

³ Ludwig Wittgenstein, review of *The Science of Logic: An Inquiry into the Principles of Accurate Thought and Scientific Method*, by P. Coffey, *Cambridge Review* 34, no. 853 (1913): 351.

⁴ Luciano Floridi, *The Philosophy of Information* (Oxford: Oxford University Press, 2011).

⁵ Carlo Rovelli, *The Order of Time*, trans. Erica Segre and Simon Carnell (New York: Riverhead Books, 2018).

⁶ H. L. A. Hart, *The Concept of Law*, 3rd. ed. (Oxford: Oxford University Press, 2012). For a discussion of Wittgenstein's influence on Hart, see Anthony J. Sebok, "Finding Wittgenstein at the Core of the Rule of Recognition," *Southern Methodist University Law Review* 52, no. 1 (1999): 75–110.

⁷ Rudolf Carnap, *The Logical Structure of the World, and Pseudoproblems in Philosophy*, trans. Rolf A. George (Chicago: Open Court Press, 2003).

coherence,⁸ and Hillary Putnam rejects the fact/value dichotomy.⁹ As a result, mainstream jurisprudents are no longer realists: Quine was influential for Brian Leiter's naturalized jurisprudence;¹⁰ and some sociological legal theorists, among them Brian Tamanaha,¹¹ still follow a version of C. S. Pierce's pragmatism, which is founded on the usefulness of claims rather than correspondence to metaphysical reality.¹² Anti-realist legal theories, like Richard Rorty's neo-pragmatism,¹³ which influence the later work of Richard Posner,¹⁴ and critical theory interpretations of Jacques Derrida's deconstruction deny foundationalism altogether.¹⁵ Against all this, Opderbeck simply asserts a return to the naïve realism of Aristotle without further explanation. Moreover, the new field of computational law uses the computer as a tool for exploring the nature of legal reasoning and analysis through statistical mechanics and algorithmic computation. It is widely understood that a computational system can mimic many aspects of legal reasoning and that legal events can be predicted through statistical analysis. Law and legal practice are being subsumed under the mathematics of information science, and this is relocating law's function in society. Psychological theories of law, like neurolaw, can also be reduced to information science and social physics.

The Metaphysical Status of Time

Concepts of time appear to provide some fertile points for dialogue between science and theology. Since the time of Einstein and Niels Bohr, physicists have rejected the common-sense intuition of time as a uniform and universal fundamental dimension. Now, the nature of time is disputed: it sits in the crux of a contemporary crisis in physics that seeks unification of the general theory of relativity and quantum mechanics. In the cosmological scale of the general theory, time runs at different speeds depending on gravitational forces. But in the world of quantum mechanics time appears to vanish altogether. Attempts to unify the two theories have led physicists to question whether time is a fundamental property at all. Time may be an emergent phenomenon from quantum events. These debates from the physics of time resonate with recent theological reconsiderations of Christian neo-Platonic understandings of nature, for example Willemien Otten's *Thinking Nature and the Nature of Thinking*, David Bentley Hart's *You Are Gods*, and John Milbank's *Theology and Social Theory*.¹⁶ These works explore Augustine's theology, in which time stands as a mysterious noetic artifact of the Fall, similar to the notion of emergent time now put forward by physicists.

⁸ W. V. Quine, "Epistemology Naturalized," in *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969), 69–90.

⁹ Hilary Putnam, "The Collapse of the Fact/Value Dichotomy," in *The Collapse of the Fact/Value Dichotomy, and Other Essays* (Cambridge, MA: Harvard University Press, 2003), 1–63.

¹⁰ Brian Leiter, "Rethinking Legal Realism: Toward a Naturalized Jurisprudence," in *Naturalizing Jurisprudence: Essays on American Legal Realism and Naturalism in Legal Philosophy* (Oxford: Oxford University Press, 2007), 15–58.

¹¹ Brian Z. Tamanaha, *A Realistic Socio-legal Theory: Pragmatism and a Social Theory of Law* (Oxford: Oxford University Press, 1999).

¹² Charles Sanders Pierce, "Pragmatism as a Principle and Method of Right Thinking," in *Pragmatism as a Principle and Method of Right Thinking: The 1903 Harvard Lectures on Pragmatism*, ed. Patricia Ann Turrissi (Albany: State University of New York Press, 1997), 107–256.

¹³ Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1979).

¹⁴ Richard A. Posner, *Law, Pragmatism, and Democracy* (Cambridge, MA: Harvard University Press, 2003).

¹⁵ For a discussion of Derrida's influence on legal thought, see Jack M. Balkin, "Deconstruction's Legal Career," *Cardozo Law Review* 27, no 2 (2005): 719–40.

¹⁶ Willemien Otten, *Thinking Nature and the Nature of Thinking: From Eriugena to Emerson* (Stanford: Stanford University Press, 2020); David Bentley Hart, *You Are Gods: On Nature and Supernature* (Notre Dame: University of Notre Dame Press, 2022); John Milbank, *Theology and Social Theory: Beyond Secular Reason* (Oxford: Blackwell, 1990).

For Augustine, time is mundane and earthly, but in the eternity of the Trinity time is transcendent and past, present, and future are simultaneously known to God. Since all the events on the timeline are laid out for inspection, the entire evolutionary history can be viewed all at once. It would show where determinism and historical accident take place for the entire evolutionary history of the universe. From an extratemporal perspective, the human evolutionary tree emerges from proto forms to become what we now call human and extends into a future currently unknown to us but available to the eternal witness. The literal Adam would not have an eternal essence; Adam would be the whole of all prior beings in the tributaries of the river of human development and all subsequent developments. Adam's soteriological status would include the whole divine economy from the earliest protohuman bacteria to the salvific status of whatever final being will wait to be welcomed into heaven at the end of time. From a divine perspective, nature and grace, metaphysical dichotomies for Thomism, are only noetic distinctions.

In sum, a twenty-first-century Christian theory of natural law must encounter the metaphysical claims of physics where there are no essences, and where time is not what it seems. It is only through such an encounter that the evolution of complex social systems like science, culture, society, law, and religion might be understood both as systemic processes controlled by the principles of social physics and simultaneously as the presence of the irreducible mystery of the Trinity. Material being is controlled by entropy, a temporal phenomenon that unfolds in the irreducible mystery of time. Time is where theology and physicists might meet, and from there the soteriology of law might be apprehended.