

FORUM:
GOD, SCIENCE, AND HISTORICAL EXPLANATION

2.

NO ROOM FOR GOD? HISTORY, SCIENCE, METAPHYSICS,
AND THE STUDY OF RELIGION

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ABSTRACT

Despite widespread beliefs to the contrary within the secular intellectual culture of the modern academy, scientific findings are not necessarily incompatible with religious truth claims. The latter include claims about the reality of God as understood in traditional Christianity and the possibility of divinely worked miracles. Intellectual history, philosophy, and science's own self-understanding undermine the claim that science entails or need even tend toward atheism. By definition a radically transcendent creator-God is inaccessible to empirical investigation. Denials of the possibility or actual occurrence of miracles depend not on science itself, but on naturalist assumptions that derive originally from a univocal metaphysics with its historical roots in medieval nominalism, which in turn have deeply influenced philosophy and science since the seventeenth century. The metaphysical postulate of naturalism and its correlative empiricist epistemology constitute methodological self-limitations of science—only an unjustified move from postulate to assertion permits ideological scientism and atheism. It is entirely possible that religious claims consistent with the empirical findings of the natural and social sciences might be true. Therefore historians of religion not only need not assume that atheism is true in their research, but they should not do so if they want to understand religious people on their own terms rather than to impose on them an undemonstrated and indemonstrable ideology. Exhortations to critical thinking apply not only to religious views, but also to uncritically examined secular ideas and assumptions, however widespread or institutionally embedded.

Professor Følrand's article, "Acts of God? Miracles and Scientific Explanation," is exemplary in the etymological sense: it exemplifies the sorts of uncritically accepted presuppositions that I criticized in the essay to which his article is partly a response.¹ I will get to the evaluation of miracles, including the alleged miracle recounted and analyzed in his article. Other issues are more fundamental.

Følrand's views about miracles rest on misapprehensions about what the natural sciences can and cannot tell us, and on an apparent unfamiliarity with a traditional Christian understanding of God in relationship to the natural world. In this misunderstanding and lack of awareness he is not unusual. Many scholars in the social sciences and humanities seem to assume that the scientistic ideology dominating the modern academy is true, do not question it, and seem unable to

1. Tor Egil Følrand, "Acts of God? Miracles and Scientific Explanation," *History and Theory* 47 (December 2008), 483-494 (this issue). Page references are in parentheses. Brad S. Gregory, "The Other Confessional History: On Secular Bias in the Study of Religion," *History and Theory, Theme Issue* 45 (December 2006), 132-149.

imagine or are unwilling to consider any alternatives. Very few secular scholars or scientists read intellectually serious philosophy of religion, biblical scholarship, or theology—indeed, many might be surprised to learn that they “still” exist—and so their views about all three tend to be extremely simplistic when they are not categorically dismissive. Almost all secular academics seem to think that the important questions about the relationship between religion and science were settled a century or more ago, in the Enlightenment critique of revealed religion, with the advent of Darwinism, or when modern universities secularized and began further to augment the secularization of society. What more is there to be said? When will these uncomprehending religious believers finally admit that the scientific worldview is simply, in the words of the philosopher John Searle, “the world view that we have,” and acknowledge that their premodern beliefs are incompatible with the demands of modern knowledge?² As a sociological description, Følrand’s depiction of what he calls “the scientific community” (492) in European and North American universities today is largely accurate. Yet that an institutional reality has arisen for historically intelligible reasons says nothing about whether its metaphysical and epistemological assumptions, however intellectually justified they might once have seemed, have turned out to be merely ideologically dominant.

I

Følrand argues that the worldviews of modern science and of most religions (including traditional Christianity) are radically incompatible. Scientific explanations of “how the world works” have “no room for God or other supernatural entities.” Religions claim the opposite: such entities exist and are “active in the world, having the ability to affect matter and matters” (484). Nowhere is this incompatibility more apparent, Følrand contends, than in the case of alleged miracles, such as the one about the edible plant that reportedly grew afresh each night and so saved Anders and Ola Engebretsen from starvation on a tiny island in a Scandinavian lake in August 1652. Confronted with the account written decades later about what happened, what should historians do—accept the claims or explain them in the secular terms dictated by the natural sciences? Restricting ourselves to explaining the evidence rather than the events is insufficient if the latter is our objective; recourse to the brothers’ conception of divine providence does not offer a naturalistic explanation about the plant; reference to an epistemological divide across the centuries is inadequate because many people today continue to claim that God acts in the world; and limiting ourselves to understanding past people on their terms ignores the historian’s duty to explain them in our terms and to substitute our ontology for theirs. Consequently, due especially to the implausibility of alleged miracles in the light of “accepted *scientific* beliefs (truths)” (492; Følrand’s emphasis), Følrand argues that scholars in “social science and the empirical humanities” (484) must conduct their research and present their findings according to the strictly naturalistic ontology of the natural sciences, if they are to be part of “the scientific community” (492). This demand, he claims, is due not to any unwarranted epistemic privilege enjoyed by science, but is simply the result

2. John Searle, *The Rediscovery of the Mind* (Cambridge, MA: MIT Press, 1992), 90.

of modern science being empirical, whereas religion is “unempirical and unscientific.” Between the two there is an intellectually “unbridgeable gap” (494).

According to Følrand, not only are secular assumptions widespread in the academic study of religion, they are rightly institutionalized and constitute the necessary requirements according to which all scholars, *qua* scholars, must work and write. Even historians of religion, Følrand asserts, are obliged to explain the beliefs and practices of those whom they study in secular terms circumscribed by the naturalistic metaphysics of the natural sciences. In Følrand’s opinion the natural sciences properly set the terms for all contemporary intellectual life, which is necessarily secular and which entails that as an academic discipline even theology “must conform to scientific atheism” (493). Practitioners of all disciplines must conform or be excommunicated from academic life. Such dedicated genuflection before the high altar of the natural sciences might be thought curious coming from a historian. Have other disciplines, including history and philosophy, nothing to say about it? Do the assumptions, methods, and findings of the natural sciences themselves intellectually demand it?

Were Følrand’s views not still shared by so many academics today, reading his article would seem like intellectual time-travel. In it we are, as it were, transported back to a late-nineteenth-century world innocent of the revolution in post-Newtonian physics, in which science and religion “appear mutually exclusive,” the one clearly “an empirical quest” that necessarily excludes any and all “unempirical and unscientific” claims of the other (484, 493). “I am aware,” he writes, “of no successful attempts to unite, in a logically consistent language, the competing world-views of science and religion—religion defined in a substantive way, as entailing belief in supernatural beings or powers that can influence the course of events in the material world” (484). Presumably Følrand *is* aware that for decades, dozens of scholars and scientists have been presenting sophisticated research about the relationship between the two in ways that neither deny the findings of science nor necessarily demythologize traditional religious claims.³ Entire research institutes

3. For just a few recent examples in an enormous literature, see Ian G. Barbour, *When Science Meets Religion* (New York: HarperCollins, 2000); Stephen Barr, *Modern Physics and Ancient Faith* (Notre Dame, IN: University of Notre Dame Press, 2003); *Chaos and Complexity: Scientific Perspectives on Divine Action*, ed. Robert John Russell, Nancy Murphy, and Arthur R. Peacocke (Vatican City: Vatican City Observatory, 1995); Francis S. Collins, *The Language of God: A Scientist Presents Evidence for Belief* (New York: Free Press, 2006); N. H. Gregersen and J. W. Van Huyssteen, *Rethinking Theology and Science: Six Models for the Current Dialogue* (Grand Rapids, MI: Eerdmans, 1998); John F. Haught, *Deeper than Darwin: The Prospect for Religion in the Age of Evolution* (Boulder, CO: Westview Press, 2003); Joachim Illies, *Schöpfung oder Evolution: Ein Naturwissenschaftler zur Menschenwerdung* (Zurich: Edition Interfrom, 1979); Stanley Jaki, *The Road of Science and the Ways to God* (Edinburgh: Scottish Academic Press, 1978); R. Jastrow, *God and the Astronomers* (New York: W. W. Norton, 1992); Christopher C. Knight, *The God of Nature: Incarnation and Contemporary Science* (Minneapolis: Fortress Press, 2007); Kenneth R. Miller, *Finding Darwin’s God: A Scientist’s Search for Common Ground between God and Evolution* (New York: Harper, 1999); Arthur R. Peacocke, *Evolution: The Disguised Friend of Faith? Selected Essays* (Philadelphia and London: Templeton Foundation Press, 2004); John Polkinghorne, *Quantum Physics and Theology: An Unexpected Kinship* (New Haven and London: Yale University Press, 2007); Robert John Russell, *Cosmology from Alpha to Omega: The Creative Mutual Interaction of Theology and Science* (Minneapolis: Fortress Press, 2008); Keith Ward, *Religion and Revelation: A Theology of Revelation in the World’s Religions* (Oxford: Clarendon Press, 1994), esp. 283-343; and Mark W. Worthing, *God, Creation, and Contemporary Physics* (Minneapolis: Fortress Press, 1996).

are devoted to this endeavor, such as the Vatican Observatory and the conferences and projects it sponsors, the Center for Theology and the Natural Sciences at the Graduate Theological Union in Berkeley, California, and the Georgetown Center for the Study of Science and Religion in Washington, DC. Entire book series are dedicated to the enterprise, such as “Theology and the Sciences” from Fortress Press (now with more than twenty-five titles published). Yet Førland cites none of this directly relevant scholarship in his article.

For reasons quite different from those implied by Førland, to *unite* scientific and religious worldviews successfully seems unrealistic, to put it mildly. The fact of the matter is that scientists today have no idea how to unite *scientific* knowledge about reality *within a scientific* worldview. In fact, the latter goal paradoxically recedes in proportion as scientific discovery advances: the more scientists learn, the less they grasp in any integrated, “logically consistent” way “how the world works.” Nor is this simply the result of research specialization, the proliferation of data, and the ever-expanding number of scientific sub-disciplines. Even within *individual* natural sciences, including physics—the science long considered foundational for our understanding of the natural world—the relationships among classical Newtonian physics, quantum mechanics, general relativity, and chaotic systems remain utterly perplexing.⁴ The distinguished theoretical physicist Brian Greene puts it bluntly: “As they are currently formulated, general relativity and quantum mechanics *cannot both be right*,” even though they are the “two foundational pillars upon which modern physics rests.”⁵ By the 1920s quantum theory itself, as the solution to the wave-and-particle conundrum of the nature of light, demanded that standard logic—and thus ordinary rationality—be abrogated in order to account for the measurable realities of subatomic phenomena.⁶

Since 1984, nearly all of theoretical physicists’ efforts to unify the Standard Model of elementary particle physics with general relativity have been devoted to various forms of superstring theory.⁷ In any of its expressions, superstring theory transgresses any straightforward understanding of physics as an empirical investigation of the material world. Positing six or seven additional, inaccessible dimensions of space-time besides the four of our experience and observation, superstring theory has yet to make any verifiable or falsifiable experimental predictions. For this reason, some eminent physicists have been skeptical of it since the 1980s; others, including Leonard Susskind, David Gross, and most influentially Edward Witten, have supported it. Superstring theorists have devised increasingly ingenious and elaborate ways to make it “work” mathematically, even though they cannot agree on what it is, or even whether it might have just one or an astronomi-

4. John Polkinghorne, *Exploring Reality: The Intertwining of Science and Religion* (New Haven and London: Yale University Press, 2005), 11-30; Lee Smolin, *The Trouble with Physics: The Rise of String Theory, the Fall of a Science, and What Comes Next* (Boston and New York: Mariner Books, 2007), 4-8. On chaotic systems in relationship to Newtonian physics and quantum mechanics, see James Gleick, *Chaos: Making a New Science* (New York: Viking Penguin, 1987), 6-7, 184-187, 250-251, 314.

5. Brian Greene, *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory* [1999] (New York: Vintage Books, 2003), 3 (italics in original).

6. Polkinghorne, *Exploring Reality*, 92-93.

7. Peter Woit, *Not Even Wrong: The Failure of String Theory and the Search for Unity in Physical Law* (New York: Basic Books, 2006), esp. 149-159, 221-236.

cal number of valid articulations. Some recent critics, such as Peter Woit, have denied its status as a scientific theory at all, because despite the prodigious efforts of a generation of physicists, superstring theory remains thus far empirically fruitless.⁸ But whether or not some version of superstring theory proves eventually to be true, the discoveries of twentieth-century physics make clear that the universe, with its dark matter and dark energy, its intricate swarms of subatomic particles and inexplicably small cosmological constant, its strange symmetries and bizarre geometrical spaces, is orders of magnitude more complex than anything anyone in the nineteenth century could have anticipated. The greatest physicists of the era before Einstein and Bohr—whether Newton or Laplace, Faraday or Maxwell—seem in retrospect quaintly naïve. Insofar as physicists, to say nothing of scientists as a whole, cannot coherently combine their *own* discoveries and theories “in a logically consistent language” within “the scientific worldview,” it is hard to see how anyone else might be expected to combine this worldview with, for example, specific religious truth claims in Christianity, Judaism, or Islam. Theologians can hardly be expected to do their work and that of physicists as well.

What can be done is to show that at least some substantive, traditional religious claims are entirely compatible with the findings of science. This requires that we question the complacent acceptance of “the scientific worldview” as Følrand and most secular scholars still construe it. And this in turn requires a historical awareness of the origins and development of the philosophical assumptions underpinning “the scientific worldview” as commonly understood. Such awareness then permits us to distinguish between the legitimate scope of scientific inquiry and the scientific ideology that lies behind the sociological reality of the secularized academy.

The secularized institutional world and intellectual culture of contemporary academia are the outcome of complex historical processes that stretch back to the Middle Ages. Analysis of this history shows that despite widespread opinion to the contrary, the belief that science and religion are necessarily incompatible does not derive from the methods or findings of the natural sciences themselves. Rather, it rests on particular metaphysical ideas conceptually more fundamental than and historically antecedent to the advent of this belief. The belief that science and religion are incompatible originated in recognizably modern forms among some thinkers in the seventeenth century and has gained strength in surges, for complex reasons, since the mid-nineteenth century and again since the 1960s.⁹ The meta-

8. For four different assessments of the character and future prospects of superstring theory, from the most optimistic to the most critical, see Greene, *Elegant Universe*, and *idem*, *The Fabric of the Cosmos: Space, Time, and the Texture of Reality* (New York: Alfred A. Knopf, 2005); Leonard Susskind, *The Cosmic Landscape: String Theory and the Illusion of Intelligent Design* (New York: Little, Brown, and Company, 2006); Smolin, *Trouble with Physics*; and Woit, *Not Even Wrong*.

9. For the history of this process in elite American public and private universities especially in the later nineteenth and twentieth centuries, see George M. Marsden, *The Soul of the American University: From Protestant Establishment to Established Nonbelief* (New York: Oxford University Press, 1994), and Christian Smith, “Secularizing American Higher Education: The Case of Early American Sociology,” in *The Secular Revolution: Power, Interests, and Conflict in the Secularization of American Public Life*, ed. *idem* (Berkeley and Los Angeles: University of California Press, 2003), 97-159. The antireligious rants of the so-called New Atheists are a recent manifestation in this same history, premised on the same metaphysical assumptions, now metastasized into a shrill ideology

physical views in conjunction with which modern science historically emerged are not the only ones consistent with scientific findings and methods. Furthermore and ironically, considering Fjørland's claims about theology, a particular kind of theological view continues to offer a viable intellectual alternative to the putative unavoidability of "scientific atheism." This alternative view affirms all natural-scientific findings and methodological assumptions, and delineates how at least some substantive religious claims are fully compatible with them. For their part, the natural sciences make clear that neither their findings nor assumptions can determine whether miracles are possible or whether particular alleged miracles have occurred. In short, intellectual history, philosophy, and the assumptions and methods of the natural sciences themselves turn the tables on the alleged epistemological and metaphysical hegemony of the natural sciences as described by Fjørland. The latter is an ideological imperialism masquerading as an intellectual inevitability.

My argument here concerns the relationship between the natural sciences and the dominant religion in relationship to which they developed, namely traditional Latin Christianity in Europe. It does not preclude the possibility of analogous accounts about the relationship between the natural sciences and, say, Judaism or Islam. As such, in other words, it is neither an argument for the truth of any particular religious views, nor one that disputes any findings of the natural sciences. Rather, it explores the historical genealogy and mistaken assumption of the ostensible incompatibility of religion and science. This in turn provides a basis from which to approach questions about alleged miracles, and more generally, questions about the way in which historians of religion should write about the men and women whom they study. Much more would need to be said to develop the argument fully. Yet however tersely, the present argument seeks to embody just the sort of approach that Fjørland claims should not, and supposedly cannot, be adopted—because it turns not on the truth but on the *viability* of a particular kind of theological view combined with a historical analysis that is itself metaphysically neutral.

II

Fjørland states that "The scientific worldview has no room for God or other supernatural entities," noting that scientists' "explanations of how the world works have no room for supernatural beings" (484, 492). Such seemingly banal expressions are metaphysically—and theologically—loaded. The spatial metaphor is significant (a lack of "room" for God), as is the conception of religion as a rival to science, each of which supposedly competes to explain what is sought,

fueled by recent culture wars over religion's place in Western public life and the violent realities of militant Islamism around the world. See, for example, Sam Harris, *The End of Faith: Religion, Terror, and the Future of Reason* (New York and London: W. W. Norton, 2004); Richard Dawkins, *The God Delusion* (2006; Boston and New York: Mariner Books, 2008); Daniel Dennett, *Breaking the Spell: Religion as a Natural Phenomenon* (New York: Penguin, 2006); Christopher Hitchens, *God is Not Great: How Religion Poisons Everything* (New York: Twelve, 2007); Michel Onfray, *Atheist Manifesto: The Case against Christianity, Judaism, and Islam*, transl. Jeremy Leggatt (New York: Arcade, 2007); and John Allen Paulos, *Irreligion: A Mathematician Explains Why the Arguments for God Just Don't Add Up* (New York: Hill and Wang, 2008).

namely “how the world works” (a phrase repeated seven times in Førland’s article). Hence if science explains something in naturalistic terms, both cause and effect thereby exclude not only supernatural causes but also God’s action or presence, because explanation is conceived as a competitive, natural vs. supernatural zero-sum game. Occam’s razor shaves away what is extraneous: the more science explains the less God is necessary, until eventually and in principle there is “no room for God.” This explanatory displacement is implicitly mapped onto the historical transition from a pre-scientific to a scientific worldview: the Engebretsen brothers “probably believed the earth was the center of the universe; Newton had yet to develop his physics” (488-489). This historical picture fits with the typical narrative of modernization and secularization implicit in Førland’s article: until science rationally showed otherwise, ignorant, superstitious people mistakenly believed that God or gods acted in the world and caused things to happen. Often (though not in Førland’s article) Weberian *Entzauberung* is mentioned as though disenchantment were a quasi-mechanistic effect of discovering ourselves trapped within a materialistic prison of exclusively natural causes, capped by Darwin’s ultimate subversion of any and all human exceptionalism. The supernatural is both defined over against the natural *and* understood to belong to the same conceptual and metaphysical framework. So if God existed, God plus the natural world would be components within a more comprehensive reality.

This conceptualization of the relationship *between* God and the natural world in the modern “scientific worldview” is not itself the result of empirical inquiry. No one found or discovered it. Rather, it is contingent on certain theological presuppositions linked to particular metaphysical views: it makes assumptions about what God would be like if God were real. As it happens, the metaphysics of modern science relies on a univocal conception of being first articulated by John Duns Scotus (c. 1266–1308) in response to Henry of Ghent’s analogical concept of being, which was then further transformed in the fourteenth century by William of Occam (c. 1285–1347).¹⁰ According to them and to Occam’s late-medieval scholastic followers, because being is common to all that exists, including God, it must be conceived as pertaining to God in the same manner as it pertains to all creatures in the natural world, however God is otherwise understood to differ from everything else that exists.

Amos Funkenstein’s brilliant analysis of this “nominalistic revolution” delineated its profound, unanticipated consequences between the fourteenth and early eighteenth centuries.¹¹ The particular confluence of theology and natural science in seventeenth-century thinkers as different as Descartes, Hobbes, Henry More, and Newton combined a nominalist insistence on univocity of expression with

10. For Scotus and Henry of Ghent on this issue, see Stephen Dumont, “Henry of Ghent and John Duns Scotus,” in *Medieval Philosophy*, ed. John Marenbon, in *Routledge History of Philosophy* (London and New York: Routledge, 1998), III, 291-328 at 307-322. On Occam’s univocity as a continuation of Scotus’s, see David Burrell, *Analogy and Philosophical Language* (New Haven and London: Yale University Press, 1973), 185-193. On Occam’s univocity in general, see Armand Maurer, *The Philosophy of William of Ockham in the Light of Its Principles* (Toronto: Pontifical Institute of Mediaeval Studies, 1999), 277-292.

11. Amos Funkenstein, *Theology and the Scientific Imagination from the Middle Ages to the Seventeenth Century* (Princeton: Princeton University Press, 1986), 25-31, quotation on 27.

neo-Stoic Renaissance conceptions of the homogeneity of nature governed by forces. This combination, plus the *de facto* methodological assumption of Occam's razor, established the framework for the eventual retreat of God in modern science and philosophy. A God conceived "clearly and distinctly" as causal agent within the same order as his creation could not but yield ground as the explanatory scope and power of natural causality progressed. In Funkenstein's words, "It is clear why a God describable in unequivocal terms, or even given physical features and functions, eventually became all the easier to discard."¹² Intellectually *au courant*, early-modern Catholic theologians such as Leonard Lessius (1554–1623) and Marin Mersenne (1588–1648) unintentionally contributed to this process, as Michael Buckley has shown. Living in a Europe torn by religious violence and inundated by theological controversy, they wrote about God and combated atheism in the strictly philosophical terms of neo-Stoicism and Platonized Epicureanism, respectively, without any significant reference to divisive ideas about Jesus Christ or religious experience.¹³ The idiosyncratic, seventeenth-century affinity between theology and science analyzed by Funkenstein proved to be a transitory prelude to post-Newtonian deism, which provided the context for the English "great debate on miracles" studied by R. M. Burns and mentioned by Førlund.¹⁴ The same metaphysical assumptions and conception of God led to Hume's skeptical empiricism and argument against miracles, Kant's metaphysics, the neo-Kantian framework of liberal Protestantism, and modern atheism. At the end of the nineteenth century, Andrew Dickson White presupposed the same views in his narrative of the "warfare of science with theology"—and they underlie the common contemporary belief, shared by Førlund, of the total incompatibility of scientific and traditional religious worldviews.¹⁵

But perhaps if God is real, God is not like that. Perhaps God is real, but cannot in principle be conceived as part of, alongside, or in competition with the natural world—that is, perhaps God is not a "highest being" or a "supernatural entity" that can in any sense be properly conceived within or as a component of a more

12. *Ibid.*, 116. Spinoza was far from alone among seventeenth-century thinkers in arguing for the somatization of God and insisting that the divine body must be related to the plenum of space and physical objects. *Ibid.*, 72-116. Koyré covered much of the same territory and reached a similar conclusion in his classic narrative of the emergence of the Newtonian mechanistic worldview, but without seeing the underlying significance of the nominalists' univocal metaphysics of being. Alexandre Koyré, *From the Closed World to the Infinite Universe* (Baltimore and London: Johns Hopkins University Press, 1957).

13. Michael J. Buckley, *At the Origins of Modern Atheism* (New Haven and London: Yale University Press, 1987), 45-67.

14. R. M. Burns, *The Great Debate on Miracles: From Joseph Glanvill to David Hume* (Lewisburg, PA: Bucknell University Press, 1981).

15. Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom* [1896], ed. Bruce Mazlish (New York: Free Press, 1965). The same univocal conception of being was presupposed not only by those thinkers (above all Spinoza) whom Jonathan Israel categorizes as part of the "radical Enlightenment," but also "moderate Enlightenment" thinkers such as Newton and Locke. Israel, *Radical Enlightenment: Philosophy and the Making of Modernity, 1650–1750* (Oxford: Oxford University Press, 2001). For the continuation of the same presuppositions underlying the story in nineteenth-century Britain, see A. N. Wilson, *God's Funeral* (New York: W. W. Norton, 1999); and for the United States in the nineteenth century, see James Turner, *Without God, Without Creed: The Origins of Unbelief in America* (Baltimore and London: Johns Hopkins University Press, 1985), esp. 141-202.

comprehensive reality. In other words, perhaps God is real and is radically distinct from the universe; perhaps God is metaphysically *transcendent*. In Robert Sokolowski's words, God understood in this way "is not a part of the world and is not a 'kind' of being at all."¹⁶ If such a God were real, then the relationship between God and the natural world would be very different from their relationship as construed in late-medieval nominalism, nearly all modern philosophy, and the modern "scientific worldview." If God is real and is radically, otherly transcendent, then *every* quality univocally predicated of God would be a category mistake, including even his existence—which was the point of Aquinas's insistence that there is no genus, not even the genus of being, to which God belongs along with creatures.¹⁷ It was such a view that Henry of Ghent modified and Scotus rejected, leading to the unanticipated and enormously influential trajectory traced by Funkenstein.

A radically transcendent God would be neither outside nor inside his creation. He would not hover beyond the universe (or multiple universes) at unimaginably enormous distances of billions of light-years. Rather, if real, such a God could be wholly present to everything in the natural world precisely and only *because* he would be altogether *inconceivable* in spatial categories. Divine transcendence would thus be not the opposite but the *correlate* of divine immanence. So too, God in this sort of view would be neither temporally prior to nor a cosmic observer of sequential events as they unfold, as if an extraordinarily remote cause of the Big Bang some fourteen or fifteen billion years ago were merely an updating of Voltaire's deistic watchmaker. Rather, God could be fully present to all events and every moment in time precisely and only *because* he would be altogether *inconceivable* in temporal categories. Divine eternity would then be not the opposite but the *correlate* of divine providence.

In any culture, an understandable outcome of such literally unrepresentable characterizations of God, considering the nature of ordinary language and of the human imagination, would be an almost inevitable tendency toward misunderstandings arising from theological formulations themselves. Hence it would seem obvious "in a logically consistent language" (484), for example, that if God and the natural world are radically distinct, God should be conceived as being "outside" or

16. Robert Sokolowski, *The God of Faith and Reason: Foundations of Christian Theology* (Notre Dame, IN: University of Notre Dame Press, 1982), 36. According to Sokolowski, the character and novelty of the traditional Christian conception of God is best seen by contrast with ancient, pagan conceptions: "The pagan sense of the divine is that of the best, highest, greatest, most powerful and most necessary beings within the whole or within the world. There are bound to be many different conceptions of the highest and first substance, depending on what approach is used to come to it. . . . In contrast, such diversities do not occur to the Christian sense of God precisely because it is defined, not by contrast to other beings in the world, but in contrast to the world as a whole. . . . God is not simply the greatest being in the world or the highest principle in a world-view; he is understood as distinguished from the world and from any world-view." *Ibid.*, 46-47. Modern notions of God predicated upon a univocal metaphysics thus recapitulate, in their manner, ancient conceptions of the gods as the highest beings within the universe.

17. Thomas Aquinas, *Summa Theologiae*, I, q. 3, a. 5; see also Robert Barron, *The Priority of Christ: Toward a Postliberal Catholicism* (Grand Rapids, MI: Brazos Press, 2007), 13, and much more extensively, for analyses of Aquinas's view of God informed by Wittgenstein and Lonergan, Burrell, *Analogy and Philosophical Language*, 119-170; *idem*, *Aquinas: God and Action* (Notre Dame, IN: University of Notre Dame Press, 1979).

“beyond” the natural world. Or if this is wrong, then logically and necessarily God must be “inside” or a part of it. But if God is transcendent in ways asserted in traditional Christian theology, both views are mistaken. A transcendent God needs no room, because such a God is not spatial *at all*. A God for whom there is no “room” in the scientific worldview, however, is conceived in precisely these quasi-spatial, metaphysically univocal terms. A correlate to metaphysical univocity is religion understood as a pathetically inadequate, pseudo-scientific competitor to science as a rival system of explanation about “how the world works.” Which is indeed what any form of religion is, if understood as a competitor to science.

A further corollary: if God is real in a traditional, non-univocal way, then all legitimate religious language about God as God would *have* to be metaphorical in its intention and interpretation. It would not simply *happen* to be metaphorical, but must be as a demand correlative to God’s incomprehensibility in relationship to the nature of language. Such recognition of the nature of religious language might serve as a prophylactic against powerful tendencies toward the linguistic and conceptual domestication of divine transcendence, that is, toward verbally and philosophically mediated theological idolatry. But religious language would not *therefore* be mythological, superstitious, primitive, *pre*-philosophical, or *pre*-scientific. It would rather reflect the demands imposed by an awareness of what God is “like,” if such a God is real. We might well therefore *expect* religious language to be loaded with metaphorical, poetic, evocative imagery, some of it running in divergent directions. *None* of it could rightly be taken to describe God adequately or directly. Because if God is real in this sense, then *no* language—religious, theological, philosophical, or scientific—*can* so describe God. This is the point of the apophatic discursive tradition in Christian theology, exemplified in the writings of the Cappadocian Church Fathers. It would then be a mistake born of dubious metaphysical assumptions to expect or demand that God be rendered conceptually, linguistically, or scientifically accessible—as God is in the univocal metaphysics that underpins “the scientific worldview.”

In the modern world, this sort of demand might be linked to a neo-Protagorean intolerance of and refusal to admit the possibility of anything radically transcendent and beyond human comprehension. Because if *this* were admitted, it might imply that human beings are not their own masters, as modern notions of the self protected by Western political institutions insist that we are. This would be heresy to modern, secular, liberal ideologies of the individual. In such anthropocentric ideologies, notwithstanding our putative demotion by Darwin, we are *and must be* the measure of all things.¹⁸

III

Natural scientists, beginning especially in the seventeenth century in physics and the nineteenth century in biology, have built an impressively cumulative corpus of knowledge pertaining to observable regularities in the natural world. On this Før-

18. For insightful remarks on the ways in which scientists frequently portray human beings as both evolutionarily unexceptional and yet as the supreme arbiters of morality and human progress, see Eric Cohen, “The Ends of Science,” *First Things* 167 (November 2006), 26-33.

land and I agree entirely. This growth in scientific knowledge and its predictive powers are indisputable notwithstanding Kuhnian protestations based on paradigmatic ruptures in the history of science (or at least, in the shift from Aristotelian to Newtonian physics), or poststructuralist denials of science's epistemological realism.¹⁹ Scientific findings over the last century in particular have revealed an almost unimaginably complex, frequently counterintuitive universe that resists synthetic human comprehension at scales from the subatomic to the intergalactic, with no end to discovery or adequate integration remotely in sight.

Two central assumptions frame the practice of the natural sciences. They have contributed to the success of the sciences in explaining known natural phenomena in causal terms, and in making predictions about phenomena confirmed by subsequent experiments. About these assumptions as well, Følrand and I seem to agree. The first assumption is the methodological postulate of metaphysical naturalism, which entails that for science to be science, by definition it can pursue, identify, and entertain only natural causes as plausible explanations of natural phenomena, with the universe as a whole regarded as if it were a closed system of natural causes. The second assumption is critical-realist empiricism, an epistemological corollary to the postulate of metaphysical naturalism. This entails that for science to be science, by definition it can examine only what can be observed, investigated, verified, and (in principle) falsified through empirical methods as an extension of human sense perception. What counts as evidence varies in particular contexts in different sciences, but neither putative supernatural realities nor any alleged supernatural causes belong or can belong to science as science.

Note that these stipulations, like conceptions of the relationship between God and the natural world, are not *themselves* empirical. Scientists do not discover in the natural world either the postulate of metaphysical naturalism or the episte-

19. For a convincing critique of Kuhn's antirealist claims and tendency to take the transition from Aristotelian to Newtonian physics as typical of all scientific paradigm shifts, see Steven Weinberg, *Facing Up: Science and Its Cultural Adversaries* (Cambridge, MA: Harvard University Press, 2001), 85-86, 104, 187-209, 268-269. Weinberg is also an astute critic of constructivist and postmodern attacks on scientific realism. *Ibid.*, 91, 132-133, 138-161, 264-270. Some radical postmodern criticisms of scientific knowledge allege that science is no more justified in purporting to represent the reality of the natural world than is any other contingent cultural "construction." Such assertions are probably best understood as a misdirected resentment against the influence of science's impact via its technological applications, and the latter's frequently deleterious impact on our world (for example, environmental destruction, war, global warming). This resentment is transposed into a misguided attack on the epistemological realism of the natural sciences themselves. Of course, all scientific findings and theories remain subject to falsification and amendment, as scientists themselves insist. And of course, the practice of science and application of technology are embedded in institutional and political structures beholden to power, manipulation, deceit, and poor judgment as much as are any other human practices. Recognition and criticisms of *these* realities within critical science studies are extremely important, lest anyone think that scientific findings themselves somehow prescribe political decisions, or that technological applications of scientific findings are morally neutral (itself a dangerous fallacy ignored by those who claim science's authority in order to argue for controversial practices such as stem-cell research or human cloning). But such critiques are analytically distinct from claims about whether science—as opposed to, say, the beliefs of aboriginal tribes or the assertions of Protestant fundamentalist "young-earth creationists"—best explains the structures, processes, and phenomena of the natural world. To conflate the two is sloppy thinking that justifiably arouses the scorn of scientists against postmodern epistemological claims. Seriously to make such claims against the critical-realist epistemology of the natural sciences is to render oneself as intellectually ridiculous as those who claim that the earth is six-thousand years old.

mological stipulation of empiricism. The methodological assumptions that make science what it is derive not from the *findings* of science, but from science's own *philosophical self-limitations*, by means of which it historically has constituted and continues to constitute itself as a distinctive and explanatorily powerful form of human knowledge. It has not "*attained* [the] position" of metaphysical naturalism as a working hypothesis "*because* modern science is an empirical quest" (493; my emphases). No, science *begins* from metaphysical naturalism as a postulate with critical-realist empiricism as its corollary.

What are the implications of empirical inquiry within the scientific enterprise in relationship to the traditional Christian understanding of God? If God is real and metaphysically distinct from the natural world, then *no* science, working within the self-imposed limitations of its methods, could discover him. If anything transcends the universe, then science's own self-definition precludes any scientific investigation of or access to it. So by its very nature, science can say nothing *one way or the other* about the reality of the transcendent God of traditional Christian theology. The very notion expressed by Fjørland, that "the realm of the supernatural has so far been inaccessible empirically" (493), is therefore a spectacular category mistake that implies a univocal metaphysics—as if God might be a surprise resident dwelling just beyond the most distant quasars known to observational astronomers, or inhabiting the unimaginably tiny, vibrating loops conjectured by string theorists. If the "supernatural" were accessed empirically by science, it would by definition not be supernatural, but rather a previously unknown, natural aspect of the universe—as if Zeus were discovered really to dwell on Mt. Olympus.

Fjørland seems unclear about what the natural sciences can and cannot tell us, a lack of clarity related to his embrace of the scientific ideology that dictates the secular discourse dominant in the social sciences and humanities. The intellectually unjustified misstep that provides the foundation for scientism and ideological secularism in the modern academy derives not from science, but from the *transgression* of science's own self-imposed limits. Here is how Fjørland missteps. On the one hand, he properly refers to metaphysical naturalism as "not a dogma but an admittedly basic working hypothesis of modern science" (493). On the other hand, he approvingly cites Edelman's statement, "The physical world *is* causally closed to anything but the interactions of matter-energy" (492; my emphasis). Then he uses this remark and another by Jaegwon Kim to justify metaphysical naturalism as the basis for acknowledging "accepted *scientific* beliefs (truths)" (492; Fjørland's emphasis). Not only do "beliefs" here magically become "truths," but the methodological postulate of metaphysical naturalism and its epistemological corollary of empiricism are mischaracterized as beliefs to begin with. In contrast to atheists, scientists *qua* scientists do not *believe* in metaphysical naturalism—they accept it as a necessary prerequisite for doing science, whether or not they believe it is true.

Neither Edelman's assertion nor Fjørland's inference are based on science, nor can they be. They beg the question about whether, besides being a "working hypothesis of modern science," metaphysical naturalism is the truth about real-

ity.²⁰ They blatantly breach the assumptions of science itself, which by definition *cannot know* whether the physical world is causally closed precisely because by *definition* it cannot access anything that transcends the physical world. This is the same move from the postulate to the dogma of metaphysical naturalism that I critiqued in my previous article, with reference especially to Durkheim's reductionist sociology of religion, a move now widely and tacitly regarded as unproblematic throughout the social sciences and humanities in the study of religion.²¹ Relative to a traditional Christian understanding of God, such a move relies on this argument:

By definition, science cannot access what is empirically inaccessible.

By definition, God as understood in traditional Christian theology is empirically inaccessible.

Therefore, because science "so far" has not empirically accessed what is definitionally inaccessible according to both science and traditional Christian theology, there *is* nothing empirically inaccessible and metaphysical naturalism is true.

This is patent nonsense.

The consequences are far from trivial, for on the basis of this "ontology"—not a self-consciously self-limiting methodological hypothesis—Førland alleges that all scholars, and not just natural scientists, must conduct their work and present their findings in ways that "conform to scientific atheism" (493). Historical awareness of the relationship among metaphysics, theology, and science, however, as well as an understanding of what science can and cannot do, subvert the ideological alchemy by which epistemological restraint becomes metaphysical assertion. Science itself, precisely *because* of its methodological self-limitations, *cannot* move beyond metaphysical naturalism as a postulate. The metaphysical *assertions* of modern science can only be agnostic precisely *because* of its methodological presuppositions. Atheists' heartfelt, personal, subjective beliefs notwithstanding, the findings of science tend toward atheism only if one's theological conception of God presupposes a univocal metaphysics.

IV

Scotus insisted on a univocal notion of God because he recognized that without it, nothing could be said about God directly on the basis of reason or philosophy. By contrast, the traditional Christian conception of a radically transcendent God, which flouts ordinary ways of using language and insists on the reality of what is unimaginable, is neither the outcome of philosophical speculation nor the product

20. By contrast, the quantum physicist Polkinghorne concludes from the baffling character of post-Newtonian physics that "It is clear that science has not demonstrated the causal closure of the natural world." Polkinghorne, *Exploring Reality*, 37. On the tendency of those espousing atheistic scientism to conflate the hypothesis of methodological naturalism with the implicit or explicit assertion of metaphysical naturalism, see, for example, George M. Marsden, *The Outrageous Idea of Christian Scholarship* (New York: Oxford University Press, 1997), 74; R. Douglas Geivett, "The Epistemology of Resurrection Belief," in *The Resurrection of Jesus: The Crossan-Wright Debate* (Minneapolis: Fortress Press, 2006), 93-105 at 99-100.

21. Gregory, "Other Confessional History," 138, 140.

of empirical investigation. It is the result of theological reflection on the writings of the Old and New Testaments, themselves rooted in the experiences of ancient Israelites, some of whom became first-century Christians. In a wide variety of genres written over many centuries, these writings, the experiences they reflect, and the alleged events they recount are the product of complicated oral and textual traditions of transmission and have been the subject of prodigious critical study by biblical scholars, especially since the nineteenth century. Because so few secular academics bother to read biblical scholarship by contemporary exegetes and historians such as Richard Bauckham, Raymond Brown, Samuel Byrskog, James Dunn, Birger Gerhardsson, John Meier, Graham Stanton, or N. T. Wright, they are apt to be stuck in simplistic nineteenth-century or Bultmannian assumptions about the supposed demythologization of the Bible and the alleged post-Enlightenment “eclipse of biblical narrative,” just as some of them still seem to be living in a world innocent of the revolutions in science effected by post-Newtonian physics.²²

Biblical writings are filled with poetic images, narratives, and metaphorical language about God that simultaneously imply God’s transcendent incomprehensibility and immanent intimacy with the world. Therefore traditional Christian theology likewise insists on both. Not only is God said to have created and to sustain all things, but he is also understood actively to be sovereign in and through his creation, an active presence that offers, however opaquely, some indirect indication of what God is like. Biblical texts also claim that God is hidden, yet understands, wills, loves (indeed “is love”), and works through creation to achieve his purposes—all of which attributions must be understood in ways commensurate with God’s transcendence and the correlatively metaphorical character of religious language about God.

These are not the categories of natural science, nor can they be, because of science’s methodological self-limitations. But if the biblical God as understood in traditional Christianity is real, then the natural world investigated by science is nothing other than God’s creation, and all scientific findings and theories disclose incrementally more and more about its intricate workings. The findings of science remain exactly the same, whether in particle physics, evolutionary biology, or anything else, but they are taken as the data for theological reflection.²³ For exam-

22. For just a few examples of works by these scholars, see Richard Bauckham, *Jesus and the Eyewitnesses: The Gospels as Eyewitness Testimony* (Grand Rapids, MI: Eerdmans, 2006); Raymond E. Brown, *An Introduction to the New Testament* (New York: Doubleday, 1997); Samuel Byrskog, *Story as History—History as Story: The Gospel Tradition in the Context of Ancient Oral History* (Tübingen: Mohr, 2000); James D. G. Dunn, *Jesus Remembered* (Grand Rapids, MI: Eerdmans, 2003); Birger Gerhardsson, *The Reliability of the Gospel Tradition* (Peabody, MA: Hendrickson, 2001); John Meier, *A Marginal Jew: Rethinking the Historical Jesus*, 3 vols. (New York: Doubleday, 1991–2001); Graham N. Stanton, *Jesus and Gospel* (Cambridge, UK: Cambridge University Press, 2004); N. T. Wright, *Jesus and the Victory of God* (London: SPCK, 1996). For the classic work about the marginalization of the Bible in Western intellectual culture, see Hans W. Frei, *The Eclipse of Biblical Narrative: A Study in Eighteenth and Nineteenth Century Hermeneutics* (New Haven and London: Yale University Press, 1974). Jonathan Sheehan has recently argued that the Bible’s place in eighteenth-century German and English Protestantism was transformed rather than eclipsed, but he does not examine the assumptions underlying the historical process of its reconstitution as a culturally central rather than religiously authoritative text. Sheehan, *The Enlightenment Bible: Translation, Scholarship, Culture* (Princeton: Princeton University Press, 2005).

23. Among recent sophisticated theological reflections on evolutionary biology in relationship to

ple, in the last century in particular, science has disclosed a universe that is *both* intelligible in extraordinarily elegant ways, subject to mathematical modeling on a previously unimagined scale, *and yet* paradoxically resistant to any integrated human comprehension in proportion as more about the universe is understood. At the same time, based on the Old and New Testaments, traditional Christianity affirms the reality of an incomprehensible, transcendent God as the supremely wise creator of an ordered universe.²⁴ The parallel is clear between the rationally willed intentionality of a radically transcendent creator, and the intelligibility-*cum*-mysteriousness of the natural world understood as God's creation. If the biblical God is real and he willed and sustains his creation through the *logos*, as the prologue to John's Gospel proclaims, such a parallel would make perfect sense, as would further scientific discoveries that extend the same paradoxical combination of dramatic intelligibility and baffling incomprehensibility.

Theological reflection of this sort is deliberately "unscientific" insofar as it does not restrict itself to the self-limitations of science. Nor does it purport to be a proof of the biblical God's existence. But it is certainly not irrational. To dismiss this rational intellectual endeavor because it transcends what science can empirically verify is not itself a position demanded by science. It is ideological scientism. And only misleadingly can such theological reflection be called "un-empirical," because it is consistent with all scientific findings and partly based on them. This sort of reflection, evident in the writing of scientists such as Polkinghorne, Arthur Peacocke, Francis Collins, and Kenneth Miller, as well as in that of theologians such as Christopher Knight, John Haught, Keith Ward, Christoph Schönborn, and Joseph Ratzinger, presupposes the findings of science as evidence for "how the world works." But it also uses scientific findings as evidence for how a mysteriously transcendent creator-God might work in the world.²⁵ Every finding and every *possible* finding of natural science is compatible with a notion of God whose radical otherness is precisely the possibility condition of his presence throughout the physical world.²⁶ If the biblical God of traditional Christianity is

cosmology and physics, see, for example, John F. Haught, *God after Darwin: A Theology of Evolution* (Boulder, CO: Westview Press, 2000); *idem*, *Deeper than Darwin*; Knight, *God of Nature*; Peacocke, *Evolution: Disguised Friend of Faith?*

24. The American writer Flannery O'Connor (not a trained theologian, but an intellectually astute Catholic) put it this way: "I have got, over the years, a sense of the immense sweep of creation, of the evolutionary process in everything, of *how incomprehensible God must necessarily be* to be the God of heaven and earth." O'Connor, letter to Alfred Corn, May 30, 1962, in *The Habit of Being*, ed. Sally Fitzgerald (New York: Farrar, Straus, and Giroux, 1979), 476-478 at 477 (my emphasis). The theologian Christoph Schönborn suggests that the overwhelming increase in our knowledge of the natural world compared to what was known to biblical writers actually should make it easier to believe now in God as creator *ex nihilo* of the universe. Schönborn, *Chance or Purpose? Creation, Evolution, and a Rational Faith*, ed. Hubert Philip Weber, transl. Henry Taylor (San Francisco: Ignatius Press, 2007), 29.

25. In addition to works by these authors already cited previously in the notes, see Arthur R. Peacocke, *Theology for a Scientific Age: Being and Becoming—Natural, Divine and Human*, 2nd ed. (Minneapolis: Fortress Press, and London: SCM Press, 1993); and Joseph Ratzinger, *Introduction to Christianity*, transl. J. R. Foster [1969] (San Francisco: Ignatius Press, 2004), esp. 137-161, 171-177, 193-196.

26. For a few recent attempts to conceptualize divine action and presence consistent with the findings of science and "in a manner that operates non-interventionally within the grain of nature, rather than interventionally against it," see Polkinghorne, *Exploring Reality*, 35-36 (quote on 36); *idem*,

real, then the empirical findings of the natural sciences from astronomy and experimental physics to paleontology and evolutionary biology *could* not diminish God's presence in and through the world.

V

Now let us consider alleged miracles. I agree with Førland that the real issues are not the evaluation of the evidence apart from the purported events, nor whether certain conceptions of miracles are ahistorically applied to cultures that lacked such notions. I am not seeking any "easy ways out" (486). The central concern is whether certain extraordinary events occur or have occurred that contravene the normal course of natural processes, for which there are no obvious (or perhaps even plausible) naturalistic explanations, and that are attributed to the power of God—such as small patches of plants regrowing each night despite having been picked, or (to use an example mentioned by Førland) the bodily resurrection of Jesus of Nazareth after his crucifixion.

We must distinguish between the possibility of such events and the evaluation of the credibility of any particular alleged miracle. Miracles might be possible and yet never occur, or they might be possible and yet purported evidence for any ostensible miracle might be unconvincing. In the modern era, arguments against the possibility of miracles were first made in an influential way by Spinoza in his *Tractatus Theologico-Politicus* (1670).²⁷ Arguments against the plausibility of any testimony about miracles derive most influentially from Hume, whose *Philosophical Essays concerning Human Understanding* containing the section "Of Miracles" was published in 1748.²⁸

If the biblical God of traditional Christianity is real, then miraculous events are certainly possible. If God is real and created the entire universe *ex nihilo*, there is no good reason to think that he could not, provided it served his purposes, manage to make a few plants grow more rapidly than usual or raise a crucified man from the dead. The question about the possibility of miracles is therefore a function of whether such a God is real—a question the answer to which, as we have seen, lies by definition beyond the investigative methods of science. Nor would such actions be "interventions" by an "outside" force, because if such a God is real, he is neither spatial in any respect nor is he locked in causal competition with his own creation. Miracles then would not involve God's invasive influence on an independent natural world normally devoid of divine presence, but would be different, much more dramatic manifestations of God's presence within the

Belief in God in an Age of Science (New Haven and London: Yale University Press, 1998), 48-49, 57-75; Philip Clayton, *God and Contemporary Science* (Edinburgh: Edinburgh University Press, 1997), 169-231; and Russell, *Cosmology from Alpha to Omega*, 110-211.

27. On the context and character of Spinoza's work, see Brad S. Gregory, "Introduction" to Baruch Spinoza, *Tractatus Theologico-Politicus*, transl. Samuel Shirley (Leiden: E. J. Brill, 1989), 1-44.

28. Hume's work was subsequently republished as *An Enquiry concerning Human Understanding*; in order to distinguish this work from his *Enquiry concerning the Principles of Morals* (1751), the former is conventionally known as the *First Enquiry*. See Hume, *An Enquiry concerning Human Understanding*, ed. Stephen Buckle (Cambridge, UK: Cambridge University Press, 2007), with section ten, "Of Miracles," at 96-116.

divinely dependent creation from which God in the exercise of his providence is never absent. The central conceptual category would be divine action consonant with the achievement of God's purposes, which, if God is real, might be pursued ordinarily via the normal course of divinely established natural processes as part of his ordered creation, but sometimes could be pursued extra-ordinarily through miracles.

Any insistence that God, if real, either could or should not act in such miraculous ways, or conversely should do so more often, is simply a function of different theological presuppositions. Spinozism and deism, for example, assume respective views of God very different from the ineffable, providentially active God of traditional Christian theology. Such countervailing theologies are not dictated by scientific findings, but are rather a function of their proponents' respective theological ideas. As we have seen, science *qua* science cannot pronounce on the nature of a transcendent God, including the potential for his extra-ordinary action in the world, because its own methods preclude any move beyond metaphysical naturalism as a postulate. Despite the claims of scientific philosophers to the contrary, it simply does not and cannot follow from the overwhelmingly regular course of natural processes that exceptions cannot occur. It cannot be said more plainly: science *does not and cannot* demonstrate that miracles are impossible.²⁹

Such events, if they occurred, would in no way undermine or contradict the findings of science. They would demonstrate only that ordinary natural processes are not equivalent to inviolable natural laws. And were such events to occur, science *qua* science could only pronounce them inexplicable. Scientists would rightly continue to try to find naturalistic explanations for them (although as human beings, scientists might infer that they were miracles worked by God³⁰). Inescapably, what lie behind questions about the *possibility* of miracles are questions about the reality and nature of God. No empirical investigation can rule out their possibility. As I implied in my earlier article, any *empirical* confirmation of the alleged impossibility of extra-ordinary events of this sort is vastly beyond the capacity of the sciences in our current or in any conceivable configuration of knowledge.³¹ Only a minuscule fraction of natural events in the universe can be observed or monitored, and assuming that time-travel remains impossible, science has no access to events alleged to have occurred in the past.

The investigation of purported miracles in the past requires the critical evaluation of surviving evidence, just like the investigation of any other alleged event in the past. But because reported miracles are by definition not like ordinary historical events, at least four considerations seem important.

29. In the words of Kenneth Miller, a Catholic professor of evolutionary biology at Brown University, a transcendent God who is "present everywhere and at all times could easily act to alter what both physicists and Hollywood call the space-time continuum in ways that profoundly affect events. . . . And God, the Creator of space, time, chance, and indeterminacy, would exercise exactly the degree of control he chooses." Miller, *Finding Darwin's God*, 242.

30. Interestingly, Steven Weinberg, a Nobel laureate in physics who has been consistently hostile to any religious claims about meaning, purpose, or design derived from the laws of physics, concedes: "I think that in fact my nondesigner argument is eminently falsifiable. All that's needed is a miracle or two." Weinberg, "A Designer Universe?: An Exchange," in *Facing Up*, 245.

31. Gregory, "Other Confessional History," 138.

First, as Førlund rightly stresses, we must acknowledge the immense growth of modern science's explanatory power in recent centuries. Undoubtedly, many events that were wrongly thought by premodern persons to have had a supernatural, miraculous cause can now be seen to have had a readily comprehensible natural one.

Second, the explanatory power of modern science means that despite historians' concern to reconstruct the past's otherness, they too should try to find plausible naturalistic explanations for purportedly miraculous events rather than credulously to accept testimony *only* because someone makes it. But neither science nor history offers any warrant for thereby presupposing that ordinary natural events necessarily exclude God's presence, provided that God is understood as metaphysically distinct from the natural world.

Third, pious frauds pertaining to alleged miracles have been exposed and documented not only in the modern era, but were also unmasked in the Middle Ages. In the famous "Jetzler Affair" of 1507, to give only one example, several Dominicans in Bern, Switzerland, were caught and tried for making it appear that a statue of Mary was shedding tears of blood by blowing them through a pipette from a concealed position behind the statue.³² It would be a serious mistake born of modern, secular prejudice to assume that medieval Christians were superstitious and naïve simply by virtue of being medieval or Christian. At the same time, any serious historian must be alert to the possibility of pious fraud, particularly in cultures with people eager to believe in miracles as a confirmation of their religious beliefs.

Fourth, if certain sorts of allegedly miraculous events actually occurred—such as the changing of large quantities of water into wine at a wedding feast, or the bodily resurrection of a crucified man from the dead—it seems extremely unlikely that they will ever receive a convincing or even plausible naturalistic explanation, even though scientists could of course continue to pursue explanation only in these terms. Such events, were they actual, would obviously have been real and thus empirical at the time they occurred, but to the extent that no naturalistic explanations were or are forthcoming, they would be inexplicable on the basis of science. Førlund seems not to have grasped this point: *of course* such claims of miracles in the past "cannot be tested scientifically" (494)—*no* past events can be, at least so far, because time-travel is impossible. But this does *not* mean that if miracle claims are true in some cases, they "lack empirical substance" (494)—it only means that scientists can offer no naturalistic explanation for the events involved.

It is all alleged events of this sort that Hume's argument against miracles was meant to exclude, as "an everlasting check to all kinds of superstitious delusion" for "as long as the world endures."³³ No purported miracle, Hume claimed—quite apart from any of its particular circumstances or any related, relevant background contexts—is believable in comparison to the regularities of the natural world uniformly observed by everyone in ordinary life and explained by Newtonian

32. The incident is briefly recounted in Joseph Leo Koerner, *The Reformation of the Image* (Chicago: University of Chicago Press, 2004), 146-147. On the issue of medieval skepticism about miracle claims, I am grateful for discussions with Steven Justice.

33. Hume, *First Enquiry*, ed. Buckle, 97.

physics. Therefore all testimony about putative miracles was to be rejected as less probable than the weight of evidence pointing to the supposed uniformity of natural regularities. Despite its repetition by those already predisposed to believe its conclusions as a comforting confirmation of their own convictions, Hume's argument has been challenged from the time he made it and has been subjected to devastating criticism by philosophers in the past two decades.³⁴ Hume seems to have thought that the exceptionality of purported miracles is always sufficient reason to reject them in favor of countervailing evidence about (to use Førland's phrase) "how the world works"—meaning by "the world" an autonomous, independent natural order separate from God's presence or influence. But purportedly miraculous events are exceptional and extra-ordinary by definition, else claims about them would not stand out from experience of the ordinary course of nature, and so arouse controversy. Hume's admonition comes down to a belief that claims about extra-ordinary events should *never* be believed over against apparent evidence for an unexceptionally regular course of nature. But this begs the question about whether natural regularities must be exceptionless, no less than it begs the question about whether the God of traditional Christianity is real. Standing squarely in the univocal metaphysical tradition discussed above, Hume does not ground his argument against miracles in a case-by-case investigation of purported miracles based on evidentiary testimony. Rather, he rejects all alleged miracles based on the weight of the experience and scientific observation of natural regularities in combination with his own metaphysical beliefs. His argument does not lead to but rather *presupposes* a rejection of traditional Christianity.

How then ought we to assess the claim of the rapidly regrowing plant alleged by Anders Engebretsen to have occurred in August 1652? Without question it *could* have happened. To deny its possibility presupposes an atheistic rejection of the reality of a transcendent God who can work miracles in the natural world, a rejection that cannot be rooted in scientific findings or methods. Such a God, if real, could have acted to save these two devout brothers from starvation by providing them with just enough plants to survive until they were rescued, just as such a God could have fed the ancient Israelites with manna in the desert.

That said, the story as recounted by Førland seems doubtful for multiple reasons—but none of which necessarily implies that "Anders [the younger brother] made up the story" (491). First, as Førland recognizes, the brothers were in a severely weakened condition due to several days of food deprivation. So they might have been confused about whether the same plants were regrowing each night, as opposed to other blades near the ones they had previously picked and eaten. Second, their unexpected rescue after their twelve-day ordeal might have colored their recollection of details about the events pertaining to their survival, especially given their weakened and possibly confused state. Third, Anders did not write down the story of their ordeal until nearly forty years later, in 1691 (presumably

34. J. Houston, *Reported Miracles: A Critique of Hume* (Cambridge, UK: Cambridge University Press, 1994), esp. 121-207; C. Stephen Evans, *The Historical Jesus and the Christ of Faith: The Incarnational Narrative as History* (Oxford: Clarendon Press, 1996), esp. 153-156; David Johnson, *Hume, Holism, and Miracles* (Ithaca, NY: Cornell University Press, 1999); John Earman, *Hume's Abject Failure: The Argument against Miracles* (New York: Oxford University Press, 2000).

this was the first of the two versions mentioned by Fjørland). He might easily have forgotten or conflated details in the long interim between the events and their recounting. Finally, Anders's two accounts of the events are themselves lost, and so we must rely on the versions given by (Lutheran?) "priests" and published respectively in 1732 and 1743. Their redactions present the possibility of still further amendments or interpolations, perhaps related to the alleged miracle of the plants. But we cannot compare Anders's missing accounts with the eighteenth-century published versions. All in all, we have in this particular case numerous complicating factors and plausible interpretations that seem to militate against the claim that the alleged events actually occurred, but without being able to demonstrate that they did not.

Fjørland emphasizes in his article the fact that Finn Erhard Johannessen, the author of a recent local history in which the story of the Engebretsen brothers is told, asserts that the account of the rapidly regrowing plants "can hardly have happened" (486, quoting Johannessen). In Fjørland's view, Johannessen's "out of hand" rejection of the miracle's possibility, even though he "is no atheist," indicates that "as a historian—that is, *when doing historical research* (including writing)" he must work and write as a member of "the scientific community," the "ontology" of which has "no room for supernatural beings" (486, 492; Fjørland's emphasis). But as we have already seen, this demand is based on inferring the truth of metaphysical naturalism from the assumptions, methods, and findings of science, a move precluded by science's own self-definition. And it overlooks the fact that all of the findings of science are compatible with a traditional Christian understanding of the biblical God. So the issue is not whether, having conformed to the scientific assumptions characteristic of the secular academy, Johannessen, along with Fjørland and many others, fall into line with the prevailing ideology. They seem to. The issue is whether the prevailing ideology is intellectually justified. Like many religious believers, many secular academics do not question what they believe and why. How much easier simply to assume that one's own beliefs are true, or to conform to the dominant expectations and socializing experiences of the environment in which one works?

Four things are certain. First, science does not and cannot demonstrate that either scientism or metaphysical naturalism is true. Second, science does not and cannot demonstrate that the transcendent creator-God of traditional Christianity is a fiction. Third, all scientific findings and all *possible* scientific findings are compatible with the mysterious, providential influence of God throughout the natural world as understood in traditional Christian theology. Fourth, if a transcendent God created the entire universe *ex nihilo*, there is no good reason to suppose he could not work miracles on the third planet from the star of one solar system in the Milky Way galaxy. I would go even further than Fjørland regarding science's disproof of "some notions of the concept [of God] and the theology accompanying these" (484). Some religious claims can unquestionably be falsified on the basis of overwhelming scientific or historical evidence—for example, the assertion by "young-earth creationists" that the earth is around six-thousand and not approximately 4.55 billion years old, or the claim by certain Christian fundamentalists that the Bible was somehow dictated, received, and preserved without any messy

complexities of oral and textual traditions of transmission across many centuries.³⁵ Such claims are rightly rejected in academic contexts for their respective incompatibility with massively corroborated scientific and historical evidence. But it is otherwise for claims about the reality of the God of traditional Christianity or the possibility of miracles that he might have worked, for these cannot be excluded on the basis of any of the natural sciences, philosophy, history, or any other discipline. Therefore, unless one is a scientistic ideologue mesmerized by mistaken inferences from *de facto* transgressions of the natural sciences' self-imposed limitations, one is not bound, as a scholar of religion, to write about one's subjects as though no religious claims could be true. For religious claims consistent with the empirical findings of science and other disciplines might be true, and there is no intellectually justified basis to claim otherwise.

VI

Førland makes some misleading assertions about my methodological approach in the study of religion. For example, he claims that my emphasis on the principal guiding question, "What did it mean to them?" is "tempting," but "on closer scrutiny this route leads nowhere" (490). This assertion prompts two thoughts.

First, this route led to a first book that won six book awards.³⁶ So it would seem that some other scholars also thought that a patient, sympathetic reconstruction of the respective beliefs and behaviors of Catholics, Protestants, and Anabaptists in the Reformation era, related to persecution, suffering, and martyrdom, led somewhere worthwhile. Nowhere in *Salvation at Stake*, writing as a professional historian, did I write from a position of "scientific atheism" as a putative demand of belonging to the "scientific community." Nor did I assume that *any* of the claims of my early modern protagonists regarding God's influence in their lives or the world must be false, because science allows "no room for God" (although as I stated in the book's conclusion, it follows from the principle of non-contradiction that their respective, incompatible truth claims cannot all be true³⁷). On the contrary, part of my purpose was to challenge uncritically accepted secular assumptions widespread in the study of religion. I was aware in the 1990s, as I am now, that neither science nor philosophy makes intellectually compulsory the adoption of metaphysical naturalism, atheism, or scientism.

I have never experienced being a "plural subject" whose capacity for "multiple partaking" permits me "personally" to believe in God, but professionally to pretend as though God were not real. Except when plagued by the doubt that sometimes shadows religious belief, I believe in every area of my life that the God of traditional Christianity is real, along with much else related to this. I simply know better than to make either my own or *any* particular faith commitments the basis

35. For a fine recent overview of the complexities involved in the formation of what eventually became the Christian Bible, see Lee Martin McDonald, *The Biblical Canon: Its Origin, Transmission, and Authority* (Peabody, MA: Hendrickson, 2007).

36. Brad S. Gregory, *Salvation at Stake: Christian Martyrdom in Early Modern Europe* (Cambridge, MA: Harvard University Press, 1999).

37. *Ibid.*, 344.

for trying to understand other people, whether in the past or present. Hence my rejection of traditional confessional history—and of secular confessional history. Precisely *because* of my beliefs, my world is not divided into different domains or sectors in the way suggested by Fjørland, nor does it need to be. An alternative to “being part of several plural subjects at the same time” (494) is to become reflectively self-conscious about the relationship among one’s own beliefs, the nature of religious language, the findings of science and history and other disciplines in relationship to philosophical reflection, and to embrace a worldview in which one’s religious truth claims are entirely compatible with the empirical findings of the natural and social sciences. This permits one, notwithstanding the sordid realities of human life past and present, to live joyfully and hopefully as an integrated person in all areas of one’s life, whether one is doing scholarship or praying, working in a biology lab or worshipping God. Truth cannot contradict truth, and is to be embraced wherever it is found. So until and unless someone offers a good reason why I should change my views, I am and will remain a Roman Catholic.

The second thought prompted by Fjørland’s remark about the alleged barrenness of my approach is that I should perhaps have been more expansive in the final paragraph of my previous *History and Theory* article. That paragraph begins in this way:

An antireductionist, “thicker description” of the religion of individuals within communities within traditions does not simply leave us with a static snapshot of believers who believe what they believe and do what they do. Paradoxically, it provides the foundation for explaining (and here I do mean explaining) change over time, at once the central and the most difficult challenge that historians face.³⁸

Never have I written or thought that historians of religion should do *nothing more* than try to understand past people on their own terms. Rather, I have insisted that this is an indispensable prerequisite for explaining change over time. Such a foundation is very different from the one on which many scholars of religion build—namely, choosing a (post)modern, explanatory theory of religion or a theoretical hybrid, which nearly always implies an uncritically accepted metaphysical naturalism, and then applying it to the evidence. Accordingly, I emphasized the latter portion of this sentence in my article, the upshot of which Fjørland apparently missed: “The point is not to impose any metaphysical beliefs or moral judgments on religious people, *for the purposes of understanding them.*”³⁹ If one adopts secular theories based on metaphysical naturalism—not just the postulate, but the assertion—one is *guaranteed* not to understand religious people, past or present, in terms in which they would recognize themselves, because the theories

38. Gregory, “Other Confessional History,” 149. See also *idem*, *Salvation at Stake*, 348-349, 351-352; “Late Medieval Religiosity and the Renaissance of Christian Martyrdom in the Reformation Era,” in *Continuity and Change: The Harvest of Late Medieval and Reformation History: Essays Presented to Heiko A. Oberman on His 70th Birthday*, ed. Robert J. Bast and Andrew C. Gow (Leiden: E. J. Brill, 2000), 379-399 at 399; *Catholicism and Historical Research: Confessionalism, Assimilation, or Critique?* (Notre Dame, IN: Erasmus Institute, 2005), esp. 10-12; “Christian Reform and Its Discontents,” in *The Renaissance World*, ed. John Jeffries Martin (New York: Routledge, 2007), 589-604 at 602-603.

39. *Ibid.*, 146-147.

presuppose from the outset that religion is reducible to something else in ways that are rejected by religious believer-practitioners.

The real question for scholars of religion is what to do once one has reconstructed in context, as nearly as one can based on surviving sources, the beliefs, sensibilities, and behaviors of those whom one studies. Førland is clear on this: “What it meant to them is just a step on the road to what is in it for us, and at some point along this road our own ontology must substitute for the ontology of our study objects which, after all, has only historical (or anthropological) interest in a limited sense” (491).⁴⁰ This is both false and question-begging. First, why *must* we substitute our ontology for theirs? I don’t—otherwise I would write Catholic confessional history. And which ontology would we substitute? Førland takes the easy way out by simply adopting “the scientific worldview” and what he thinks it demands. But by now it should be clear why such a move is so objectionable: it ignores the compatibility of a traditional Christian view of God with scientific findings, transgresses the self-limitations of the natural sciences, assumes a univocal metaphysics of being, evinces no familiarity with sophisticated biblical scholarship or philosophy of religion, and seems oblivious to the fact that the findings of post-Newtonian physics cannot themselves be rationally integrated. Second, Førland has apparently decided in advance that all the premodern ontologies and religious truth claims of those whom historians study are merely of historical or anthropological interest. How does he know that none of them could be true?

Førland writes that “[b]elievers and atheists have different ideas of which beliefs are accepted—by whom?—or ‘reasonable’ about the set-up of the world. . . . When it comes to God, there is no consensus on ‘what else we know’ or on what are accepted or reasonable beliefs, let alone truths” (492). Exactly. Nor is there any consensus among secular (un)believers about morality or meaning. So part of our *explanandum* ought to be the historical emergence of a Western world characterized not by a linear movement from premodern traditional religiosity to modern scientific secularism, but one marked by an open-ended, pluralistic proliferation of religious *and* secular truth claims over the *longue durée*. Insofar as such pluralism describes the social and ideological reality of the Western world in which we live, *it* is what we ought to explain historically, without uncritically assuming from the outset the truth of “the scientific worldview” as understood by Førland and so many other scholars. Such an attempt at historical explanation presupposes as its foundation the anti-reductionist willingness to understand *all* of the respective protagonists on their own terms, without substituting any ontology. For their *conflicting* ontologies are central to the explanation of how we have arrived at

40. Again misunderstanding what I wrote, Førland implies that I hold a similar view: “We must explain the events, and this *often entails, as Gregory admits, judging the truth value of the beliefs of our study objects*” (8; my emphasis). Here is what I wrote: Not to impose any moral or metaphysical beliefs on others for the purposes of understanding them “does not mean that one cannot ask questions about the truth of religious claims made by a given individual, group, or tradition, or that one cannot raise moral questions about religious believers or the human past, but only that such questions are distinct and should be kept separate from the attempt to understand religious believers.” Gregory, “Other Confessional History,” 147 n. 36. To raise questions about religious truth claims does not imply that one’s own *ontology*—as distinct, say, from the findings of the natural sciences or history—should be the basis for evaluating their truth or falsity.

our current situation. These clashing metaphysical views along with rival moral commitments continue to explain much about our current world. Unlike Førland, I am not an advocate of secular confessional history based on “scientific atheism.” I have never adopted it, whether in my book or any of my articles, including this one. Nor unless someone makes an intellectually compelling argument for it will I ever adopt it. For however widespread or deeply institutionalized, it is an intellectually unjustified ideology masquerading as neutrality and objectivity in the secularized academy in general, and in the study of religion in particular.

VII

The study of religion in the modern academy remains dominated by reductionist theories that presuppose metaphysical naturalism derived from univocal theological assumptions. According to Førland, this is as it must be. My scholarship and that of other historians of religion falsifies his claim.⁴¹ But if the study of religion is to become something more than an exercise whose research findings are restricted in advance by the assumptions of the reductionist theories that inform it, many scholars will have to become more aware of the difference between their faith commitments (whether religious or secular) and the nature of modern science. Collingwood, as quoted by Førland, asserted that “[a]ll thinking is critical thinking” (491). Indeed—so let’s start being much more critical of secular assumptions embedded in modern thought, rather than acting as though they were inevitable, obvious, or unavoidable. Let’s start being more critical of scholarship that, when it is concerned at all with the non-reductionist reconstruction of others’ beliefs and behaviors, views this as no more than a warm-up act for the main performance: the imposition on them of our own faith-based ontologies, whether religious or secular, in pursuit of “what is in it for us” (491). In addition, if the study of religion is to become more than a self-affirming exercise in the confirmation of secular presuppositions, many scholars of religion will have to think harder about the implications of the empirically falsified, post-Enlightenment myth that to be learned is to be secular, that “of course” advanced education and intellectual honesty lead to skepticism, relativism, and unbelief. To this end, they would do well to familiarize themselves with the most intellectually sophisticated biblical scholarship, philosophy of religion, and theology, whose practitioners are much more self-conscious about their own metaphysical assumptions than are those secular scholars content to conform to the status quo expectations in which they are socialized.⁴²

41. For a few recent examples by prize-winning historians, see Mark Noll, *America’s God: From Jonathan Edwards to Abraham Lincoln* (Oxford: Oxford University Press, 2002); George M. Marsden, *Jonathan Edwards: A Life* (New Haven and London: Yale University Press, 2003); Eamon Duffy, *Marking the Hours: English People and their Prayers, 1240–1570* (New Haven and London: Yale University Press, 2006); Liam Matthew Brockey, *Journey to the East: The Jesuit Mission to China, 1579–1724* (Cambridge, MA: Belknap Press of Harvard University Press, 2007).

42. As an example from each of these three categories of the sort of scholarship I have in mind, see Bauckham, *Jesus and the Eyewitnesses*; Evans, *Historical Christ and Jesus of Faith*; and David Bentley Hart, *The Beauty of the Infinite: The Aesthetics of Christian Truth* (Grand Rapids, MI: Eerdmans, 2003).

In the meantime, scholars of religion who want to try to move beyond secular confessional history should reject the status quo. They should dare to be intellectually nonconformist and counter-cultural. Their approaches cannot be based on a resumption of traditional confessional history. Nor should they adopt (or even flirt with) the inanities of epistemological poststructuralism: sheer perspectivalist assertion based on relativism is the weakest of weak bases on which to build any intellectual endeavor, including the study of religion. There is a genuine and intellectually powerful alternative. As I said in my earlier article, it endeavors to understand any and all protagonists on their own terms without imposing any moral or metaphysical views, not simply as an end in itself, but as a prerequisite for the explanation of change over time. It enables us in principle to understand everyone whom we study without presupposing in advance that any of their competing views are mistaken. There *is* room in the secular academy for the rejection of social-scientific and theoretical assumptions presupposing “scientific atheism,” at least in some academic departments at some leading universities in the United States, provided that an alternative is pursued with sufficient sophistication. *Salvation at Stake* was conceived and begun as a dissertation in the Department of History at Princeton, completed as a dissertation in the Society of Fellows at Harvard, and revised and published as a book in the Department of History at Stanford. If non-reductionist, non-confessional study of religion in the modern academy is to flourish, it must do so in a manner critically aware not only of the faith-based, intellectually unjustified, secular assumptions embedded in so much modern thought about religion. It must also heed the ways in which particular religious truth claims are related to the findings of the natural sciences.

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