

SCIENCE AND SCIENTISM: THE IMPORTANCE OF A DISTINCTION

by John F. Haught

Abstract. John Caiazza's interesting argument is an important one and deserves a close hearing. However, his article could be more forceful if he would distinguish more carefully between science on the one hand and "scientific secularism" and "materialism" on the other.

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I deeply appreciate John Caiazza's theological concern and his reservations about "techno-secularism," and I regret that I do not have the space to discuss these and many of the other important issues his essay (2005) raises. If my comments here seem somewhat critical, this is not to take anything away from the valuable service Caiazza's article performs by focusing on issues that most readers of *Zygon* will consider important.

In this response I limit my comments to Caiazza's assertions about the relationship of science to religion. He refers provocatively to this relationship as a "debate," one that has become so "trivialized" as to merit satirizing by Monty Python (2005, 14). As an example of the low level of the "debate" between science and religion he cites the now-famous conversation that took place between John Polkinghorne and Steven Weinberg at the Smithsonian Museum in Washington, D.C., in 1999. Incidentally, I was present at this session with my students, many of whom told me afterward that they thought the match was close but that Polkinghorne had "won," so it is not surprising that Caiazza would also interpret the event as a kind of joust. Although the two participants were not in agreement, my impression was that their engagement was conversational rather than confrontational.

John F. Haught is Thomas Healey Professor of Theology at Georgetown University, Washington, D.C. 20057.

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Caiazza writes that “in the pure intellectual sense, science and religion have gained some form of parity” (p. 14), and a section heading (p. 12) refers to “Science versus Religion” as “a Draw.” These remarks, however, are swamped by observations that science has “triumphed” over religion. “The present state of affairs in Western culture is that religion as part of civil discourse is in retreat . . . ; science has won, and religion is discounted as irrelevant, as a mere survivor from a less progressive time such as the Dark Ages or the 1950s” (p. 12). Caiazza even suspects that “there are good intellectual reasons, translatable into formal arguments, for opposition between modern science and revealed religion” (p. 12). But he seems quite certain that science and secularism have emerged victorious over religion. Moreover, “The triumph of the secular in our culture is largely the result of the triumph of empirical science” (p. 13).

So, as I read it, the main thrust of Caiazza’s impassioned reflection is that science has defeated religion in a deadly struggle for the human soul. However, throughout his essay Caiazza can support this judgment only by merging the concept of science with those of scientism, materialism, reductionism, secularism, and techno-secularism. He repeatedly gathers all the facets of this complicated amalgam into the solitary but highly charged term *science*, and this conflation allows him to claim that science threatens to destroy the kind of spiritual existence that he associates with revealed knowledge. What makes it possible for Caiazza to place science in a competitive relationship with religion is the very same assumption that allows his “secular” opponents to do so, that is, to presuppose as self-evident that science is inseparable from a materialist metaphysics or a naturalistic worldview (Humphrey 1999). “Science,” Caiazza declares, “has its own implied metaphysics of the Galilean atomism that reduces physical reality to abstract mass points while discounting colors, motion, and other evidence of our senses as merely secondary qualities. Science has its uncompromising theory of causality, which combines materialism with mathematics . . .” (pp. 12–13).

In *Science and the Modern World* Alfred North Whitehead also talks about the tendency from the seventeenth century onward to synthesize mathematical abstractions with materialist philosophy. But he does not call this synthesis *science*, as Caiazza does. He calls it *scientific materialism* (Whitehead 1967, 51–57). Whitehead thought that it was quite possible to distinguish science from the philosophy of scientific materialism.

It seems to me that what Caiazza finds noxious, then, is not necessarily science but scientific materialism or scientific naturalism. A number of passages make it clear that for Caiazza science is really not so much a fruitful way of finding things out about the world as it is an alloy of method and metaphysics, of instrument and ideology. What else could he mean when he says that “Greek philosophy acknowledges the reality of spirit and the existence of God, whereas science tends, as Cardinal John Newman

pointed out, to be atheistic” (p. 12)? He makes no attempt here, as do many participants in the science-and-theology dialogue, to distinguish carefully and consistently between scientific method and philosophies such as scientism, materialism, and naturalism.

That for Caiazza the “debate” is really one of ideology—although he fails to acknowledge it explicitly as such—becomes transparent as soon as he insists that “the current state of the science-religion controversy” is one that “can no longer be settled decisively in intellectual terms” (p. 14). He writes that “science traditionally has tended to deny the legitimacy of the perception of purpose in the universe and to pursue a reductive agenda that attempted to delegitimize revealed knowledge” (p. 12). Notice that Caiazza is explicitly saying that it is *science* that is the enemy of revelation, whereas many others would say that what contradicts religion or revelation—or the idea of cosmic purpose—is not science but a mixture of science with scientism and materialism. At one point he does allow that modern science may not be “necessarily materialistic, atheistic, and reductive” (p. 12), but then he lapses again and again into formulations that let slip an overriding suspicion that science is inseparable from secularistic and “techno-secular” beliefs and that theology’s encounter with science must always be a contest rather than a conversation. He claims, “it is a historical fact that, with the rise of modern science, what was previously a controversy about secular and revealed knowledge between theological academics has become a steel-cage death match” (p. 12).

Caiazza is rightly critical of Stephen Jay Gould, but he is no less ready than the latter to view science, and especially evolution, as inescapably tied to secularistic and materialist ideology. He announces, “It is in the historical context of the separation between secular and revealed knowledge that the 150-year-old controversy between evolutionary theory and religion is best understood” (p. 10). Consistent with his and his Darwinian opponents’ conflation of biology with materialism, he writes that “it is useful to understand the present debate surrounding evolution as the latest reflection of an age-old contest between secular and revealed knowledge” (p. 12).

On the basis of these and many other signals in his text, I believe it is proper to conclude that Caiazza would be most at home with the intelligent-design (ID) resistance movement now doing battle with neo-Darwinian biology. He singles out Michael Behe’s book *Darwin’s Black Box* as an “effective response” to Darwin (p. 11), and this gesture only adds to my suspicion that Caiazza’s fundamental model for the relationship of science to religion is that of conflict. This impression is enhanced by the fact that, like Phillip Johnson, William Dembski, and other ID proponents, Caiazza seems unable or unwilling to distinguish consistently and clearly between the science of evolution on the one hand and evolutionary materialism on the other.

The linguistic thrust of the essay, therefore, is such that when Caiazza uses the term *science* the reader is being persuaded, whether the author consciously intends this slippage of meaning or not, to read *scientific secularism*. I can only surmise that Caiazza is not really talking directly about the contemporary conversations between science and religion at all; he is talking about a war between incompatible sets of belief. His notion of science is itself as much of a construct as is the idea of evolution that is tossed back and forth between the atheistic evolutionists and Christian anti-Darwinians.

It is precisely Caiazza's implicit harboring of the mix-up of science with scientism, materialism, and secularism that allows him—and he is by no means alone here—to declare that science is triumphing over religion in contemporary culture. His efforts remind me of those of the British journalist Bryan Appleyard, who argued similarly more than a decade ago that science is “spiritually corrosive, burning away ancient authorities and traditions.” For Appleyard, as for Caiazza, science is not an innocent or humble way of knowing but a subversive force that is now robbing culture of its spiritual substance (Appleyard 1993, 8–9). It would be better for the world if science had never happened. Appleyard claimed that science is “absolutely not compatible with religion” (p. 8). Caiazza is not quite so explicit, but he leans strongly toward such a view.

The scientific secularists, for their part, would agree with Caiazza that science is deadly opposed to religion, even though for them the advance of science will bring about the elevation rather than the collapse of culture. I believe, though, that Caiazza may be taking his opponents too seriously, allowing them to define the terms of the “debate.” He seems content to go along with their belief that science entails scientific secularism. However, even if it is true that without science there would never have occurred such ideologies as scientism, reductionism, materialism, and techno-secularism, this does not delegitimize the scientific pursuit of truth. One might also claim that, without our religious tendencies and the possibilities of worship, the pernicious absolutism of various kinds of idolatry would never have become human actualities, either. One way to stamp out perversions of religion is to stamp out religion. Analogously, one way to rid the world of scientism is to rid it of science. I hope that this is not what Caiazza is advocating, but such is the direction in which his thoughts seem to be leading. After looking at how Caiazza views the relationship of science to religion—namely, in terms of the conflict model—it would appear that for him the triumph of what he calls revealed knowledge would require as its condition the banishment not only of secularism but of the empirical method of science on which he explicitly blames the rise of secularism. By such logic, the defeat of “techno-secularism” will also require the demise of empiricism.

Ironically, Caiazza could make a stronger argument against scientific secularism and evolutionary materialism if he refused from the start to

accept the confusion of the term *science* with materialist (or naturalist) belief that is so common among his cultural opponents as well as his anti-Darwinian allies. There is no good reason why those who love science but refuse to endorse scientific naturalism have to embrace an understanding of science (as Caiazza seems to do) into which materialist ideology has been folded a priori. Rather, at least in my experience, substantive conversations in science and religion can begin only once the participants have been able to distinguish, as far as is humanly possible, between science as a method of exploration and scientific naturalism as a worldview. This is not always easy, as Caiazza's essay illustrates. In fact, by tacitly accepting the contemporary conflation, he places himself on his opponents' side of the debate that he has so boldly entered into. By allowing that science is inseparable from materialism he is playing into the hands of those like biologist Richard Lewontin who is renowned in science-and-religion circles for having issued the following decree:

We take the side of science . . . because we have a prior commitment, a commitment to materialism. It is not that the methods and institutions of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our *a priori* adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counterintuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is absolute, for we cannot allow a Divine Foot in the door. (Lewontin 1997, 31)

Lewontin believes that the whole enterprise of scientific discovery is powered by an a priori commitment to materialist naturalism, but it is not written anywhere that the rest of us who appreciate science have to believe that. In fact, most of the great founders of modern science did not. Even Lewontin concedes that the decree is not a scientific statement but a profession of faith. And he would have to agree that his opposition to theological culture and teleological discourse flows not from any particular scientific experiments but from the materialist belief system that he has decided—for nonscientific reasons—to make the basis of his “science.”

Caiazza's essay begins to mislead near the beginning, where he attempts to draw a precise parallelism between Tertullian's idea of a conflict between secular knowledge (represented by Athens, neo-Platonism, and Aristotelianism) and revealed knowledge (represented by the Bible and church teaching through the ages). Even if one were to accept this simplified view of things, the real difficulty arises and the parallelism breaks down as soon as Caiazza introduces his main point: “In modern times secular knowledge has been represented not by ancient philosophy but by modern empirical science” (p. 10). By virtue of this schema Caiazza hopes to “clarify current controversies, including whether the conflict [of science and religion] is a necessary one” (p. 10). However, it only confuses things to say that empirical science now occupies the same sort of niche that Athens or Aristotle

did formerly in the encounter with revealed knowledge. If Tertullian were around today I doubt that he would ask "What does empirical science have to do with Jerusalem"? Rather, to use Caiazza's own categories, I think it more likely that he would ask what scientific secularism and techno-secularism have to do with Jerusalem. This is a worthwhile question, and I believe this is the one that Caiazza really wants us to consider. But placing empirical science in the same categorical slot that had been formerly occupied by metaphysics does not help clarify the relationship of science to religion.

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