

Editorial

The mythopoetic drive can be harnessed to learning and the rational search for human progress if we finally concede that scientific materialism is itself a mythology defined in the noble sense. . . .

The core of scientific materialism is the evolutionary epic. Let me repeat its minimum claims: that the laws of the physical sciences are consistent with those of the biological and social sciences and can be linked in chains of causal explanation; that life and mind have a physical basis; that the world as we know it has evolved from earlier worlds obedient to the same laws; and that the visible universe today is everywhere subject to these materialist explanations. The epic can be indefinitely strengthened up and down the line, but its most sweeping assertions cannot be proved with finality.

What I am suggesting, in the end, is that the evolutionary epic is probably the best myth we will ever have.

Edward O. Wilson

There are at least three general ways in which the contemporary sciences present challenges to religious thinking. The first comes from specific scientific discoveries and technologies such as genetic engineering, new developments in neurobiology, and the use of artificial intelligence in complex decision making. Any religious thinking that considers human nature and purpose should take such findings into account. A second challenge comes from the establishment in science of fundamental principles or theories that have such general application they function as constraints even on philosophers and theologians who consider the course of human existence or the history of the natural world. The neo-Darwinian theory of evolution and the second law of thermodynamics are examples.

Recent issues of *Zygon* have contained articles responding to these two kinds of challenges. However, a third and more fundamental challenge has been dealt with only implicitly. It is presented by the predominant outlook underlying almost all scientific inquiry—the outlook of modern materialism whose claims are summarized by Edward O. Wilson in my opening quotation. For some years now, in conferences and symposia on science and religion, as well as in the pages of *Zygon*, I have observed that one of the consistent, underlying issues in much of the dialogue has been the issue of materialism. As Wilson presents it in his concluding chapter of *On Human Nature*, titled “Hope,” materialism of an evolutionary variety offers much promise in unifying many disciplines and areas of life to provide a powerful, coherent view of the world and humanity’s place in it, so as to function as ancient myths did in providing meaning, moral direction, morale, and motivation. Yet, at the same time the materialist picture of things offers a profound challenge; its removal of purpose, intentionality, and other personal or mental qualities from the most basic nature of things provokes vigorous response from many humanistic and religious thinkers.

In my opinion, it will be helpful for those who in any way are involved in attempts joining together science and religion (*zygon* means to yoke together as a team) to bring into sharper focus the materialism of modern science—in both its scientific and mythic dimensions as Wilson suggests. The articles in this issue of *Zygon* have been selected partly with this focus in mind. Of course, when

each author submitted her or his article to *Zygon*, she or he did not necessarily intend to address the question of materialism as I have developed it here. However, together the articles lead us to reflect on three general questions concerning scientific materialism and religion.

The first is, What does the word *materialism* signify? While the term initially may bring to mind the idea that reality consists only of that which is tangible, which can be experienced with the senses, Wilson's presentation in the opening quotation about the materialism of the evolutionary epic includes such nontangibles as physical and chemical laws and causal chains. These are indicative of relations between observables, but, as David Hume pointed out, they are not themselves observed with the senses. Contemporary materialism does not just mean atomic, individualized matter; it also, and perhaps more importantly, denotes relations.

In the lead article, Dawne C. McCance, while not discussing materialism as such, offers a picture of physics in relation to classical Buddhism that might be useful in helping us think about the nature of materialism at the end of the twentieth century. Considering quantum physics' recognition of the involvement of the knower in what is known and the Buddhist conception of the universe as an organic whole, McCance suggests that science is changing so that it no longer makes sense to interpret the world in terms of notions of objectivity and of atomic, individualized matter; instead, scientific interpretation of events should be in terms of process, context, and relationship. Yet, it appears to me that such science would still expound a type of materialism.

Raymond J. Barnett continues the contact with Eastern traditions by showing the similarities and differences between philosophical Taoism and modern biology. He advances the thesis that the surprising degree of similarity between them is due to the fact that both systems of thought base their knowledge on objective observation of natural phenomena. Readers might wish to speculate, as they read McCance's and Barnett's articles, to what extent ancient Buddhism and Taoism are materialistic in their understandings of the world and the fundamental problems of human living. It may well be that there is at least a minority view in some religions that sees what Wilson would call materialism quite positively.

If that is the case, then it serves as a foil to the response to the second question, What has been the impact of materialism in the West? Hiram Caton and Hans Schwarz each delineate the negative impact of materialism on the Western psyche. Caton's article, which applies the methods of psychobiology to intellectual history, argues that scientific materialism is a source of depressive neurosis for some modern philosophers and scientists. This has led, according to Caton, to a denial by these people of the metaphysical version of materialism and an assertion of a rigorous positivist philosophy of science. Schwarz reviews how modern science has removed a theistic point of reference from the world in which we live—which undercuts all other religious claims to offer salvation to human beings. This leaves those raised in a Judeo-Christian culture with a sense of homelessness, a lack of cosmically grounded purpose and moral guidance in an impersonal universe.

Yet, in light of the articles by McCance and Barnett, one cannot help but wonder whether this really needs to be the case. This leads to the third question, Can the materialistic evolutionary epic—in its mythic dimension—restore a sense of at-homeness and human significance? The purpose of myth is not just to provide a so-called objective understanding of ourselves and the world in which we live; it is also to provide a sense of personal meaning and

worth, moral direction, morale in periods of life crises, and motivation and power to overcome the worst in us and realize the best. Can scientific materialism—as myth—do this?

I partly addressed this question myself when considering the religious validity of the evolutionary model in the closing section of my essay "Religion and an Evolutionary Theory of Knowledge" (*Zygon* 17 [December 1982]). In one of the upcoming 1987 issues of the journal the question will be considered further in some essays on the naturalistic theology of Henry Nelson Wieman. In this current issue the article by Schwarz and especially the one by Joel I. Friedman initiate us into pondering the effectiveness of scientific materialism as myth.

Schwarz, after reviewing how modern science has removed a theistic point of reference from the world in which we live, discusses some recent attempts to reestablish theism in light of scientific thinking. He concludes by offering what appears to me to be a "materialistic" dimensional model to help us understand how God can be both fully within the world and yet transcendent of the world. If my interpretation of Schwarz on this point is correct, he affirms the usefulness of materialistic analogies in religious thought while challenging materialism's tendency to deny any reality ontologically transcending our universe.

Friedman goes even further than Schwarz in accepting scientific materialism as he discusses the beginnings and endings of the universe, the earth, human life, and himself. Confining himself to what is natural as opposed to supernatural, Friedman then develops a concept of God as the Force of Nature. Although this Natural God may not be personal, nevertheless knowledge of it through scientific reason combined with global intuition may help us achieve universal love, ethical action, and personal salvation.

It is in his thinking about the relevance of the Natural God to our personal lives that Friedman implicitly begins to consider scientific materialism as mythology. Whether this type of mythology can adequately meet the kinds of religious needs I described above of course remains to be seen. However, Friedman does give us a good starting point for seriously evaluating Ed Wilson's claim that the materialistic "evolutionary epic is probably the best myth we will ever have."

Karl E. Peters