"Scientific Materialism" — Science, or Mythology?

A Review of Edward Wilson's *On Human Nature*

by Richard Thompson

In his recent book *On Human Nature,* Edward O. Wilson deliberately sets out to fashion for mankind a new mythology based on scientific materialism. In this effort one of his principal objectives is to eliminate religion as a central force in human society and to harness for material science the energy now being expended in religious pursuits. He argues that "If religion . . . can be systematically analyzed and explained as a product of the brain's evolution, its power as an external source of morality will be gone forever. . . ."[1] Wilson feels that the resulting vacuum can be filled by inducing people to center their aspirations on the epic of organic evolution. In other words, evolution is to become the new myth for humanity.

In making this proposal, Wilson has indeed pinpointed one of the most serious dilemmas posed by scientific materialism. Scientific materialism denies the very idea of purpose and reduces life to the meaningless interplay of blind forces and inanimate entities. Why is it, then, that human beings exhibit an innate need for higher purpose and meaning in life?

Before looking at how Wilson tries to solve this dilemma, let us briefly summarize the basic hypotheses of scientific materialism, as set forth in *On Human Nature.* The most basic of these is that all phenomena, including life, can be fully explained in terms of the laws of physics and the entities postulated by physical theories. This hypothesis has two fundamental corollaries. The first is that mind and consciousness have a physical basis. (In other words, every aspect of mind is explainable by reference to a physical substrate, presumably the brain.) The second is that living organisms are combinations of material elements that arose from earlier, nonliving combinations through material transformations obeying the physical laws.

In support of these two corollaries, the theory of evolution attempts to provide a detailed explanation of just how the multifaceted phenomena of life that we see today could have arisen step-by-step from lifeless, disorganized matter. Wilson is primarily concerned with the division of this theory that deals with the origin of higher species of life, including man. Here the basic hypothesis is that organisms will vary randomly by genetic mutation, and that certain variants will be better suited for reproduction than others in the context of the environmental situation. Thus the genetic constitution of the organisms will gradually change, and new species will evolve.

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Wilson's goal is to extend this theory to encompass all aspects of human society. He thus hopes to show that the deepest aspirations of human life for higher meaning and purpose are simply patterns of genetically programmed brain activity that arose by chance and were preserved because they conferred some reproductive advantage on the individuals or societies possessing them.

This attempt by Wilson is ironic, however, for while undermining the basis for the very concept of hope, he simultaneously stresses again and again the themes of hope and purpose. Throughout *On Human Nature* he passes judgement on various aspects of human life, expressing appreciation for some and disfavor for others and maintaining the hope for improvement in the future. In his conclusion he proposes that mankind should embrace the explicitly blind hope of the new myth of evolution. The true spirit of science, he says, "constructs the mythology of scientific materialism, . . . addressed with precise and deliberately effective appeal to the deepest needs of human nature, and kept strong by the blind hopes [sic] that the journey on which we are now embarked will be farther and better than the one just completed."[2]

Unfortunately, this scheme must fail, for one cannot base hope on a world view that explicitly excludes it. If one accepts this world view, he must either understand its implications and acknowledge that life is meaningless, or he must abandon his hard-won understanding and plunge willfully into delusion.

Yet there is still hope—*genuine* hope. And this hope is to be found by raising the following question: Is "scientific materialism," as described by Wilson, actually *scientific,* or is it indeed *mythological*? This question brings us to the real substance of Wilson's book. Has he actually demonstrated his thesis that the phenomena of human psychology can be explained by the theory of evolution? The answer must be an emphatic "No." As Wilson himself warns us in the introduction, *"On Human Nature* is not a work of science."[3] Rather, it is a speculative exploration of the consequences of systematically interpreting human society within the framework of scientific materialism.

It is not surprising, therefore, that some of Wilson's most important points are supported by vague suggestions, at best. One example is his explanation of belief in God. Even from a behavioristic viewpoint belief in God is an extremely important feature of human psychology, for it has played a central role in the lives of millions of people throughout history. Yet in an entire chapter on the evolution of religion, Wilson devotes but two small paragraphs to this topic. In them he suggests that, in some completely unspecified way, belief in a single all-powerful God is caused by the tendency towards male dominance in pastoral tribes. According to Wilson, it is for this reason that both the Hebrews and the Arabs developed

monotheistic religions.

This is a very disappointing performance by Wilson, and not at all what we are accustomed to expect in the way of ingenious scientific explanations. Unfortunately, it is typical of his arguments throughout *On Human Nature*. Rather than contribute convincing proofs that strengthen the case for evolution, he simply relies on the existing prestige of scientific materialism to give credence to his views. At most he is providing a perspectus for a possible theory of the future, rather than a substantial contribution to scientific knowledge.

Yet even though Wilson is presenting only an outline for future research, it is likely that many people will accept his vague and scanty reasoning as standard scientific proof. Indeed, the book-jacket copy promotes this misconception by neglecting to mention the tentative nature of Wilson's speculations and instead directly stating that "He shows how . . . patterns of generosity, self-sacrifice and worship . . . reveal their deep roots in the life histories of primate bands that hunted big game in the last Ice Age."[4] This is misleading, and it sets a very bad precedent.

One mode of fallacious reasoning that Wilson frequently employs is to argue that a trait of human behavior has evolved by natural selection simply because it appears to be advantageous to the welfare of individuals or societies. When dealing with such complex and subtle subjects as human behavior, this argument is simply not justifiable.

Let us give a simple example to illustrate the traditional standard of scientific reasoning, as it might apply to the question of evolution. Consider the joints of the body, such as the elbow. To understand how joints might evolve, we would first have to understand what they are. This means that we would have to have a realistic mathematical model that shows which configurations of matter are capable of acting as joints, and which are not. (What constitutes a workable joint is by no means obvious, for it entails many delicate questions of engineering.) Then we would have to trace out possible intermediate stages between organisms possessing joints and organisms lacking them. We would have to somehow estimate the relative selective value of different stages, and we would have to show a natural, selective progression leading to forms with joints. Only then could we leave the realm of sheer conjecture and claim to study the matter scientifically. It is not sufficient simply to observe that joints are advantageous to creatures possessing them.

So, if analysis of the origin of such simple structures as joints presents such a difficult challenge to scientific methodology, then what can we say about religion? Unfortunately, Wilson does not even know what religion is. Has he studied the *Vedānta-sūtra*? Has he mastered the *Bhagavad-gītā*? Does he understand the teachings of Christ or Mohammed? In *On Human Nature* we find no evidence of such knowledge.

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Wilson does, however, reveal a strong prejudice against religion, as well as a desire to eliminate it and divert its energies into the service of material science. He explicitly states that this is his objective in formulating an evolutionary explanation of religion. However, this negative attitude makes it very unlikely that he will ever understand what religion actually is, much less understand its original source.

In the end, Wilson is forced to base his mythology of scientific materialism on the great success that science has enjoyed in the past in explaining various natural phenomena. Because these successes have mainly occurred in the physical sciences, it might be worthwhile to note briefly the recent history of physics. Since the revolutionary development of quantum mechanics in the 1920's, physicists have found it necessary to explicitly include the conscious observer in their accounts of inanimate matter. Indeed, Werner Heisenberg has stated that "The laws of nature which we formulate mathematically in quantum theory deal no longer with the particles themselves but with our *knowledge* of the elementary particles."[5] (Italics added.) We should note that this development plays havoc with a basic tenet of scientific materialism, i.e., that conscious mind is explainable in terms of the physical laws. Thus, while Wilson confidently fashions a crown for his colossus of material scientism, there are hints of cracks in its feet of clay.

In addition to being unproven and unreasonable, Wilson's new mythology also leaves us with nothing but the alternatives of total cynicism or willful self-delusion. Therefore we would like to briefly suggest here that there is another way to resolve the conflict between science and religion. But this approach entails two prerequisites. First, science—and especially the nascent science of man—should be approached with very strict and cautious reasoning. The temptation to wildly extrapolate scientific hypotheses and thereby generate mythological world views should be resisted. Second, one should study religion as it is, without trying to force it into a Procrustian bed of artificial concepts. If religion is approached with an open mind and appreciated in terms of its own categories, it can be truly understood, and then its relation with the findings of science can be fruitfully considered. ■

References

1. Edward O. Wilson, *On Human Nature* (Cambridge: Harvard University Press, 1978), p. 201.
2. Ibid., p. 209.
3. Ibid., p. *x*.
4. Ibid., book jacket.
5. W. Heisenberg, "The Representation of Nature in Comtemporary Physics," *Daedalus*, Vol. 87, No. 3 (1958), p. 95.