

SOCIOBIOLOGY AND RELIGION: CONCILIATION OR CONFRONTATION?

by Alexander J. Morin

It was the Sabbath, and the people of the village had gathered in the synagogue for the evening service just as they had always done in nineteenth-century Poland. The doors of the Holy Sanctuary were open and the Ark of the Covenant had been unveiled. The rabbi was nodding in a chair on one side of the raised platform at the front of the room and the cantor was standing on the other side, chanting the day's words from the Holy Book. The men in the congregation, in their broad hats and prayer shawls, were bobbing their heads as they sat, murmuring the appropriate invocations of the name of God. The women, in their wigs and shawls and black dresses, were in the balcony, peering through the lattice that shielded them from view of the men so that the holy service should not be defiled. Everything was as it had always been, so far as anyone knew, from the beginning of time.

Suddenly the doors of the temple were thrown open and a man rushed down the center aisle. He was coatless, hatless, wearing the rough clothes of a workman. His face was flushed, his hair was wild, his eyes were blazing. He turned to the congregation and shouted: "You fools, you clods, you sheep! You worse than sheep, because sheep at least have shepherds who guide them to food and keep them safe from harm. All *your* shepherds can do"—pointing with a sneer at the rabbi and the cantor—"is serve the wolves who feed on you. They teach you only how to suffer in silence while you live in fear and degradation and poverty.

"Week after week, year after year, you waste your lives chasing the hopeless dreams of the dead past, worshipping a thing that does not exist, when you could be out in the great world, learning the ways of nature, unlocking the secrets of the universe, and using what you learn to build a world of peace and plenty. If I am wrong, may your supposed God in his supposed heaven tell me so!"

And as he said these words, there came a great roar of thunder. The roof of the temple split open, lightning filled the sky, and the voice of God was heard, saying: "You know, he's absolutely right!"

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This story is an example of familiar Jewish irony, expressing the tension of a people suspended between two worlds—in this case, between the world of traditional religion and the world of utilitarian science. The subject of this conference and the existence of the Institute on Religion in an Age of Science itself reflect a similar tension, expressed from two directions. On the one hand we have the tension of religious believers seeking to accommodate within their traditional value system the powerful understandings derived from science. On the other hand we have the tension of scientists who are scientific materialists in their work and at the same time are heirs to the power of traditional religious beliefs, seeking somehow to reconcile the two. And we have the special case of Edward O. Wilson, the progenitor of the new scientific discipline of sociobiology, who seems to be trying to transfer the power of religious belief to scientific materialism itself.

Science and religion have been in conflict for a long time now, and their confrontations have produced (and are continuing to produce, e.g., in Iran) violence and death to men and ideas. Is this conflict inevitable, inherent in the very nature of the two idea systems? Is some form of reconciliation possible, and does sociobiology provide a bridge between them? I share with several of the theologians who have contributed to this conference a sense—although I get there from the opposite pole—that a reconciliation of religion and science based on sociobiology is not easy. In fact I do not think it is possible, at least on any rational or meaningful level. And from my own point of view—that of a dogmatic scientific materialist—I do not even think it is desirable.

SOCIOBIOLOGY AND SCIENTIFIC MATERIALISM

Consider what sociobiology may tell us if it can develop as powerful a body of confirmed theory about human beings as it already has developed about other kinds of animals:

First, by systematic observation of the social behavior of animals, scientists have been able to trace out the rules of conduct that appear to facilitate the kinds of cooperative activity that enhance the reproductive fitness of the individuals in the group. It appears altogether likely that such rules of conduct operate in human groups and that these rules have been generated similarly in the course of our own evolutionary history. I am not altogether comfortable with Wilson's use of the term "altruism" and his analysis of this kind of behavior, but clearly it involves a set of rules of the kind I mean, and it seems plausible that this is only one among the many sets of such rules we ultimately may be able to identify and explain. And when we have

done this, we will have identified what is commonly called an "ethical code" and found it to be rooted not in the amorphous will or nature of God, not in the shifting winds of cultural consensus, but in the solid, physical base of the amoral, individualistic, procreative human genes.

Second, Wilson speaks (in *On Human Nature*) of a "mythopoeic drive," of the construction of fantasies that serve to organize human perceptions of the world and of our place in it, a drive so strong that it is not uncommonly reinforced by the intense physiological manifestations that we call "transcendental."¹ Wilson describes this mythopoeic or religious drive as a distinguishing characteristic of the human species, like the wing tessellation that uniquely identifies the fritillary butterfly.

Again I am uncomfortable with this kind of formulation because "myth" and "religion" (like "altruism") are terms that mean too many different things and are too hard to define operationally for purposes of scientific investigation. But it does appear likely that all forms of life require decision systems that impose regularity and consistency on the random chaos of the external world. Insofar as these decision systems define what is self and what is not self and predict what usually can be expected of the things and events that are not self and how the self can best respond to them, they serve some of the major purposes that humans achieve by the construction of cosmologies and the elaboration of myths and religions. And once again, if speculations of this kind can be supported by the scientific investigations of sociobiologists, we will have located the source of religious behavior (if not its specific content) in our genes rather than in our culture or any supernatural force. By doing so, we will have shown religion to be the blind and accidental result of random variation, simply another means found by our genes to facilitate their survival and replication.

I hasten to emphasize again that these are speculations, so far not supported by any significant body of scientific data. There are those within the scientific community who argue that such speculations can never be confirmed, that the complexity of the human animal and its interactions with its environments is so great as to preclude the verification of hypotheses of this kind. I disagree, but that is another argument. What matters for our present purposes is the fundamental premises of the scientific materialism on which sociobiological investigation is based. This materialism denies ultimate purpose. It is utterly amoral. It tells us only about what is and can tell us nothing about what ought to be, in the present or in the future. It contains neither hope nor despair nor any other statement of values. It attaches no importance to the survival of the human species, in its present form or

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at all. And it denies the possibility that there exist any events, ideas, or perceptions that are not themselves part of objective reality, independent of the observer and susceptible to explanation on the same grounds as all other phenomena.

In such a system, there is no room whatever for notions of the immaterial, the transcendental, or the metaphysical. Insofar as the concepts of "God" and "religion" have been associated historically with notions of this kind, there is no room for them in the system either. Such notions are recognizable as cultural inventions probably based on biological forces, and the development and the specific forms of cosmologies and epistemologies of this kind can be subjected to comparative and historical analysis, but they can have no status as alternative ways of explaining the human experience, either in its parts or in its totality.

I have stated the tenets of scientific materialism in as extreme and dogmatic a form as I can in the hope that those who retain some belief (however tenuous) in any part of conventional religious ideologies will find something to disagree with. Certainly many scientists would disagree with (or at least be made uncomfortable by) a statement in this form, just as many of them are made uncomfortable by its implications as they are expressed in the work of Wilson. We are all of us heirs to thousands of years of religious beliefs, which permeate every aspect of our lives. We are all of us subject to the enormous pressures toward conformity in societies in which the vast majority of people still attach great emotional force to such beliefs. It is not surprising then that many people who recognize and accept the power of the materialist epistemology should be reluctant nevertheless to abandon the comfort of the older epistemologies and should seek somehow to effect a "reconciliation" between them. But on what terms is such a reconciliation possible, if it is possible at all?

Here I must say that I am treading on unfamiliar ground. I was only dimly aware that this was a subject on which serious and intelligent people could spend a lot of time and invest a lot of energy. I am largely unfamiliar with what I now begin to recognize as a long and honorable history of intellectual analysis and disputation on these issues. All I can do therefore, is respond to what I heard at the Star Island conference, which I take to represent the most sophisticated and enlightened body of contemporary thought along these lines.

RELIGION AS SCIENCE

The "reconciliations" that have been proposed seem to me to fall into several groups, with a good deal of overlap among them.

One group seeks in effect to redefine the notions of "God" and "religion" in a way that makes them synonymous with the materialist cosmology and the evolutionary process. They argue, in much the same terms as in my synagogue story, that this is what God has been trying to tell us all along. That is, the conclusions of traditional religious thought about the nature of the human species and the origins of ethical behavior are said to be consistent with and confirmed by the results of scientific investigation, and the evolutionary epic (to use Wilson's phrase) now can perform the same important biological and social functions that were previously performed by the traditional religions.

My first response to this is just to say, "Welcome to the fold, my friends, glad to have you with us." But, on second thought, I have some problems with this line of approach. One problem is the suggestion it contains of the equivalence of the traditional and the scientific epistemologies. It is certainly the case that folk wisdom incorporates real wisdom, although it is usually cluttered up with a lot of superstitious nonsense, and that wise men (including poets as well as philosophers and theologians) have provided us with profound insights into the human condition, even though they could not operate with the advantages of modern scientific methods and knowledge. But this puts the traditional religions and modern science in the same position as the alchemists vis-à-vis the chemists; the very notion of God becomes as outmoded and inadequate as the notion of the four elements of earth, air, fire, and water. If religion is no more than a kind of imperfect science or an explanation of only those phenomena that science has not yet been able to explain adequately (e.g., the origin of the hydrogen atom), I can see little basis for maintaining that it is viable as an independent belief system.

My second problem with this approach has to do with the connotative significance of the terms involved. No redefinition of the terms "God" and "religion" can eliminate their historical association with a complex set of values and beliefs and institutions that give them particular and profound meanings—and those meanings (including, above all, notions of the immaterial and of purpose) are fundamentally inconsistent with the premises and conclusions of scientific materialism in general and sociobiology in particular. For this reason any use of the terms that implies such a consistency carries with it an inevitable distortion of crucial distinctions and can lead only to confusion and misunderstanding.

I have some of the same difficulties with Wilson's approach to this problem in *On Human Nature*, or at least with the language he uses in discussing it. Wilson describes scientific materialism as a "mythology,"

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presumably in the sense that, like other mythologies (including those associated with traditional religion), it presents statements about natural phenomena, including the origin and behavior of human beings, that are ultimately unprovable and unfalsifiable. Here again we have a term with connotations that are inappropriate for the way it is used. The conventional definitions of mythology that are found in any dictionary make clear that the term usually refers specifically to explanations that are unscientific, and to ignore this distinction again invites confusion and misunderstanding.

More important, the use of the term "mythology" in this context seems to suggest (as do the conciliators in this first group) that both scientific and religious idea systems have equal status as statements about reality. It is of course true that all idea systems consist of words and none of them can be confirmed by direct sensory experience; in this sense they are equally valid as subjects for study by philosophers and historians and sociologists of ideas. But the adequacy of any system as a guide to understanding and action is a matter that is subject to confirmation in terms of its capacity to generate testable hypotheses, to produce explanations of phenomena that specify both necessary and sufficient causes, and to result in accurate predictions of events. By these standards, idea systems are by no means equal; scientific materialism can be and has been confirmed, and the kind of sentimental relativism that equates it with religious systems is logically indefensible and heuristically misleading.

RELIGION AS ECSTASY

A second group seems to seek a reconciliation by limiting the domain of religion to particular kinds of human experiences, which are described by such undefinable and unanalyzable terms as "revelation" or "transcendence." These experiences are said to make up a mode of apprehension and understanding that is different from and cannot be achieved by scientific explanation, even by scientific explanation of the experiences themselves. It is undeniable that such experiences occur, apparently for other animals as well as for humans; but a class of events that might include everything from a cat's response to catnip to the voices that spoke to Joan of Arc to Archimedes' ecstatic cry of "Eureka!" is an awfully fuzzy set, and I am not sure how much can be done with it. Anyway I suppose that if such a class of experiences does exist, it can be given any name we like, including the name of religion. But here again I would prefer a more neutral term in order to avoid all the theistic implications that inevitably accompany the very word "religion."

This whole line of approach ultimately rests on the observation that scientific explanations cannot adequately reproduce or replace the full force and immediacy of individual experience and perceptions. In this limited form the observation is unarguable; but it is sometimes extended to the conclusion that the knowledge derived from these individual experiences is not only different from but also equal or even superior to the knowledge gained from scientific investigation. This broader conclusion appears to rely not on any presentable evidence but on an assertion of the moral superiority of "warm" emotion to "cold" reason, of "holism" to "reductionism," of "humanism" to "scientism." But an individual's perception of reality is not made more accurate either by its moral purpose or by the intensity with which it is felt to be real, and it is a dubious morality that denies authority to science in the name of religion defined in these terms.

In any case, this attempt to deal with the competing claims of science and religion is more one of defense and denial than of conciliation. It seeks to reserve one aspect of human behavior as a *sanctum sanctorum*, never to be violated by understandings derived from scientific investigation. This is the defense of the hedgehog *in extremis*, willing to abandon the rest of the world so long as it can stay curled up in a final effort to protect its one vital idea from the foxes. Naturalistic observation suggests that this strategy does not lead to greater peace or better understanding between the species.

RELIGION AS ETHICS

A third group seeks similarly to take religion out of the cosmological realm, in this case to give it dominion over the realm of ethics. It is here that the encounter between traditional religion and the new discipline of sociobiology is perhaps most direct.

All human beings appear to be guided by generally similar rules affecting such important aspects of behavior as the relationships between males and females, between parents and children, between siblings, between individuals and their social groups, and between members and nonmembers of these groups. As I indicated earlier, sociobiological research suggests that these rules, like the similar consistencies observed in the behavior of other social animals, are part of our genetic inheritance, just as much as our physiological characteristics (like sexual dimorphism) and our developmental characteristics (like a long period of infantile dependency). Accordingly the ethical codes we have invented to guide and justify our behavior may be regarded as reflections and elaborations of the basic biology devel-

oped by members of our species over the long course of its evolutionary history.

I must emphasize that this description reflects sociobiological theory in terms of its potential rather than its present accomplishments. The evidence presented in Wilson's major work (*Sociobiology: The New Synthesis*) and other research in this field suggests that this potential already has been realized to a considerable extent for many nonhuman forms of life, to a lesser degree in comparing different species, but least of all for *Homo sapiens*.² It is therefore all too easy to extrapolate from general theory to speculations about specific human traits in a way that reflects the inclinations of the observer more than any considerable body of evidence. Wilson himself is guilty of a good deal of this kind of speculation in *On Human Nature*, where he leaps from statements about the biology of human behavior to statements about the implications of particular ethical and social policies without providing adequate evidence for his conclusions. I am always made uneasy by prescriptions and proscriptions of conduct that rely mainly on affirmations of authority, whether they are theological or scientific, because I have so often seen them used for disagreeable purposes. We still have a long way to go before we can relate our ethical choices with any confidence to the constraints and potentialities provided by our biology.

Nonetheless the clarification of this relationship is part of the program of sociobiology, and I believe that continued research will be productive along these lines. As this occurs, a host of difficult questions will be raised—for example, about the nature and extent of individual and social freedom of choice—that cannot be addressed here.³ Our present interest is in the implications of these findings for religion and for claims of religious hegemony over the realm of ethical conduct.

The sociobiologists are certainly not the first to suggest that ethical rules are inherent in human nature and based on some kind of natural law. Philosophers and theologians from Plato to Saint Thomas to Sigmund Freud have developed theories of human behavior along these lines, and it is the parallelism of speculations of this kind with the hypotheses of sociobiology that suggests the possibility of reconciliation between them. But the parallelism is no more than superficial. Sociobiological thought is fundamentally different from such speculations in at least two very important ways. First, it offers the only theory of human behavior that is plausible in terms of its consistency with everything we know about the nature and evolution of other forms of life. Second, it offers the only theory that is itself susceptible to empir-

ical verification and that may result in a cumulative body of tested knowledge.

Accordingly I do not see much basis for conciliation between the competing claims of religion and science to the territory of ethics. To the extent that sociobiological research finds rules of conduct encoded in our genes, the traditional authority of religion in these matters is diminished. The wisdom of theologians and philosophers may be useful in our consideration of choices, but it rests on premises that are logically incompatible with those of scientific inquiry. Insofar as the conclusions of the two idea systems may resemble each other, the resemblance itself testifies to an underlying reality that can be investigated only with the tools of scientific materialism. The retreat of religion to the domain of ethics at best provides it with a refuge that is unsafe and ultimately indefensible.

RELIGION AS FAITH

The three approaches I have described so far are attempts to define the domains of religion and science in ways that can be defended by reason and logic. Their protagonists tacitly accept the terms of discussion set by the scientists and try to demonstrate that there is room for some form of religious belief within that system. There is a fourth group that makes no such attempt at rationalization. Instead its members rest their case on a simple assertion of faith, accepting religion and science as separate but equal without attempting seriously to reconcile the contradictions inherent in the two systems of ideas.

This approach is shared by many scientists and many theologians, who—like everybody else—are perfectly capable of maintaining any number of contradictory beliefs at the same time. It is an approach that is not amenable to logic or to evidence, either in its construction or in its response to criticism. And it is an approach that is more one of accommodation than conciliation. It permits science and religion to live and work in the same house, but they keep to their separate quarters. Certainly they are not bedfellows, and any union they might attempt under these circumstances is not very likely to be consummated with satisfaction to either party.

SOCIOBIOLOGY AS RELIGION

Wilson addresses our central question from a point of view that is exactly the opposite of those described above. So far as he is concerned, the nature of religious beliefs and the intensity of religious experiences can be fully explained in terms of materialist evolutionary

biology. He then reverses the field by finding in scientific materialism, and in the activities associated with it, a body of beliefs and experiences that is itself capable of serving the compelling biological needs that are expressed in religious behavior. Consider the following statements, from the closing pages of *On Human Nature*:

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. It can be adjusted until it comes as close to truth as the human mind is constructed to judge the truth. And if that is the case, the mythopoeic requirement of the mind must somehow be met by scientific materialism so as to reinvest our superb energies. . . .

The true Promethean spirit of science means to liberate man by giving him knowledge and some measure of dominion over the physical environment. But at another level, and in a new age, it also constructs the mythology of scientific materialism, guided by the corrective devices of the scientific method, addressed with precise and deliberately affective appeal to the deepest needs of human nature, and kept strong by the blind hopes that the journey on which we are now embarked will be farther and better than the one just completed.⁴

Here we see the vision that moves Wilson and informs his work. Those of us who have abandoned the old faiths are offered a new one appropriate to our needs and times, majestic in its sweep, consistent with our belief in scientific rationality, and restoring a sense of purpose to our activities.

This sort of vision troubles many scientists, whose attitudes of mind and methods of analysis are hostile to propositions that are unprovable and unfalsifiable, including all forms of superstition, mythology, and revelation. At the same time it is a vision that has informed the pursuit of knowledge at least since the time of the Greeks. Science lives on the power of revelation that its practitioners find in their work. The rapture of mathematicians and physicists in the discovery of concise and elegant proofs and the awe of astronomers and biologists at the cosmologies and phylogenies they elucidate are of a piece with all other religious experiences. The identification of truth with beauty and of understanding with power is equally apparent in scientific and religious thought.

Thus Wilson stands in a long line of missionaries who have equated science with religion in this sense and who have preached the gospel

of scientific materialism as a substitute for other creeds. His approach is distinctive, however, in several important ways. Unlike most of his materialist predecessors, Wilson does not dismiss the phenomenon of religious belief as irrational, obscurantist, or irrelevant; he recognizes its power and explains it on scientific grounds as a biologically based adaptation developed in the course of human evolution. Given the power and necessity of religion, Wilson then suggests that it can best be used for human purposes if it is associated with the power and necessity of scientific materialism itself, expressed both symbolically and empirically in the “evolutionary epic” and its implications for human conduct.

Wilson’s approach to the reconciliation of science and religion is the most direct of those we have considered, but, like all the others, it contains a fundamental contradiction. His formulation of the evolutionary epic and of the spirit of scientific materialism is inescapably infused with notions of ultimate goals and purposes, and these notions are denied in his own materialist epistemology and unsupported by his scientific evidence. His formulation also involves a problematical attempt to resolve the ancient dilemma of free will versus determinism in human conduct, a matter too complex to be considered here. And finally, if Wilson’s reconciliation of science and religion is reduced from an intellectual to a political level, its implications are more frightening than absurd. It is all too easy to imagine the National Academy of Sciences as the Vatican of this new religion, promulgating rules of conduct based on the authority of a scientific priesthood, sending out missionaries to convert the heathen, and conducting heresy trials of those who deviate from a dogmatized version of scientific materialism. Thank you, but no.

Nonetheless I must say that I am moved by Wilson’s vision and share his belief in the biological, social, and symbolic power of scientific understanding. We require truth to make us free, however we may define and use our freedom, and our best approximation to truth—about ourselves and the universe we inhabit—is achieved by means of the principles and methods of scientific inquiry. Both the processes and the results of this inquiry engage and exalt the unique capacities of the human species, even as they demonstrate our inseparability from the rest of the universe and the rules that govern its behavior. If religious belief is indeed part of the human condition, I know of no better place to invest it than here.

I can sum up best perhaps by telling another story, this one in a more personal vein:

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On my first trip to England, many years ago, I arrived late one afternoon at King's College Chapel in Cambridge. I was a young and ardent pilgrim to the holy places of American literary and intellectual tradition and greatly excited by the extraordinary experiences I was having. And for those of you who don't know it, King's College Chapel is truly extraordinary. It is a superb example of late Gothic architecture in the English style—a long, high nave, full of light and air and graceful carving, with an astonishing fan-vaulted roof that lifts the eyes and the spirits to the heavens.

The chapel by itself was enough to fill me with awe, but in addition I arrived at Evensong, just as the choristers were beginning the vesper service. Row upon row of young boys in white surplices, their fresh faces radiant in the light that filtered through the gothic traceries, singing sweet songs with the voices of angels. There I stood—that worldly-wise atheist from the tough-minded west side of Chicago—and I broke down. I found myself literally shaking, with tears streaming down my face, in the grip of emotions that I did not understand and could not control.

After a few moments I realized that a man standing nearby was watching me closely. He was dressed in clerical robes, perhaps those of a deacon of the church, and when he caught my eye, he came closer and said in a quiet voice, "Isn't it wonderful to come so close to the glory and beauty of God?"

This was such an alien notion to me that at first I had no response to make. But, as I listened to the music and looked around the chapel, I realized what it really meant. "No," I said, "but isn't it wonderful to come so close to the glory and beauty of humanity!"

NOTES

1. Edward O. Wilson, *On Human Nature* (Cambridge, Mass.: Harvard University Press, 1978).
2. Edward O. Wilson, *Sociobiology: The New Synthesis* (Cambridge, Mass.: Harvard University Press, 1975).
3. Many of these questions are thoughtfully discussed by Bernard D. Davis in his "The Importance of Human Individuality for Sociobiology," in this issue.
4. Wilson, *On Human Nature*, pp. 201, 209.