

# THEOLOGY AND THE SOCIAL SCIENCES—DISCIPLINE AND ANTIDISCIPLINE

by Nancey Murphy

*Abstract.* In this review of papers by E. O. Wilson, Philip Gorski, and Robert Segal, I apply Wilson's description of the relations between a discipline and its antidiscipline (the science just below it in the hierarchy of sciences) to the relations between theology and the social sciences. I claim (*contra* Gorski) that a common methodology is applicable to natural science, social science, and theology. However, despite the fact that a discipline cannot ordinarily be reduced to its antidiscipline, I claim (with Segal) that it remains to be shown that a theistic interpretation of religious phenomena is superior to a social-scientific explanation. I see this as work to be done rather than an impossibility. Insofar as it is shown that theology cannot be reduced to social-scientific explanations, support is provided for the hypothesis of the existence of God.

*Keywords:* antidiscipline; E. O. Wilson; Philip Gorski; Robert Segal; social sciences; relation to theology.

---

The preceding papers by E. O. Wilson, Philip Gorski, and Robert Segal provide an interesting set for a commentator. I shall pay some attention to each paper in turn, with the goal of seeing what we may learn about the proper relations between theology and the social sciences. I shall conclude that a critical task for theologians is to counter claims by social scientists to provide adequate explanations of religious phenomena. From Wilson I shall borrow the notion of an antidiscipline; Gorski's paper provides some help in applying this concept to the social sciences in their relation to theology. Segal's paper makes clearest the challenge posed to theologians by the ambitions of the social scientists.

Nancey Murphy is Assistant Professor of Christian Philosophy at Fuller Seminary, Pasadena, California 91182. She has a bachelor's degree in psychology and doctorates in both theology and philosophy (specializing in the philosophy of the natural and the social sciences).

[*Zygon*, vol. 25, no. 3 (September 1990).]

© 1990 by the Joint Publication Board of *Zygon*. ISSN 0591-2385

Wilson proposes that in the ontogeny of scientific disciplines there is at first an adversarial relation between disciplines that study entities on adjacent levels of organization. Members of the antidiscipline (the one on the next rung downward) call for the reformulation of the discipline by explaining its phenomena in terms of the laws of the antidiscipline. Members of the discipline, on the other hand, stress the novelty and particularity of the phenomena they study. "A tense creative interplay is inevitable," says Wilson, "because the devotees of adjacent levels of organization are committed to different methodologies when they focus on the upper level" (1990, 247). That is, even after they have accepted the relevance and value of the antidiscipline, members of the discipline still tend to focus on comprehensiveness of explanation—as opposed to the search for fundamental laws, to which the antidiscipline is committed. This competition and these tensions, Wilson suggests, are the principal source of the vitality of science.

The main point of Wilson's paper, of course, is to suggest that sociology and biology are in the early stages of a discipline/antidiscipline relation. However, before moving on to apply his insights to positions expressed in the other two papers, I note a claim he makes in passing: Sociology, he says, is not destined to be cannibalized by the antidisciplines since it displays emergent properties (1990, 259). In fact, the laws of an antidiscipline are never sufficient to account for a discipline's potentially far richer content. This is an extremely important point, very much at variance with the positivists' expectation that all higher sciences would ultimately reduce to physics.

To show the relevance of Wilson's account of the relations between discipline and antidiscipline to both Gorski's and Segal's papers we have but to consider Arthur Peacocke's proposal that in the hierarchy of scientific disciplines, theology occupies the top rung (1979, 1985). He claims that because theology is the science that studies the relations among humankind, the cosmos, and God, it is a higher-order science than either the social sciences or cosmology.

Let us turn now to Gorski's paper. Here we find confirmation for Peacocke's suggestion that theology (*religion* in Gorski's term) is above the social sciences in the hierarchy of disciplines. The social sciences, in fact, are sandwiched between theology and the natural sciences. Thus in Wilson's terms the social sciences are antidisciplines to theology, just as the natural sciences are antidisciplines to the social sciences. Gorski's paper amplifies this account of the relations of the disciplines in two important ways. First, he addresses the relations between the *methods* of the natural sciences, the social

sciences, and theology. Second, he offers an interesting proposal (related to his theses on methodology) concerning the points of overlap and competition between theology and the social sciences.

Gorski characterizes the methodology of the natural sciences as predominantly “pragmatic” or “instrumental.” By this he means that (natural) scientific theories are evaluated by the extent to which they enable us to control and manipulate the natural world in a predictable manner (1990, 288). Next, he defines the area of overlap between theology and the social sciences, and differentiates them according to method. Both are concerned about meaning, right action, and the good life, but social-scientific arguments are grounded in “objective” claims about social reality, whereas theology is normative and grounds its demands on “speculative” theories about transcendent reality. The form of reasoning most appropriate to the social sciences he calls “practical,” and that of religion “critical.”

At the same time, however, “in each realm of knowledge other modes of reason may also be present as ‘weak poles’ that create a sort of ‘force field,’” Gorski says. In the essay, he argued that “the productive tension within social science is created by the interaction of practical and critical reason and that religion is governed by the same tension but with the reverse polarity, so to speak: the critical is predominant and the practical is weak” (1990, 303). Note the similarity to Wilson’s claims about the creative tension between discipline and antidiscipline in the natural sciences and between sociology and biology.

If we grant that theology is to the social sciences as typical discipline is to antidiscipline, then the arguments that Segal reports between religionists and social scientists are exactly as expected: attempted reductions of religious phenomena to the social and psychological are met by over-reactions from the religionists. I must confess some puzzlement at Segal’s paper, but perhaps in so doing I merely display the typical obtuseness of the over-reacting religionist. Nonetheless, it seems to me that the differences Segal is at pains to point out between the actual claims of the social scientists and the ones attributed to them by religionists are not differences that make any difference; Segal’s social scientists are quite thorough enough in their reductionism to merit the suspicion of the religionists, and Segal himself seems strangely unaware of this. For example, religionists, he says, should notice that social scientists do not ignore the believers’ explanation of religious behavior; they only deny that it is the ultimate explanation. But the point of a theistic explanation of religion is exactly to provide the ultimate explanation. If a different

“ultimate” explanation is provided by the social sciences, that is indeed an unacceptable reduction.

Nonetheless, Segal’s paper comes closer than Gorski’s, I believe, to recognizing the contested areas between theology and the social sciences. It is the phenomenon of religion itself that needs explaining: belief and worship, as well as moral code or vision of the good life. Religion is a sociocultural phenomenon; so the question arises whether it can be exhaustively explained by sociology and its allied sciences.

At this point I want to introduce a note on terminology. Peacocke correctly places *theology* rather than religion at the top of the hierarchy of the sciences. Whereas *religion* refers to the entire complex of belief and practice, theology is the discipline that seeks to provide an account of the beliefs of the religion in connection with its practices, structured in such a way as to exhibit their rationality.<sup>1</sup> I believe Segal could make some of his points more clearly if he made use of this distinction. Rather than saying, “the issue is whether the *true* nature of religion is religious,” (1990, 265) he could say that the real issue is whether sociology or theology (with its assumption of the existence of God) gives a better account of religious phenomena and is therefore more justified in its truth claims.

Now, the easy answer at this point would be to say that total reduction of any discipline to its antidiscipline(s) will never be successful, and to infer from this general statement that the reduction of theology to social science is bound to fail. However, there is a crucial difference between the status of theology and that of the other (nonreducible) disciplines upon which Wilson has based his conclusions. All agree that the entities studied by the disciplines of (say) cytology, psychology, sociology exist: there are cells, whether or not they are made up of anything but organic chemicals, and regardless of whether biochemists can explain all their operations; there are conscious states, whether or not they can be identified with brain states; and there are societies, whether or not they are more than (or nothing but) the individuals who comprise them.

But whether there is a God is very much an issue in this culture. Is there a real God, above and beyond the minds of believers, who is not merely an inference from the order of the cosmos but its creator, who has acted in history to command assent and obedience? Thus the reducibility of theology to the social sciences cannot be settled merely by looking at relations between other disciplines. However, we can get some clues about what it would take to settle the issue by looking

at other sciences—in part, by examining what it would take to show in particular instances that theological explanations cannot be replaced or reduced to social-scientific ones.

Consider an analogy from the sphere of consciousness and its relations to neurophysiology. We have a string of events such as the following: I am driving down the street, feeling hungry, see a Baskin-Robbins sign, and decide to pull into the nearest parking place. The neurophysiologist points out, correctly, that each of these events is (in some sense) identical with a physiological event: the physical motions of driving, the sensation of hunger, the neuronal firings when I see the sign, the different brain event that constitutes my decision to stop and park. However, the causal connections between the events are perceptible only from within the level of consciousness and meaning. In particular, even if there were a built-in food-seeking response triggered by the recognition of my hunger, there is no way to translate the meaning of the Baskin-Robbins sign into talk about neurons. Here we have an instance of the “richer content” that cannot be reduced to the language of the antidiscipline; and without it, one cannot make sense of the *series* of events.

Similarly, suppose we say that all religious events are (in some sense) identical with psychological or sociological events. The question, then, is whether the theological perspective provides an intelligible connection among them that is unavailable to the social scientist. For example, biblical scholar Norman Gottwald, using a Marxist-sociological model, has written the history of the settlement of Canaan by the Israelites (1979). His account deserves careful comparison with a more traditional biblical history. Notice, though, that the fact that he can produce such an account does not in itself argue for the falsity of the standard claim that God led the Israelites into Canaan, for God, of necessity, works through “natural” processes, and these are, *ex hypothesi*, sociological and psychological events. However, it does pose problems for the traditional account if Marxist sociology explains the entire series of events at least as satisfactorily as the theological account. On the other hand, if those series of events that appear meaningful from a theistic point of view appear random or inexplicable from a purely sociological point of view, then there is evidence for the failure of the reduction, and indirect evidence for the truth of the God hypothesis.

I claim that this is only indirect evidence for the truth of believers’ claims about God. I have suggested elsewhere that the structure of theological thought can best be understood on the model of a scientific research program (Murphy 1990). Recent philosophers of science have noted that scientific theories do not face the tribunal of

experience in isolation, but rather it is vast networks of theory that stand the test of experiment and observation. These networks of theory are generally organized by means of a single, very abstract, core theory. The core gives the program its identity, since changes in a network are generally made among theories of lower levels of generality. These lower-level theories are both closer to experience and easier to change without disrupting the entire research program. The core theory is supported by the role it plays in holding the rest of the network together. I claim that theories about the nature of God form the cores of theological research programs, and stand or fall with those programs. Thus the usefulness of a theological perspective in accounting for historical events (such as the migration of the Israelites into Canaan) is indirect support for the relevant theory about God.

It is interesting that social scientists have, according to Gorski, attempted to work with a model of scientific rationality based on the methodologies of both Popper and Kuhn. If this model turns out to be incoherent this should come as no surprise, since the main point of Kuhn's *Structure of Scientific Revolutions* (1970) was to criticize the received view of science—mainly Popper's falsificationism. However, the desire to appropriate some of Kuhn's revisionist views of science without giving up all of Popper's rationalism is understandable; Popper's late colleague, Imre Lakatos, outlined a scientific methodology that does just that; it is primarily Lakatos's views (1970) that I have just summarized above. Students of Lakatos have shown, moreover, that his methodology works to account for methodological decisions in both natural science and the social sciences. It combines elements of the conventionalism Gorski claims to be central to all scientific reasoning, but adds an emphasis on the prediction of novel facts. If I am correct in claiming that the novel-facts criterion is applicable to theology as well as to the natural and social sciences, then, *contra* Gorski, there are highly significant similarities throughout the hierarchy of sciences—from physics to theology, despite the fact that their theories deal with radically different entities (quarks, meanings, God), and despite the fact that their concrete methods of research (laboratory experiments, *verstehen*, exegesis) must be different in light of those different objects.

Furthermore, the suggestion that theological systems take the form of research programs allows us to describe more clearly what it would take to show that theology is not reducible to one or more of the social sciences. Confirmation of a research program is always a matter of comparison—which of the available competitors accounts for the domain of data in the most progressive (least ad hoc) manner. The

usual competitors for a theological research program are other theological programs. However, insofar as social scientists claim that religion is wholly sociological, they commit themselves to explaining the same domain of facts and to doing it better. We might expect the social scientists to have an edge—they postulate one less entity in the universe and therefore have a more parsimonious system. But an equally important criterion for a good explanation is its coherence (non-*ad hoc*-ness), and here the theologians have an edge; their systems of theory are made to fit (because they have grown out of) the totality of what we conventionally call the religious.

I conclude that Segal is right: whether the ultimate explanation of religion is theological or sociopsychological is a matter for research. Religionists have a long way to go to justify their claim that theistic explanations of human religious behavior provide so rich a content that they cannot be cannibalized by theology's antidisciplines. I'm convinced that it can be done; but that, of course, will appear to my antidisciplinarian reader as nothing but the usual prejudice of the religionist.

When (or if) theologians show that theology cannot be replaced by social-scientific accounts of religious phenomena, this will not show that the social-scientific accounts are of no value; their (usable) insights will be incorporated into theological research programs. In Lakatos's terminology, social-scientific theories will function as auxiliary hypotheses in theological programs. Wolfhart Pannenberg, for instance, has already made important moves to incorporate anthropological theories into his theological system (1985). In other words, theologians will be able to demonstrate the irreducibility of their discipline only by showing that they can interpret theistically and include in their programs most of the data and some of the theories favored by the social scientists. For instance, what does a predestinarian theology have to say about evidence that religious behavior is partly determined by socioeconomic status or genetics? In short, the stimulating discipline-antidiscipline relations described by Wilson can and should obtain between theology and the social sciences.

#### NOTES

1. If this distinction between a religion and its theology fails to fit all religions, then so much the worse for the social scientists' assumption that *religion* is a term capable of univocal application to everything from, say, Christianity and Judaism at their finest to the most primitive sort of superstition. Note also that I am assuming throughout that theology is *theistic* theology, although I recognize that there are other possibilities.

## REFERENCES

- Gorski, P. 1990. "Scientism, Interpretation, and Criticism." *Zygon: Journal of Religion and Science* 25 (September): 279/307.
- Gottwald, N. 1979. *The Tribes of Yahweh: A Sociology of the Religion of Liberated Israel, 1250-1050 B. C. E.* New York: Orbis.
- Kuhn, T. 1970. *The Structure of Scientific Revolutions*. 2nd ed. Chicago: Univ. of Chicago Press.
- Lakatos, I. 1970. "Falsification and the Methodology of Scientific Research Programmes." In *Criticism and the Growth of Knowledge*, ed. I. Lakatos and A. Musgrave. Cambridge: Cambridge Univ. Press.
- Murphy, N. 1990. *Theology in the Age of Scientific Reasoning*. Ithaca, N. Y.: Cornell Univ. Press.
- Pannenberg, W. 1985. *Anthropology in Theological Perspective*. Philadelphia: Westminster.
- Peacocke, A. 1979. *Creation and the World of Science*. Oxford: Clarendon.
- . 1985. *Intimations of Reality*. Notre Dame, IN; Univ. of Notre Dame Press.
- Segal, R. 1990. "Misconceptions of the Social Sciences." *Zygon: Journal of Religion and Science* 25 (September): 263/278.
- Wilson, E. O. [1977] 1990. "Biology and the Social Sciences." *Zygon: Journal of Religion and Science* 25 (September): 245/262. Reprinted from *Dædalus* 106/4 (Fall 1977): 127-40.