

## PHILOSOPHY OF SCIENCE AND RELIGION: THREE APPROACHES

Three recent books show the approaches Christian theologians are taking to construct a unified account of science and religion. Thomas F. Torrance, *Transformation and Convergence in the Frame of Knowledge: Explorations in the Interrelations of Scientific and Theological Enterprise*,<sup>1</sup> a series of essays from a Barthian perspective, presents a revelational positivist view. John F. Haught, *The Cosmic Adventure: Science, Religion and the Quest for Purpose*,<sup>2</sup> offers a liberal approach. Helmut Peukert, *Science, Action and Fundamental Theology: Toward a Theology of Communicative Action*,<sup>3</sup> presents a radical post-Marxist theory. Each succeeds in showing that his position is possibly true. Yet Haught and Peukert are more successful than Torrance in rendering their views credible to the audiences they address.

Although they write from very different orientations and reach rather different conclusions, all three share the same basic structure of argument. Each author analyzes the difficulties and anomalies of other attempts to account for science and religion. Each offers a postmodern "unified account" to show that science and religion are not essentially divergent, thus transcending the dualism that each finds in modern thought. Each argues that his own position is superior to reductionist or dualist positions because he can overcome the problems which they cannot. However, the authors' audiences, styles, and conclusions differ quite dramatically.

Haught is writing for the Society. His work is directed to that intelligent person who has read the scientific popularizations by Asimov, Sagan, Bronowski, Jastrow, et al. He seeks to show that science does not warrant their reductive materialism. His central vision is of a universe as purposeful, not as a random series of accidents that just luckily happened to develop sentience on this planet. His prose ranges from lucid to sparkling. His argument is clear and free of excess jargon. Haught is profoundly influenced by the thought of Whitehead and his followers in process theology, but he also smoothly integrates insights from Ricoeur and others into this work. Both he and Torrance rely heavily on Michael Polanyi's thought.

<sup>1</sup> Grand Rapids, Mich.: Eerdmans, 1984. Pp. xiv + 353. \$24.95. Nine of the eleven essays were previously published.

<sup>2</sup> New York/Ramsey: Paulist, 1984. Pp. vi + 184. \$6.95 (paper).

<sup>3</sup> Translated by James Bohman from the 1976 German edition. Cambridge, Mass.: M.I.T., 1984. Pp. xxviii + 380. \$35.

Torrance is writing for the Church. His work is directed to theologians and ministers. He seeks to undermine the dualistic, phenomenalist, and mechanistic habits of thought which constitute the received frame of knowledge in the West during the modern period. He believes that many scientists and theologians (e.g., Küng and Schillebeeckx) remain afflicted by this modern orientation in our postmodern age. This has led to "a vicious relativism" in theology. His central claim is that once we recognize the new unified vision emerging from the natural sciences and the humanities (although the social sciences still seem to be mired in positivistic mud), we shall be able to construct an integrated, scientific theology. He allots over 120 tedious pages to rehearsing the evolution of the "modern mind" and to placing Polanyi in the development of twentieth-century philosophy of science without uncovering new insights about either. Like Haught, he does not here seriously engage the works of philosophers of science such as Carnap, Kuhn, Lakatos, or Feyerabend. Torrance does use the work of Popper, Gödel, and Bohr as foils to his exposition of Polanyi, but seems oblivious to other alternatives. By contrast, Peukert engages all these mainline philosophers of science, but he never refers to Polanyi.

Peukert is writing for the Academy. He wants to engage skeptical philosophers of science and of religion. He writes a revisionist history of recent philosophy of science to show that recent attempts to ground physical and human sciences by uncovering a secure, subject-independent epistemic base fail. Each attempt encounters a problem insoluble on its theory. Each solves the problem by becoming pragmatic, that is, by turning to the practice of scientists as the criterion for a correct resolution. Here Peukert is deeply influenced by the Frankfurt School and Jürgen Habermas. His central claim is that an adequate account of contemporary scientific and social practice requires a religious perspective. Peukert's prose is jargon-laden and the structure of his argument convoluted. Although he is more creative in his presentation of historical material than Torrance, the argument is tough going. The book reads like *Götterdämmerung* plays: deadly dull half hours and marvelous minutes. Although such contrast is necessary, even great opera often plays better for some well-chosen cuts.<sup>4</sup>

In terms of basic commitments, both Peukert and Haught are universalistic. Haught presents a vision of God as sensitive to and preservative of all the world's experiences (118). If there were no ultimate preservation

<sup>4</sup>The sections dealing predominantly with themes discussed in Anglo-American philosophy tend to be more readable than those referring primarily to German philosophical themes. As I have not had access to the German original, I cannot tell whether this variance is due to differences in sources, author's style, or translator's differing levels of comfort with the material.

of the values achieved in the adventure of the universe, those values would be meaningless. Haught's key argument against the materialists is that they conflate the epistemic, mathematical, existential, physical, and metaphysical meanings of "chance." He shows that even if "chance" applies in the first four contexts, that does not make "chance" any more warranted as a metaphysical explanation than the long-abandoned "god of the gaps" (78-82). He argues that the emergence of higher levels of beings in our universe is not best explained by "chance," but by a theory of a hierarchical universe designed with a purpose. As science reflects on the "lower" parts of the hierarchy, so religion sensitizes us to that which is "above" us. Although we cannot comprehend what is beyond us, because higher levels cannot be understood in the framework of lower ones, faith helps open our minds to "being ordered or influenced by the higher dimension" (96). Thus faith—in whatever tradition it appears—complements science.

Although Peukert does make some rather narrow-minded remarks about the Judeo-Christian tradition being the only context in which true freedom can emerge, his argument is universalistic. It begins on an acceptance of the claim that basic assertions in a discipline are established through the consensus of the practitioners. But, he asks, by "what criteria can it be decided that a consensus is a true consensus?" (183). No external criteria are sufficient, for they too would have to be validated by conversational agreement. Thus, following C. S. Pierce and Habermas, he argues that a conversation "in which validity claims are decided upon argumentatively cannot in principle be limited" (187). Therefore all who attempt to discern what is true or right are committed to accepting an unlimited conversation as normative. This is the "ideal speech situation" in which all people are in principle able to participate. But in the present this situation is not real. People are disabled from participating. Therefore we are all obliged to undertake innovative actions, actions which change the conventions and thereby enable all to participate in the conversation. To redeem the implicit commitments we make in communicating with one another, we must acknowledge a "universal solidarity," the fact that we are all finally bound to one another as a universal community searching for what is true and right. In sum, if anyone is committed to establishing truth, one is *ipso facto* committed to universal solidarity so as to instantiate the unlimited conversation in which what is true and what is right can be established. Thus Peukert interprets Habermas.

However, Peukert shows that Habermas' theory develops an insoluble dilemma, much as earlier philosophies of science had. He brings this out brilliantly by showing the present significance of a dispute between early Frankfurt School thinkers Walter Benjamin and Max Horkheimer over

the issue of our relationship with the dead. Either the solidarity to which we are committed is temporally universal or it is not. If it is not, it is not truly universal. To be universal, it must include the past and the future. But the past is dead, and "humans who have tried to act out of solidarity, those to whom we owe our own life possibilities, have been annihilated" (211). What we now enjoy rests on their efforts. But how can we be content unless we ignore the fact that because all of them have been annihilated by history they cannot enjoy the fruits of their labors? In short, we cannot have solidarity with the dead. But we are committed to a universal solidarity which must include them. Here, then, is the central paradox in Habermas' normative theory of communicative action: to enjoy what we have, we must both deny and affirm our interactive solidarity with those who are gone. Peukert argues that at this point the issues of fundamental theology become relevant. The way out of this dilemma is to recognize that temporal "communicative action in solidarity unto death anticipates a reality about which it is asserted first of all by one's own practical performance that it can and does actually save others" (234). In other words, the reality that overcomes this final paradox must be called God. Peukert supports a political fundamental theology because Bultmann's existential interpretation and Rahner's transcendental hermeneutics need the corrective that a political theology can bring to their insights.

In contrast to these universalist positions, in which God is implicated by human thought and practice, Torrance's view is particularistic. Like Haight, Torrance accepts a view of a hierarchical universe. But he claims that the physical sciences explore the "lower part," and Christian theological science deals with the "higher part." For him, God has revealed the truth about Himself, and that's that. He endorses the following claim, which he attributes to Karl Barth (ix):

He demanded a consistent and rigorous scientific method in theology in accordance with which all unwarranted preconceptions and hidden assumptions and all antecedent conceptual systems are called into radical question during the course of a *posteriori* inquiry on the ground where God actually makes himself known to mankind, and in the compelling light of the objective content of what he reveals to us of himself and his relations with us in space and time.

But Torrance never questions the assumption that God revealed Himself to a particular people at a particular time—and *did not reveal anything of importance about Himself at any other place or time*. He never entertains the possibility that God might be revealed in the Tao or through the Buddha. His otherwise unwarranted dedication to traditional Christian formulae is inexplicable unless he thinks that they and only they are revealed by God. But he who endorses the questioning of all unwarranted

preconceptions and hidden assumptions neither uncovers the full range of his own assumption nor questions it!

Each author provides arguments sufficient to show that his account is possibly true, i.e., self-consistent, compatible with everyday facts we accept, and based on foundational presuppositions which are logically possible. For instance, Haught does not seek to *prove* his case, but to argue "for the plausibility of some kind of universal purpose in the cosmos as we understand it in the light of modern science" (88). Haught further claims that the "higher levels do not interrupt or interfere with the lower. That is why they cannot appear or be understood at the level of the lower" (91). But humans do interfere with and interrupt the lower levels by chemical manipulation and even genetic transformations. Is this not detectable by intelligence? Doesn't it show that Torrance's claim, that the Highest has interfered with our level by revealing the truth at a particular time to particular people, is also permissible? Both positions seem internally coherent. Both account for the scientific evidence. Both are relatively comprehensive and equivalently simple. Both have possibly true foundational presuppositions. Both could agree about everything except how God acts. Hence neither is *inherently* more credible than the other, and it is thus permissible for a reasonable person to accept either.<sup>5</sup>

However, that it is permissible to *hold* a position does not imply that there is good reason to *take* that position. Torrance is seeking to persuade the public of the Church to take his position. Yet Torrance's position is not coherently adoptable by any member of his audience unless she or he denies the *possibility* of divine revelation in other religious traditions. There are few theologians willing to limit God's freedom to be present everywhere, or to claim that Christian religious responses to the Ultimate are the only possible valid responses. Hence, while his position can be held, the price one pays to hold it seems to be theological arrogance and religious isolation. Given his audience, his argument should fail in its aim to move people to take his position.

By contrast, Haught is not seeking to persuade reductionistic materialists to adopt his position. He addresses his argument to the public of the Society. His goal is to make a progressive Christian view a live option for his readers. Unless one already has deep commitments to atheism or to a religious fundamentalism, one does not have to abandon one's commitments to move to Haught's position. One must rather discern the depths of one's commitments to human equality, to scientific understanding, and to God's love of all of creation. Given his audience, Haught's

<sup>5</sup> Terence Penelhum calls these permissive parity arguments. See his *God and Skepticism* (Boston: Reidel, 1983) 150–52. This assessment applies *mutatis mutandis* to Peukert's view.

argument should open his position as an option for many.

Peukert's argument seems stronger than either Haught's or Torrance's. He has proffered to the public of the Academy a theistic resolution of a philosophical paradox. Yet many will find dilemmas in his own work. In order to affirm that the dead are not merely the jetsam of history, he has to offer a redemptive theodicy, an explanation of why and how the apparent evil of the annihilation of the innocent is not ultimately evil. Since he offers no explanation, but only a defense of the possibility that there is an explanation,<sup>6</sup> he shows to his audience that it is as permissible to take his position as to take his opponents'. Since he, like Habermas, has an unresolved problem at the heart of his work, one cannot expect that his argument will move many people to adopt his position unless they are already inclined to it. Further, as his own strategy throughout the text has been to show how aporias in other philosophers' positions lead to their positions being surpassed, the Academy may justly suspect that the same will happen to his own position. Like Haught and Torrance, Peukert has shown that to hold his view is reasonable, but he has not yet presented an argument strong enough to move his audience to take his position.

In sum, I find both Haught's winsome prose and Peukert's provocative hypotheses far more interesting than Torrance's dogmatism. But then Torrance could well respond: "That's a biographical fact about you—and so much the worse for you." There are no clear victors, but no certain losers, in this important debate about how to provide a coherent, integrated account of religion and science.

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<sup>6</sup> For a discussion of the logic of arguments about the problem of evil and the differences between "theodicies" and "defenses," see T. W. Tilley, "The Use and Abuse of Theodicy," *Horizons* 11/2 (Fall 1984).