Reviews


Oftentimes in science an advance on a problem comes not from a direct attempt at solution but from work on a related question. I believe that Richard Swinburne now has given us an instance in theology. He has elucidated the central question “Does God exist?” by studying not that formidable query but a more tractable one, “Is it coherent to assert that God exists?” His conclusions indicate some constraints that cannot reasonably be exceeded in defining a deity, and also he points in a fairly definite way to a key difficulty in thinking about the existence of God.

Swinburne’s concern in the book is with a God that has the properties customarily ascribed to him in the Judaic, Christian, and Islamic religious traditions. In asking “Is it coherent to assert that this God exists?” Swinburne utilizes an accepted sense of coherence, that is, a coherent statement is “one which it makes sense to suppose is true; one such that we can conceive of or suppose it and any other statement entailed by it being true; one such that we can understand what it would be like for it and any statement entailed by it to be true” (p. 12). His procedure is to consider for each of the traditional divine attributes whether it is coherent to assert that it is a property of God. Before carrying through this systematic study he gives the reader some interesting, general comments on the words and the assertions of theology. I shall not attempt to summarize, except to say that I find these preliminary discussions (which may be described as mildly involving current technical philosophy) to be helpful in understanding the subsequent major line of argument.

The divine properties whose coherence is questioned include omnipresence as a spirit, being the creator of the universe, omnipotence, omniscience, freedom, being the source of moral obligation, eternality, timelessness, immutability, necessity, and personhood. Not all of these properties are consistent with one another unless limitations are maintained for some of them. Thus God cannot be both free in His own actions and omniscient if He has complete knowledge of every future state. Neither would a god who is immutable in the strongest sense be able to perform an action other than one that always had been intended. In his discussions of the attributes Swinburne finds other reservations too that are necessary either for consistency or for agreement with general deistic tradition. Necessity of God’s existence is assessed after six kinds of necessity, with varying degrees of analyticity (tautology), have been distinguished and defined. The particular necessity generally claimed by theists for God’s existence is held by Swinburne to be “ontological necessity”: A statement $\phi$ is true by this kind of necessity not only because $\phi$ is true but because its truth is not dependent on anything not entailed by $\phi$.

That God should exist by this “ultimate brute fact” necessity is found to be a coherent statement. Likewise, subject to appropriate reservations, assertion of the other listed attributes for God is found generally to be coherent, with, however, one exception, and one that is of key importance. The assignment
of personhood to God, Swinburne finds, is not obviously coherent. He considers at length the concept of person: a named animate being who has thoughts and carries out actions of a certain degree of complexity and with properties (usually) of memory and of continuity of existence. It is difficult, however, to give a rigorous definition that covers all ordinary usages, and Swinburne essentially points to the experience we have of persons (parents, siblings, friends) for definition. God is not a person in that common sense of the word.

Hence, Swinburne tells us, in giving God the attribute of personhood we must be using that concept of person in an analogical sense. He points out that it is a dangerous ploy. To use a word analogically means that we relax the set of criteria which tells us strictly when the word is to be used, with the result that it may no longer be clear to what objects the word applies. In consequence, although it may be incoherent to say that an object has properties \( P \) and \( W \), if we take an analogical meaning \( W^* \) for the word describing the property \( W \), ascription of \( P \) and \( W^* \) to the object may be coherent. But also if use is made of starred (analogical-sense) words in a discourse it runs a high risk of losing any clear meaning.

The problems with the coherence of a statement of God's being a person lead Swinburne to conclude that one cannot definitely say that the assertion that God exists is coherent or noncoherent. This of course is for a god who has the attributes listed above, summarized by Swinburne in the statement that God is both a person and a "personal ground of being." Considering a god who has that latter, basic characterization and also is a person in being necessarily identical with an individual with whom he has continuity of experience, Swinburne writes: "The stretch of meaning of the words involved has left me without arguments of the normal kind for or against coherence" (p. 278). Further, he explains that to prove incoherence one must show that it is incoherent to suppose that there is a being who resembles ordinary persons more than houses, trees, etc., and yet is an individual of a kind who cannot cease to be or lose his omnipotence, omniscience, etc. But it would be hard to show such an incoherence, Swinburne remarks, for "who knows what kinds of beings there can be wildly dissimilar from those known to us?"

Since there is no strict tautological necessity for the truth of the assertion "God exists," Swinburne finds that atheism is a coherent supposition. And he opines: "The best hope for the atheist is to show that the evidence of experience does not make it probable that there is a God: indeed, perhaps even to show that some such evidence as the existence of evil in the world makes it wellnigh certain that there is not a God" (p. 295). Swinburne also argues, however, that the conclusions of the book should not be regarded by the theist as a setback. He or she must believe of course that the claims of theism cannot be shown to be incoherent. But also it is evident that the theistic doctrine is a subtle one that cannot readily be refuted by the atheist using straightforward a priori arguments. The general conclusion, that one cannot simply spell out the meaning of a statement that God exists, is not at all a novel one. Swinburne declares that "theologians of all theistic traditions have long emphasized the inability of man fully or adequately to understand what is being said when it is claimed that there is a God" (p. 295).

There is much interesting detail that I have omitted in this review, but I hope I have conveyed a sense of the care (although not always with striking elegance in the writing) with which Swinburne has given his arguments. It is
noteworthy that he comes in the end to much the same place where puzzle-
ment about the existence of God often has been centered: on the properties
of God as a person. This relative familiarity of the conclusion in no way
detracts from the merit of the work, for Swinburne has given us a ground
from which we clearly can see how a condition on our manner of defining
God bears on the tenability of an assertion that He exists.

In a specific way Swinburne’s investigation illustrates what one might pro-
pose as a general characteristic of conceptions of God: that as they become
more interesting they also are less readily shown to correspond to an existent
being. One can define God, for example, as all that exists or, say, if one wishes
to be less inclusive, as the set of all non-zero-mass particles in nature. Either
definition is atheist proof. But with such definitions one makes little associa-
tion with the traditions and experiences of religion. Swinburne’s argument
shows how a much more complex conception, firmly in the religious tradition,
acquires a particular difficulty with respect to its support in cognitive discus-
sion because of having the highly appealing attribute of personhood.

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Metaphor and Myth in Science and Religion. By EARL R. MACCORMAC. Durham,

The languages of science and religion are related in that both utilize
metaphor as fundamental to their conceptual foundations, be they theories or
theologies. This is the thesis of Earl R. MacCormac, professor of philosophy
at Davidson College, in Metaphor and Myth in Science and Religion.

The initial two chapters give a historical sketch of contemporary discussions
of scientific and religious language. Chapter 1 (“The Nature of Scientific
Language”) surveys the recent, turbulent history of the philosophy of science
from the ascendancy of positivism through its decline to the present “re-
volutionary period” (to use a phrase of Thomas S. Kuhn’s) in the under-
standing of science and scientific language. MacCormac tells how the positivistic
consensus represented by Carl Gustav Hempel, Paul Oppenheim, Ernest
Nagel, and Hans Reichenbach, that held that scientific language was “con-
firmable, unambiguous, precise, and clear” (p. x), was dissolved from within
by Karl R. Popper and from without by historically sensitive philosophers
such as Kuhn, Stephen Toulmin, Imre Lakatos, Paul Feyerabend, and N. R.
Hansen. From its recent history the author distills these conclusions about the
nature of scientific language: (1) Theoretical terms cannot be reduced to
observational terms; (2) many scientific terms are imprecise and ambiguous
because they suggest hypothetical speculations about new and unexplored
phenomena; and (3) the use of metaphor is commonplace in science.

Chapter 2 (“The Nature of Religious Language”) surveys the debate over
the nature and character of religious language during the same period. The
major interest among philosophers of religion has been “to determine
whether an adequate justification can be given which will demonstrate that religious language is meaningful" (p. 39) in the light of the understanding of the nature of scientific language. MacCormac summarizes the debate over the verification or falsification of religious language in John Wisdom, John Hick, Antony Flew, R. M. Hare, and Basil Mitchell. He treats the view that scientific and religious language are separate and unrelated in the thought of Ludwig Wittgenstein and J. L. Austin, and their heirs. Some attention is given to views that are outside Wittgenstein's or Austin's, namely, those of the early Karl Barth, Mircea Eliade, Paul Tillich, Rudolf Bultmann, and Richard Bevon Braithwaite. From the discussion of these various options and their criticism MacCormac develops his own view of the nature of religious language. Religious language has three sources: scripture, experience, and theology. Theological and religious languages differ only in function; "the theologian reflects upon experience while the religious man expresses it" (p. 69). The relation among the three sources is complex and varied: "Since the body of scripture is fixed, its language is independent of the other two. Interpretations of scripture, however, do depend upon religious experience and theology. Neither theology nor the language of religious experience can be understood exclusive of each other; the language of each enterprise borrows heavily from the other" (pp. 69-70). The result of this mixture of three elements is a "conceptual pattern that unified various aspects of experience, historical data, belief and theological tradition. The pattern is a unity in that the various segments are put together into a coherent whole" (p. 70). Individual statements of the whole cannot be tested for meaningfulness because "religious discourse [is] a complex language composed of many different types of expression bound together into a theological pattern" (p. 71).

Chapter 3 ("The Language of Metaphor"), following the historically oriented chapters, deals with the heart of MacCormac's thesis. It is metaphor that both relates and distinguishes scientific technical religious images (e.g., "water is birth and life"). A root metaphor such as "the world is a machine" suggests a tentative way of looking at things "without which... knowledge would be impossible, for we would have no way of organizing our perceptions into a coherent whole" (p. 94). MacCormac argues that both science and religion are erected upon hypothetical root metaphors about the nature of the world and human experience. Further, both use metaphors to convey ideas about the unknown; thus science and religion are related. Following Philip Wheelwright, MacCormac classifies metaphors as either epiphors or diaphors. Epiphors are metaphors that can be reduced to ordinary language; diaphors cannot be so reduced. An epiphor achieves its meaning by expressing experience that is analogous to that of the hearer. A diaphor achieves its meaning by suggesting possible meanings which are not reducible to ordinary language. "The process of metaphor that begins with ordinary language and moves to diaphor, and then to epiphor, and finally back to ordinary discourse," says MacCormac, "is a reflection of the process of scientific and theological activity" (pp. 100-101). While the content of metaphors in science and religion differs, the way metaphor functions in scientific and religious language is identical.

Myth is a mistaken, literal use of metaphor: "Myth is the mistaken attribution of reality to a diaphoric metaphor" (p. 102). This point is emphasized in chapter 4 ("The Language of Myth"). Thus, for example, in science "the overthrow of Newtonian mechanics by Einstein's relativity theory produced a
revolutionary shock among physicists who had come to associate the notions of absolute space and time with the way the world really was" (p. 110). The Newtonian root metaphor ("The world is a mechanism") had become a myth. In religion myth arises in the same manner, for example, when a root metaphor such as "God is the word" is taken literally. And so MacCormac concludes: "Scientific myths like religious myths arise from two sources. The first comes from treating a hypothetical explanation as literal description of the way things are; the second source is the root metaphor underlying scientific methodology" (p. 128).

The last chapter ("Metaphor and Myth in Science and Religion") gathers the conclusions from the preceding chapters. A central claim is that "the languages of science and religion can be relatives within the same family because they both use ordinary language—in this sense all languages are related—and because they both depend upon metaphor as the linguistic device necessary to suggest new meanings" (p. 136). Fundamental for both religion and science is the use of root metaphors: "Any conceptual pattern of explanation must be based upon some belief in the correspondence between the explanation and that which it seeks to explain" (p. 141). A root metaphor provides a warrant for believing that an explanation is applicable to the experienced phenomena. With a root metaphor a theology can be constructed from experience in a coherent and consistent conceptual pattern. Factors are selected from experience and are woven together with theoretical terms into a tapestry that displays a plausible and coherent picture of the way things might be. This picture then is tested according to the criteria of intelligibility, coherence, consistency, and experiential confirmation. It is confirmed, revised, or rejected accordingly.

This book can be read as a complement to Ian Barbour's Myths, Models and Paradigms (New York: Harper & Row, 1974). Both MacCormac and Barbour, along with a growing list of observers, emphasize the similarities in the ways of knowing in natural science and religion. Epistemology is the key.

However, unlike Barbour, who proposes a synthesis of paradigms, models, and myths including metaphor within this larger framework, MacCormac views metaphor as the chief literary device which links science and religion. For him myth is a metaphor which is mistaken for literal language. One wonders if MacCormac has claimed too much for this view. It is true that religious myths have been taken literally at times in the past. But many current understandings of myth make no such mistake. For example, Barbour presents what is to me a richer and more useful notion of myth.

While there is little here that is new, the book on the whole is valuable. The argument is clear, and the thesis needs to be stated again and again. MacCormac has joined the chorus of those helping us understand better the relationship between science and religion.

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No person in the twentieth century has labored more assiduously or more creatively to interpret religious and scientific phenomena in the context of an inclusive philosophic schematism than Alfred North Whitehead. Whitehead sought to explicate a metaphysical system in which both science and religion could be integrated in a comprehensive interpretative framework. He argued that the public and private dimensions of experience are inextricably interrelated. Science is concerned with the percepta objectified in our emerging experience; religion with the sensitive response of the emerging subject itself to the data it is appropriating and synthesizing. He termed the analysis of the process of becoming "genetic analysis" and the analysis of the potentiality manifest in presentational immediacy "coordinate analysis."

A majestic conception of a divine entity, partly sui generis and partly dependent upon the creatures of the world, is an integral part of his vision. Consequently the scientist who ignores religion by refusing to consider private experience and the theologian who ignores science by refusing to consider public experience truncate human life.

The scope, novelty, richness, and complexity of the Whiteheadian vision have attracted the interest of a small and diligent company of both scientists and theologians, but the form and substance of his magnum opus, Process and Reality, have made it quite difficult for many persons to appropriate his thinking. Elizabeth Kraus's The Metaphysics of Experience is designed to help redress this situation by assisting the serious reader in grasping the meaning of Process and Reality and avoiding misinterpretation of it. The first chapter introduces and discusses Whitehead's earlier Science and the Modern World as a point of entry into his magnum opus. The other five chapters address the five parts of Process and Reality.

Kraus's book is the most recent in a series of major explications of Whitehead's thought. The earliest was Dorothy M. Emmet's Whitehead's Philosophy of Organism (London: Macmillan & Co., 1932). Other valuable secondary sources include William A. Christian's An Interpretation of Whitehead's Metaphysics (New Haven, Conn.: Yale University Press, 1959), Donald W. Sherbourne's A Key to Whitehead's Process and Reality (New York: Macmillan Co., 1966), and Robert M. Palter's Whitehead's Philosophy of Science (Chicago: University of Chicago Press, 1960). A reader wanting to work through Process and Reality may want to consult several of these secondary references. It is difficult to know which texts might be most helpful, for a reader's subjective responses and his own intellectual history may affect his evaluation of a particular secondary reference.

I find Kraus's book very helpful in illumining and elaborating the corpus of the Whiteheadian text. Perhaps reflecting my own special interests, I find her explication ("The Theory of Extension") of part 4 of Process and Reality especially helpful and her discussion ("God and the World") of part 5 most problematic.
In the main I find the discussions thoughtful and accurate. I would raise the following questions about Kraus's explication. Some of these queries are technical and may not be very comprehensible to the reader who is unacquainted with Whitehead's thought, but they may alert such a reader to some issues needing further discussion: (1) Does Kraus sufficiently emphasize the importance of the ontological principle for Whitehead? (2) Can an individual eternal object have a perspective (p. 38), or do only actual entities have perspectives? (3) Is the subjective aim a proposition (p. 48), or does it surpass propositions? (4) Is God a "superject" (p. 52), or is the closing of other creatures the basis for God's experience of superject? (5) Is there an adequate discussion of Whitehead's basis for his faith in rationalism? Is the primordial grounding for rationality irrational (p. 166) or transrational? (6) Can actual entities be prehended negatively (e.g., p. 58), or can only eternal objects be prehended negatively? Would the notion of the negative prehension of actual entities violate the principle of relativity? (7) Is a purely chaotic environment conceivable for Whitehead (p. 106), or does the divine ordering preclude the possibility of pure chaos? (8) Does Whitehead hold that coordinate divisibility, with its relationships of connection, inclusion, overlap, etc., is metaphysical (pp. 151-32), or does he maintain a residual skepticism about the metaphysical character of coordinate divisibility? (9) Are order and creativity opposites for Whitehead (p. 159), or is creativity the ultimate category manifesting itself through various forms of order? (10) Is the priority of the conceptual pole in the divine entity and the physical pole of all other entities adequately discussed in chapter 6 ("God and the World"), or does this notion need to be explicated further to illumine Whitehead's view of God-world relations? (11) Is it fitting to refer to Whitehead's discussion of eternal objects and divine ordering in Science and the Modern World to illumine the discussion of God's ordering of the eternal objects (p. 166), or had Whitehead's own understanding of God's nature grown with the elaboration of his metaphysical schematism in Process and Reality? (12) Are the unity of God and the primacy of the ontological principle sufficiently accentuated in Kraus's treatment of ultimate opposites (pp. 169-72), or is God inordinately bifurcated and hypostatized in this treatment?

Kraus's book deserves a significant place among the works illumining Whitehead's thought. Her careful discussion and formulation ought to enhance the understanding of all who use it in conjunction with Process and Reality. Many interested in the relation between religion and science will find rich resources in Whitehead's work, and Kraus's book will assist them in their study of his thought.

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