Wallace’s fears that religion is on its way to extinction because a population educated in science will not be able to believe in “supernatural being and in supernatural forces which affect nature without obeying nature’s laws” are fears which a number of Christian theologians share to such an extent that they have recently produced a spate of papers and books proclaiming “God is dead” and at the same time proclaiming a Christian theology. Wallace, like them, wants to save religion somehow, and I think he is wiser than they in his insistence that a new theology must not be tied to “any recognizable human [italics mine] person, group, or institution.” But I share Spiro’s and also Wallace’s own recognition of the “apparent absurdity” of “a non-theistic theology.” From all that I know about religion and about science, I find Wallace’s analysis, in all respects except this one, such a brilliant and valid synthesis of the realities involved that I shall confine my commentary to suggesting how this “absurdity” might be resolved.

The absurdity lies in the erroneous projection of meaning on terms in the statement that there are “supernatural forces which affect nature without obeying nature’s laws.” Everyone accepts from natural sensory experience something like a law of gravity which says that a piece of iron will slide downhill and not uphill. But, if we put a powerful magnet on the upper end of the slide, we will then observe the piece of iron slide uphill, in defiance of this natural law. To the primitive mind this is a violation of the natural law that it knows. But to the scientist there is no violation and no absurdity, because he knows another law of magnetic force which has become perfectly “natural” for him. One could equally well call the magnetic force supernatural, in that it is not directly experienced or perceived by any natural human sensing mechanism.

For some time I have wondered whether we in the twentieth-century scientific frame of reference have not tended unjustly to read into the prescientific and primitive concepts of the animistic forces, gods, and the supernatural something that is not really there and failed to read

Ralph Wendell Burhoe is professor of theology and the sciences, Meadville Theological School.
in something that is there. I think we are in error when we suppose primitives excluded their gods from their real world, and we fail to see that their gods are the same sort of thing as our explanations of unseen forces in nature. The gods never violate the laws of reality since they are themselves the hidden or ultimate reality. Were not these gods, animistic spirits, or even the inanimate mana actually hypotheses of real but unseen entities like our magnetic forces which caused otherwise inexplicable things to occur? Would not men invent a supernatural force to account for such "violations" as a piece of iron sliding uphill? If so, were not these gods or "supernatural" forces essentially a set of primitive scientific hypotheses which no longer happen to agree with our present scientific hypotheses?1

In addition to showing that primitive myths of the supernatural are really primitive scientific theories, we can take the reverse approach and say that contemporary scientific theories are essentially the same sort of imaginative myths as the primitive "supernatural" entities or forces. Sophisticated scientists and philosophers of science have for a long time understood that their hypothetical and imaginative models, constructs, or theories are not to be confused with the observable or the visible and hence with one meaning of the term "nature" or "reality." Scientific theories and hypotheses are in a very real sense myths of the "supernatural" using Webster's definition of supernatural: "proceeding from an order of existence beyond the physical universe that is observable, and capable of being experienced by ordinary means." Can we observe or experience by ordinary means the electron, the amino-acid sequence in the cytochrome-C enzyme of the ancestors of men and yeast some hundreds of millions of years ago? Yet in our culture we feel we have good evidence to believe in such things, and we have confidence in the stories we tell about them.

In the sciences we no longer have the same confidence in our once equally securely held myths about the unsplitable atom, phlogiston, caloric, or the crystal spheres whose rotations accounted so nicely for the motions of the sun, moon, planets, and stars around the earth. But, when the scientists find that their faith in these "supernatural," or not directly observable, entities is shaken, they do not give up their science, nor do they give up the search for some better myth or hypothesis that may more adequately explain the seen in terms of unseen entities or forces. By the same token theologians should not give up their task of hypothesizing credible but invisible or not directly perceivable realities which do in fact ultimately concern man's destiny, duty, and hope.
I do not mean to say that there are not revolutionary differences in the methods of developing and validating scientific myths that have produced a radically new emergent in human ways of learning and knowing. I only wish to make clear that scientific hypotheses as well as primitive myths deal with imaginatively formulated images or models which are equally supernatural in that they cannot be observed or experienced directly by ordinary means. If we mean by supernatural entities or forces those imagined or hypothesized entities or forces which we cannot directly experience but yet in which we believe, we may say that the prime revelations of the "supernatural" today come from physics. Physics and all other sciences could become the grounds for a theological interpretation of the unseen realities which relate to religious concern.

With such a revised notion of the "supernatural," do we not have the key that opens the door which otherwise bars our evolutionary passage from the religions of the past to a religion that integrates with the contemporary sciences, a door which, until it is opened, makes it absurd to talk of a continuous history or evolution from the primitive religious myths and the great theologies of only a short while ago into the conceptual schemes of contemporary science?

I like to think of religious views evolving in the way that Einstein pictured scientific views as progressing. He said scientific development is not like tearing down an old barn and building a skyscraper in its place. Rather, it is like climbing a mountain, and when you reach the first knoll you look out over the valley and you see a limited picture of what you can see from that height. Then you climb further and further up the mountain and on successive knolls you get a broader and broader picture, a larger and larger view of reality. The first little house and farm that you saw down below from the first knoll is still there, but it is in a larger context, which makes a new sense and a new vision of the total. It seems to me that our enterprise here is to see the evolution of religion and theology together with science in this light, rather than in terms of taking a match and burning down the old barn and building a skyscraper in its place.

I find no problem in talking about the revelations of the various sciences concerning the unseen realities which determine human destiny as historically and epistemologically continuous with the supernatural gods. But, as Wallace, Spiro, Loomer, and perhaps most of us here have insisted, to be relevant for religion, such gods must be objects of cathexis, must touch the centers of greatest human concern, must be images that reach what ordinary language calls the heart, feelings, emo-
tions, and behavior as well as the mind. I see no problem in this, once we can believe that the gods are real.

I think this way also resolves Wallace's fears that a human person or institution would be an inadequate if not dangerous substitute for the supernatural gods. The invisible powers or realities projected by the sciences have the requisite independence of what any particular person or institution may happen to think or want. Our problem is to show what these scientific formulations of the hidden realities mean for human destiny.

NOTE

1. A positive answer to these questions is suggested by Melford E. Spiro in his "Religion and the Irrational," in Proceedings of the 1964 Annual Spring Meeting of the American Ethnological Society (Seattle: University of Washington Press, 1964). On p. 112 he says: "Religious and scientific beliefs alike explain what is otherwise inexplicable; they structure what is otherwise unstructured; they provide answers for what is otherwise imponderable. But religious beliefs are held not merely from a craving to satisfy intellectual needs, but also from a craving to satisfy emotional needs."