Editorial

One of the ongoing tasks in relating science and religion is to define what is actually being related—to describe where there are possibilities for genuine dialogue, fruitful interchange, and meaningful yoking (zygon) of contemporary scientific theory with religious thought and practice.

When one looks at the sciences one discovers at least three ways in which science can have an impact on religion. First, well-tested scientific theories about the world or humanity may either supplement or challenge older ways of thinking employed in religious traditions. Second, the methodologies of the empirical sciences, which test ideas through repeated controlled observations made by any number of qualified yet independent observers, call into question older methods that rely on the unique experiences of charismatic individuals or on the authority of institutionalized religious organizations and their leaders. Third, the world view of contemporary science, which in recent *Zygon* issues has been characterized as naturalistic or materialistic, challenges those religious orientations that are transcendental or supernaturalistic and idealistic.

In turn, there are at least two ways in which religion confronts modern science. The first is that religion raises questions of ultimacy: while the sciences tend to seek explanations for what happens in the world and in human life in terms of causes operating within the universe and human life, religion seeks to orient us toward what is thought to be the source of all existence and the highest good. In relation to ultimacy religions try to show humans the way to find fundamental meaning and moral direction for their lives. They try to show how science and the technological fruits of science can be guided to preserve and enhance rather than debilitate and destroy humanity and our world.

Questions of ultimacy are not unique to any particular religion. Even though they are expressed and answered in various ways in all religious traditions, they are part of the human quest for complete understanding. Such questions about human meaning, morals, morale, and motivation, even when stated in their most general form, constitute the religious side of the dialogue, whether one is dealing with specific scientific theories, with questions of method, or with the naturalistic and materialistic world view of the sciences.

However, the danger with relating religion as ultimacy to science at a high level of abstraction is that the concerns of many people actively practicing a particular religion may not be addressed. Therefore, it is important for religion to confront modern science in a second way—in terms of specific religions. Each religion, as it addresses issues of ultimacy, does so in terms of a particular cultural heritage, with somewhat original concepts and practices that have evolved through centuries in relative isolation from other religious traditions. Many people, for better or worse, find themselves living in such an evolved yet encapsulated cultural heritage. For them, thinking about religion in light of the contemporary sciences means thinking about their particular religion.

The combination of articles in this issue of Zygon addresses all three of the areas in which contemporary science impacts religion, the areas of specific theories, of methodology, and of the scientific world view. They do this in a manner that considers both general religious issues and the features of a specific religious tradition, Christianity.

In the opening essay, Nancey Murphy seeks to overcome the idea that science and religion cannot enter into meaningful dialogue because each occupies a distinct sphere of intellectual discourse with its own language and its own criteria for the acceptability of its propositions. Employing Imre Lakatos's idea of a progressive research program and using examples drawn from Zygon essays, which themselves are written in the context of Christianity, Murphy shows how it is possible to formulate criteria for accepting ideas in the hybrid discipline of theology-and-science.

Implicit in Murphy's proposal is the idea that thinking in theology-and-science, like science itself, is methodologically open-ended and future oriented. However, some religious thinkers would want to give much more emphasis to special religious texts that provide the foundation for Christianity or for some other world religion. In the second essay in this issue of Zygon Mary Gerhart and Allan Melvin Russell offer a new, generalized conception of what it means to have a text; they argue that the notion of text can be applied both to scientific and religious objects and that the term text need not be limited to written work. At times people in religious studies have used the concept of data from the sciences and have suggested that ancient writings are data of religion. Gerhart and Russell reverse this approach: they reformulate the objects of study in both science and religion as texts, and thus make critical inquiry in the sciences and humanities more uniform and coherent.

One of the points made by Gerhart and Russell is that all texts, even scientific ones (the facts of scientific inquiry) are constructed in the interaction between observer and what is observed. This is reminiscent of the work of Michael Polanyi. Polanyi argues that one cannot clearly distinguish the person conducting inquiry from the object of inquiry; there is no sharp split between knower and known. Polanyi therefore called knowledge, even in the sciences, "personal knowledge," although it was still objective or intersubjective knowledge.

In his essay "Inaugurating Postcritical Philosophy" R. Melvin Keiser shows why one of the great thinkers of Christianity, Augustine of Hippo, was recognized by Polanyi as an inaugurator of his "postcritical" philosophy. At the heart of Keiser's paper is a series of reflections on Augustine's Confessions. Employing the thinking of Polanyi, Keiser shows how Augustine's concluding discussion about the creation of the universe (a topic in contemporary scientific cosmology but for Augustine actually an analysis of the Genesis text) corresponds with the story of his personal conversion to Christianity. In terms of Augustine's Christianity, conversion and creation reflect one another. One might ask if modern scientific theories of an evolving universe could also be related to the transformations of personal human existence so that people today could begin to see what was happening in their lives in light of the ultimate source of existence at work in the universe.

While the first three essays in this issue of Zygon consider questions of methodology, John F. Curry tackles the issue of world views as they underlie the practice of psychotherapy. Curry sees a correspondence between how therapists view the world in general and how they practice their profession, and he suggests that problems arise when therapists and clients do not share the same world view. Arguing that much of modern therapy is naturalistic, secular, and humanistic while clients are sometimes more traditionally oriented religiously, Curry proposes an approach to psychotherapy based on Christian humanism, one which overcomes a series of antitheses between religious theism and clinical humanism.

In the final essay in this Zygon issue Marjorie Hall Davis focuses on current evolutionary and neuropsychological theories and in their light reinterprets

her own Christian faith. Davis's article is a more personal statement, and with it Zygon officially inaugurates a new section of the journal called Credo.

Our journal has published personal credo statements in the past. The most recent was Joel I. Friedman's "The Natural God: A God Even an Atheist Can Believe In" (Zygon 21 [September 1986]:369-88). An earlier credo statement was by one of the founders of Zygon, Sanborn C. Brown's "Contributions of Science to the Unitarian Universalist Tradition: A Physicist's View of Religious Belief" (Zygon 14 [March 1979]:41-52). While the credos of Brown, Friedman, and now Davis offer quite different religious-philosophical perspectives, they do share two things in common. First, each is an attempt to relate constructively contemporary science to questions of ultimacy or religion. Second, each credo, before it came to Zygon, was presented to and discussed in a public forum: it was an attempt to formulate not just an idiosyncratic, individualized creed but one that could be shared by others.

Davis's public forum was the Ecclesiastical Council of the Farmington Valley Association of the United Church of Christ, meeting in Granby Connecticut. Written in response to questions making up the ordination vows required from a United Church of Christ minister, her credo offers an interpretation of the basic beliefs of Christianity in the light of some contemporary scientific theories. Although not all members of this Association of Christians share Davis's views, nevertheless her "Beliefs of a Christian Minister in Light of Contemporary Science" is significant in that it has been judged acceptable by an official body in a major traditional religion. It thus serves as a model for people in all religious traditions and of all religious-philosophical persuasions to attempt to formulate more statements about the meaning and purpose of life in light of contemporary scientific theories, methods, and world view. I encourage members of the Zygon community to formulate their own such statements, to present them for discussion in some public forum, and then to submit them to be considered for possible publication in future Credo sections of our journal.

Karl E. Peters