

Editorial

Quite by coincidence, two scientists—biologist Ursula Goodenough and geophysicist Alfred Kracher—pose the same challenge to our readers in this issue of *Zygon*: to engage our creative imaginations with the task of fashioning new visions, new stories that interpret the world through the resources of sciences and the religions. In her new preface to her 1999 book, *The Sacred Depths of Nature*, Goodenough speaks directly to scientists, encouraging them to give free rein to their religious instincts. Kracher addresses theologians with some urgency on the same theme, in his Thinkpiece for this issue; if the riches of their traditions are to be helpful today, theologians must imagine new stories that can carry those traditions into vital concourse with scientific knowledge. Both of these calls aim to awaken and encourage imaginative powers that have slumbered too long.

The second major section of this issue of *Zygon* also developed by coincidence, with four major articles under the theme “Quantum Physics and Understanding God.” For the nonspecialist, quantum physics is one of the most esoteric and difficult areas of science. Those who cannot understand the mathematics involved often find the world of quantum physics all but inaccessible. The picture of the world that we draw from this body of knowledge flies in the face of common sense; it is counterintuitive, beyond our unaided experience. At the same time, since its inception about 125 years ago, quantum physics has changed our understanding of the world, and its theories underlie technologies that have affected the lives of nearly everyone. This field of physics has also been the subject of an immense amount of philosophical speculation that asks: What is it about the nature of reality that accounts for the behaviors that physicists perceive in the subatomic world?

Theologians and philosophers of religion have followed the philosophers of science into the discussion of quantum physics, pursuing answers to such questions as: Does indeterminacy serve as a basis for postulating freedom? Does indeterminacy point to the realm where God can influence the world? Does complementarity underlie the religious emphasis on paradox? Can one say, for example, that the classic Christian claim that Jesus Christ is both human and divine is comparable to the physicist’s claim that light can be conceived as both waves and particles?

The authors in this section are physicists Carl Helrich (who, in the final portion of his article, comments briefly on the other three pieces in this

section) and Peter Hodgson, theologian and physicist Nicholas Saunders, and philosopher Jeffrey Koperski. The editor did not solicit these articles, nor are the authors in communication with one another, but they nevertheless make a common assertion—that we ought to resist the temptation to move too easily from quantum-talk to God-talk. Readers who are not physicists may find this section difficult reading; we outsiders cannot easily cross the boundaries that mark the world of quantum physics. It is an important world, however, and cannot remain terra incognita for those who are concerned with the interface between religion and the sciences.

There will be responses to this discussion of quantum physics. In our December 2000 issue, Gregory Peterson and Keith Ward will provide commentaries on these articles, and we are soliciting additional responses for succeeding issues.

The third section of this issue, “Exploring Resources of Naturalism,” follows up a similar section in our June 2000 issue, albeit in different fashion. A section from Ursula Goodenough’s best-selling book, *The Sacred Depths of Nature*, exemplifies the approach she has called “religious naturalism.” Loyal Rue presents a detailed interpretation of religion from a naturalistic perspective. David Knight’s article describes a group of leading scientists in Britain, in the eighteenth and nineteenth centuries, who adopted a position termed “higher pantheism.” This historical sketch is intriguing, because even though this pantheism is not identical to Goodenough’s vision, we are provoked to reflect on exactly what the differences and similarities are, and also on the significance of any historical relationships that might be drawn.

The fourth major section offers a potpourri of discussion. Philip Clayton brings the neurosciences to bear on his proposals for an evolutionary concept of person. Joseph Zyciński presents a case study of interdisciplinarity, with particular reference to nonequilibrium thermodynamics and the issues of free choice and moral evil. In a very helpful manner, Michael Heller performs a service of clearing away the brush that may obscure the issues that face any attempt to use Big Bang cosmology as a resource for a theology of creation. James Nelson brings Teilhard de Chardin and Ralph Burhoe together in a novel juxtaposition within the domain of mysticism.

In the Response section, Philip Clayton writes a rejoinder to the critique of his recent book, *God and Contemporary Science*, that Willem Drees published one year ago in these pages.

We began with the calls issued by Kracher and Goodenough for new and imaginative stories that envision more adequate renderings of reality through the eyes of religion and science. There is a sense in which this entire issue concerns itself with that challenge. Only the future can decide what attempts will emerge as the seeds of genuinely new and more viable visions.

—Philip Hefner