## **Editorial**

The editors of this journal are continuously in the business of reflecting upon Zygon's location in the intellectual terrain which it occupies: What has been its position in the past? To what roles is it committed in its statement of purpose? What seems to be its actual place as it negotiates the stream of contemporary challenges? What locus would the editors most prefer for the journal? Due to circumstances over which we have no control, we may not always occupy the place we desire most or that we ought to occupy, but it is incumbent upon us to be aware of our location and its significance. Our perch, at the end of a limb that covers almost twenty-nine years of continuous publication, intensifies our reflection upon situation and direction.

As this issue of Zygon was in its final stages of preparation (six to eight months ago), I heard a number of comments that bear on our location. I list them seriatim:

"Zygon should be a journal, publication in which would be a certain sign that the author had 'arrived' academically and intellectually."

"Zygon is a journal in which nearly every leading figure in the field is now willing to publish."

"Articles in the journal should not 'reinvent the wheel', after all, there is an established body of research and writing in the field, and no contribution should be accepted that does not show a mastery of this body of thought."

"My manuscript is an invitation to share my insights into religion, without the pretense that I've heavily researched it. I don't feel apologetic about this, since theologians/philosophers seem to feel comfortable writing about science when their understanding of it is far more limited than my understanding of religion!"

"Remember the purpose [following Table of Contents]: to provide 'a forum for exploring ways to unite what in modern times has been disconnected—values from knowledge, goodness from truth, religion from science.' . . . [the yoking of science and religion can] provide 'valid and effective guidance for enchancing human life.'"

I see embedded in these comments at least five notions of Zygon's role: (1) to serve as a vehicle for dialogue between science, religion, and theology—there is no normative concern here, since dialogue is dialogue wherever and however it occurs; (2) to follow and report upon the terrain of significant interfacing between science and religion—the journal should interpret its findings in an authoritative manner, and be a "voice" of the religion/science dialogue; (3) to foster the integration of science and religion and the emergence of a "new theology" constituted by the theoretical concepts that inform this integration; (4) to lay, on the basis of this integration, the foundations for coping with the destabilization of traditional structures of meaning initiated by the growth of scientific understanding, and further, to suggest behaviors based on these foundations that can meet the challenges of our technology and foster wholeseome ways of living for all persons in our

global human community; (5) to advance an academic discipline, the subject of which may be any or all of the materials that emerge from the previously mentioned four realms of reflection.

Zygon is, I am bold to say, committed to all five of these efforts, even though the nonnormative concern for dialogue is at the bottom of our agenda, whereas integration for the sake of providing valid and effective guidance for enhancing human life is at the top.

The five facets of this editorial program are the source of tension, however, and at times even conflict. Those who wish the dialogue to be non-normative, as the groves of academe often require, are offended when we state a bias toward integration and our commitment to a program for the renewal of society. Our bias, however, requires the nourishment of dialogue, even among those who are hightly skeptical of our program.

On another front, while the advancement of an academic discipline is highly desirable, that discipline-formation can stand in tension with our other goals. Our location, as Ervin Laszlo points out, necessitates also that Zygon

be a medium where scientists talk to theologians and theologians talk to scientists and both dare to express thoughts that they would not dare (or even intend) to express to their own colleagues. Genuine integration occurs only and precisely because disciplinary boundaries are overcome. Only a new transdisciplinary paradigm can provide real integration; only such a paradigm offers true insight into the essential unity of the material and the spiritual worlds, diverse but complementary aspects of one and the same world. Such integration is both of theoretical interest and practical value.

Transdisciplinary paradigms can also, however, lead to the formation of new disciplines, and the journal welcomes such emergences. The challenge here is to steer Zygon between the Scylla of pedantry that too often accompanies the strict disciplines and the Charybdis of ungrounded dilletantish speculation.

Some of the most important developments on the interface of science and religion/theology, and some of the most notable voices on that interface, reflect a regrettable ignorance of the "discipline." Such is our current cultural condition—some of the most important scientific voices betray little comprehension of religion as religious studies scholars understand it, while (as our scientist suggested above) theologians and philosophers seem to feel comfortable with an extraordinarily high level of ignorance concerning science and mathematics. Furthermore, even among scholars in the field, there is not full consensus on just what is basic to the academic discipline of the journal. One scholar's essential wheel is another's flat tire. To judge from the bestsellers, one might conclude that the wheel is primarily constructed out of physics, cosmology, and related disciplines. The sciences that most directly touch the human person are scarcely mentioned. Conversely, the discussions from biology, anthropology, and the social sciences often leave the impression that physics and cosmology are irrelevant. Information science, the sciences of complexity, the neurosciences, and genetics have yet to appear even in the glossaries of most works in the religion-andscience field. For some discussants, philosophy is essential, the "necessary gatekeeper" on the interface, while for others it is considered to be a hindrance to real engagement. Christian theologians frequently charge that

their centuries-old discipline and its sophistications are ignored, while others lament that the Christians who dominate the field are too lazy or afraid to open up to other sources of religious faith.

Since our journal is an academic, refereed publication, its first constituency is often suspicious of intellectual reflection turned to practical, moral ends. But we believe that ultimately those ends are the justification of the theories of the leisure class that inhabits academia (pace Thorstein Veblen!). Thereby we also betray the journal's concern for religion, and not just theology; religion is something to be practiced, hence its inescapable concern with morality and the enhancement of human living.

The present editor-in-chief articulates both his distinctive commitments and his indebtedness to a tradition that flowed from Ralph Wendell Burhoe and his mentors through Karl E. Peters, and dozens of arbiters on the Joint Publication Board and the Editorial Advisory Board over the past thirty years, when he underscores that Zygon will give attention to all five of the dimensions of location that I have described, and with the weighting that has been suggested above. Let me express here my appreciation to the dozen members of these Boards who contributed their insights to this editorial. Since sensitivity to the shape of the interface, along with conceptual integration of science, religion and theology, and the moral fruitfulness are the most difficult of these dimensions, they will inevitably be the least adequately developed, even though they receive the most attention. To those most concerned with dialogue and the academic discipline, I offer not only my sincerest empathy, but also the dictum: Following the changing terrain of the interface, attempting integration, and speaking to the requirements of human living constitute, in the final analysis, the substance of the dialogue and also of the academic discipline. Apart from these, dialogue and academic discipline are effete and of marginal value. Conversely, when dialogue and discipline are embedded in concern for integration of religion and science and for moral insight, the whole of the enterprise is enriched.

In his tenth-anniversary editorial (March 1975), Ralph Burhoe wrote that Zygon was established on the basis of a "new hypothesis" to replace the "warfare" model of relating science and religion. Scientific information "had grown to the point where the sciences could be very fruitfully applied to advancing religion," and such application could lead to the yoking of science and religion so as to provide practical resources for dealing with "the weakening of human morals, morale, and sense of meaning" that science had in part fostered and that left humans vulnerable in the crises posed by the tremendous growth in science-based technology. Burhoe's definition of the location of this journal is at the core of our program. In the twenty years since he wrote, the yoking of science and religion has grown substantially hence the talk of a science-and-religion discipline. At the same time, while neither the religious nor the scientific realm has remained unchanged, there has also emerged a skepticism in society concerning science that rivals the much older skepticism concerning religion. The crisis of morality, morale, and meaning to which Burhoe devoted his life's efforts has, if anything, grown more intense and threatening. This journal may well be stronger than it was twenty years ago, but in every respect its tasks have grown more complex and challenging. The indomitable courage that our founding editor exhibited and his unbounded welcome to any and all who would join in the effort are characteristics that we, too, would cultivate. As we conclude

the third decade of Zygon's journey, we acknowledge that both courage and colleagues are more gift than achievement. The fourth decade will require both gifts in boundless measure.

The offerings in this issue of Zygon follow the contours indicated by the preceding reflections. George Murphy (physics/theology), Rudolf Brun (biology), and James Ashbrook (psychology/theology) provide examples of their ongoing efforts to integrate understandings from the sciences and religion. Murphy holds that physical concepts of energy "help to describe God's relationship with the world." Brun insists that evolution, or the selfcreation of the universe as science describes it, is not only compatible with orthodox Christian theological understanding of God but required by that understanding. Ashbrook discerns the realities of faith embedded intrinsically in the structure of the human brain and psyche. Ursula Goodenough (biology) and Loyal Rue (religious studies) function in the avant-garde on the interface of science and religion, and they provide a report, the substance of which will receive more attention in the months ahead. Theirs is a pointed challenge to the "usual business" of the religion-and-science dialogue, and it is one that many persons today, both scientists and theologians, consider urgent. Roy Rappaport (anthropology), in responding to Lee Cronk's interpretation of evolutionary biology and human morality (March 1994), initiates a discussion that is central to the academic discipline that this journal represents, while it also holds obvious relevance for the tasks of interpretation and moral construction.

A sign of the vitality of the religion-and-science field is the large number of new books that are pouring forth from the presses. We can scarcely keep up with them all. In this issue, however, the reader will find three book symposia that focus on recent books: Gordon Kaufman's In Face of Mystery; Philip Hefner's The Human Factor; and Loyal D. Rue's By the Grace of Guile.

In our Endmatter section, Alan Riddiford (engineering/physics) presents his Hindu-Christian reflection upon Ted Peters's recent book-length survey of today's New Age movements, *The Cosmic Self.* Ironically, Peters's subject and Riddiford's genre of response are generally underrepresented in the academic discipline we speak of, even though they reflect the actuality of what is probably the dominant face of religion in the world today: spiritual-mystical experience and the reflection that grows out of it.

If the reader gains from this editorial and these articles a sense of the depth, complexity, ambiguity, and urgency of the issues which Zygon seeks to address, then that reader has established empathy with the editors. The magnitude of the issues has led us to a significant decision: beginning with this set of offerings, every issue of the journal in the next year will contain about twenty-five additional pages. This will still be inadequate to present all that we wish, but it is a step forward.

-Philip Hefner

## Highlights of Upcoming Issues

December 1994—Templeton Symposium Essays

Articles by Ian Barbour, Mary Gerhart, Langdon Gilkey, Ursula Goodenough, William Klink, Arthur Peacocke, Robert John Russell, and others.

March 1995-A New Look at Teilhard de Chardin

Articles by Lodovico Galleni, Michael Heller, Thomas King, Ursula King, Karl Schmitz-Moormann, Nicole Schmitz-Moormann, and Matthias Frennert Helwig.

## June 1995

"Science, Theology, and Ethics" A profile on the work of James Gustafson

Articles: William Rottschaefer on B. F. Skinner, Iris Fry on evolution and thermodynamics, Robert Ulanowicz on causality in the life sciences.