

## ZYGON AT 40: ITS PAST AND POSSIBLE FUTURE

Journals are like humans. If they reach the age of 40, their chances for a long life are excellent. I predict that this will be the case with the journal *Zygon*. Predictions for longevity at 40 are favorable partly because anyone who has made it that far has learned much about the dos and don'ts of life and how to handle them. This also is true of journals, or at least of their editors and sponsors. In addition to the congratulations and praise that *Zygon* at this time rightly deserves, it is an occasion for assessing the past and envisioning the future. Allow me, along with others, to try my hand at these two tasks.

By way of homework to prepare for writing this editorial, I gave myself the job of examining the annual indexes for the years 1966 (the first year of publication), 1976, 1986, 1996, and 2004, the last year for a full index. What was I looking for? I simply tabulated very loosely the number of articles on various topics in the field of science and religion. Here is what I found. In addition to an even sprinkling of investigations into the philosophy of science, the philosophy of religion, and theological method, there were some interesting shifts in other subjects. A dialogue with physics and its implications for cosmology was quite visible in the beginning but gradually faded in prominence. Biology, sociobiology, and evolutionary psychology became dominant concerns in the 1970s and 1980s. The relevance of these areas of science to philosophical and theological ethics were central interests of *Zygon* during this period.

This continued in the 1990s but was supplemented by new fascinations with the brain and the emerging discipline of cognitive neuroscience. Even here, I believe, issues pertaining to ethics, in contrast to cosmology and metaphysics, characterized most of the articles during that decade and into the twenty-first century. In addition, as Ian Barbour pointed out in his 2003 essay "Future Directions for the *Zygon* Center," *Zygon* paid attention to both Christianity and other religions. Representations of Christian theology often took the form of Christian philosophy, if not some broad form of philosophy of religion. Such articles provided a larger framework in which theologians, ethicists, philosophers, and scientists could feel comfortable and engage in fruitful exchanges.

The editorial direction of *Zygon* during these years was sound. Ralph Burhoe, Karl Peters, and Philip Hefner provided firm yet inclusive leader-

ship and made *Zygon* the preeminent journal relating science and religion in the United States and possibly the leading journal in the entire world.

*Thoughts on the Future.* We have much to be proud of and much to celebrate. But now we confront new challenges and decisions. The religions of the world are in many ways in crisis. Both Protestantism and Catholicism are in free fall in Western Europe. Mainline, or oldline, expressions of Protestantism are declining and polarized in the United States. Evangelicals, Pentecostals, and Latter-Day Saints—groups thought to pay little scholarly attention to the conversation between science and religion—are growing and exercising increasing cultural and political influence. The technical applications of science are introducing increasingly complex problems in the areas of economic justice, the dislocations of globalization, and the staggering ambiguities of the fields of biotechnology and assisted reproductive technology. The possibilities of nuclear and biological terrorism loom on the horizon, fueled by religious animosity and ignorance. As fanaticism grows and mainline denominations become less powerful, religion more and more appears irrational and discredited to powerful educated and scientific elites.

In light of this emerging world situation, we must ask ourselves which of *Zygon's* past emphases it should retain, which it should expand, and what new emphases it should give fresh and focused attention.

I think *Zygon* should go in two directions at once. First, it should continue to pursue fundamental theoretical issues on the relation of science and religion—that is, investigations in the philosophy of science, the philosophy of religious tradition, and the role of science in theological and ethical methodology. Second, it should apply the fruits of these inquiries to the emerging worldwide challenges confronting societies on the boundary between biotechnology and tradition, modernity and contemporary expressions of religion. Customary *Zygon* themes should be visible in both of these directions, but they should take fresh forms, and, indeed, new issues will emerge.

Being a practical theologian, I recommend gaining focus on theoretical issues by searching for the sharpest way to define the great plethora of disturbing new practical issues facing society. I would not want *Zygon* to go so far as to become a journal in applied religious ethics that solely specializes in combining religious traditions and modern science to address contemporary moral problems. But *Zygon* has taken some appropriate steps in the direction of the practical. An example of this can be found in the important work on AIDS/HIV stimulated by James Moore. If such practical work also attends to basic issues in science, philosophy, ethics, and the critical hermeneutics of religious traditions, it can help put fundamental theoretical discussions into a fruitful frame of reference. The dialectic between practice and theory can be useful, I contend, even in the dialogue between science and religion.

*Critical Hermeneutics in Science and Religion.* To pursue both theoretical and practical issues simultaneously requires a quest for an adequate philosophy of both science and religion. We need an understanding of human action that helps us understand it in both its scientific and practical manifestations—in work of theory (*theoria*) and practical wisdom (*phronesis*). We also need models of action that help us understand the relation between theory and practice.

I recommend the resources of critical hermeneutics, sometimes called hermeneutic realism—best expressed, I think, in the work of the French philosopher Paul Ricoeur. Ricoeur follows the work of Heidegger and Gadamer in seeing human action as first of all a matter of practical interpretation. We are finite and reflective creatures who, in an effort to address the emerging future, must also interpret how the past impinges on our experience of the present. Human beings are practical interpreters, struggling to understand (*verstehen*) the past and present in an effort to deal with the natural and moral challenges of the future.

According to Ricoeur, in order to interpret experience, humans must both participate in experience yet simultaneously gain various kinds and degrees of “distance” from it. Even to begin to consciously interpret our experience requires gaining some degree of distance from the great fund of inherited symbolic frameworks that we more or less habitually bring to our present experience. Simple thoughtfulness—simple intentional reflectiveness—is a form of “distanciation,” to use a favorite word of Ricoeur (1981, 91–92). Ricoeur uses the idea of distance in place of the concept of objectivity. Sciences never achieve pure objectivity. Furthermore, the cognitive distance of a scientist is only meaningful if it functions in tension with the tradition that shaped him or her.

There are various kinds and degrees of distanciation. Science is one of the most radical forms of distancing. In science, the scientist tries to loosen habitual interpretive assumptions shaped by the past, turns them into hypotheses, and attempts to test them through controlled experiments, correlations, and statistical probabilities. But because human beings are historical creatures who are embedded in nature but never completely determined by it, scientific distanciation never gives humans all they need to know to satisfy the demands of practical interpretation, understanding, and action.

For my money, Ricoeur’s view of hermeneutics is more satisfying than either Heidegger’s or Gadamer’s simply because he built into it a place for the distanciating submoment of science. To interpret experience first requires interpreting our massive historical, symbolic, and narrative inheritance due to the huge impingement of the past on the present. Here Ricoeur agrees with his mentors Heidegger and Gadamer. But to interpret the present, one must also gain varying degrees of distance from the past to examine present social, psychological, biological, and physical impacts as

well. Practical interpretation, according to Ricoeur, is a matter of understanding-explanation-understanding. This requires, among other forms of distancing, the distancing procedures of science. Here Ricoeur goes beyond Heidegger and Gadamer.

If we take Ricoeur seriously, science is, and can only be, a subordinate moment in the wider and larger practical interpretative process. Furthermore, according to this view, science, no matter how much distance it achieves, will in fact lose its bearings—lose its orientation to experience—if it attempts to completely divorce itself from interpreting the historical past. More deeply, science needs to remember and itself be informed by the religiocultural classics of the past—the classics that have fed, informed, and given orientation to the civilizations that have in fact made science possible. These classics have not only carried the moral framework of our civilizations, they have carried the categories and interpretations of nature, time, space, and causality that science depends on, no matter how much it refines them.

Science gains continuous and necessary moral and cognitive orientation from tradition. At the same time, tradition and its religiocultural core need the constant refinements of science. My work over the last decade on the topics of family, children, marriage, and sexuality in the Religion, Culture, and Family Project has taught me that religious traditions are riddled with judgments about the rhythms of nature. Folk science, folk medicine, agricultural observations, observations about the sexual, mating, and birth habits of other species, various forms of comparative biology, and some premodern forms of science run throughout the texts of Christianity, Judaism, Islam, and all the other literate axial religions.

Part of the task of *Zygon*—a very large proportion of it—should be expending more effort to uncover the naturalistic and protoscientific judgments implicit in the great religious traditions of the past. Because of its massive impact in almost every part of the world—the United States, Western Europe, Africa, and South America—special attention to Christianity is entirely justifiable. But attention to other religions is also mandatory. What can the religion-science conversation do for the religions? It can refine them, especially at that point where their assumptions about nature inform their moral and religious judgments. Notice that I used the word *refine*. Science will never be able to replace or even radically alter the massive complexity of these religions. But science can help bring about significant adjustments to their moral and cultural practices. In order to pursue this goal, *Zygon* must do more to research, critically interpret, and retrieve the uses of naturalistic observations in the great world religions and bring these ancient observations into conversation with the insights of modern science.

At the same time, more attention to the hermeneutic task of retrieval could have great benefit for modern science. It would help overcome temp-

tations toward amnesia that afflict the philosophical-foundationalist assumptions of so many of the sciences. This is the idea that science, by forgetting and repudiating the religiocultural classics of the past, can sooner or later give rise to some new and better world vision and ethic. These foundationalist assumptions, as the work of Richard Bernstein and others has so convincingly argued, lead most assuredly to a dead end (Bernstein 1983, 2, 8, 9, 22–23). Science will serve us best if it understands itself as refining certain judgments of the past rather than repudiating them wholesale and creating a new world from scratch. These are some of the possibilities, sensibilities, and appetites that critical hermeneutics might bring to the *Zygon* table. Science, yes, but not science alone. The religious traditions, yes. But not these traditions without the refinements of contemporary science.

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#### REFERENCES

- Ricoeur, Paul. 1981. *Hermeneutics and the Human Sciences*. Cambridge: Cambridge Univ. Press.
- Bernstein, Richard. 1983. *Beyond Objectivism and Relativism: Science, Hermeneutics, and Praxis*. Philadelphia: Univ. of Pennsylvania Press.

#### Coming in December

The fourth and final round of the Fortieth Anniversary Symposium, “Science, Religion, and Secularity in a Technological Society,” appears in our next issue. Contributors are Bronislaw Szerszynski (environment and culture), Rustum Roy (materials science), Antje Jackelén (theology), V. V. Raman (physics), and Ted Peters (theology). Gregory Peterson (philosophy, religious studies) provides an interpretation of the entire symposium—22 essays altogether.

**Call for Papers 1**

*Zygon* welcomes papers on the theme "What are the criteria for judging that a worldview is 'scientific'?" What are the essential components of a "scientific worldview"? What would disqualify a position from being considered "scientific"?

Length is negotiable. Deadline is 15 October 2005. Authors planning to submit such a paper should inform the editor as soon as possible. Send notifications to both of these addresses:

pnhefner@sbcglobal.net  
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**Call for Papers 2**

*Zygon* welcomes papers on the theme "What place, if any, do the ideas of *meaning*, *purpose*, and *telos* play in scientific research and theory formation?" On the one hand, we often read that "teleology," "design," and "purpose" are alien to science; we also read that "chance" and "randomness" are fundamental to science, especially for the biological sciences. On the other hand, the idea of "function" also seems basic to some scientific thinking, especially biology. "Function" seems closely related to purpose, as philosophers of biology have frequently observed. A recent report, for example, noted that paleontologists are much exercised over the question "What were dinosaur feathers for?" Is it the case that science operates with notions of "purpose" and "telos" with lower-case *p* and *m*, whereas religion raises those letters to upper-case status? What is the nonscientific thinker to understand about the stance of science on these questions? Do the various sciences take different positions on this question?

Length is negotiable. Deadline is 1 February 2006. Authors planning to submit such a paper should inform the editor as soon as possible. Send notifications to both of these addresses:

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