

## *Editorial*

### UNWEAVING, WEAVING, AND KNOWING WHERE TO LOOK

In the poem that appears in these pages, Christopher Southgate speaks of “unweaving,” “reweaving,” “knowing where to look.” Those words encompass the powers and possibilities that are ours as human beings. They also describe the situation we live in today and suggest the challenges we face as we bring our possibilities to bear on our situation. We have unwoven the things of this world, measured them, split them up into their constituent parts, and theorized about them. Southgate takes the rainbow as an example—its colors are registered as features of the spectrum; the hope that it has symbolized is analyzed in terms of neural activity.

At the same time we have also unwoven our experience of the world around us and our understandings of it. Where do we now look—for beauty, for hope, for the meaning of things? We have the power of unweaving, and now we are in the unwoven situation in which we are challenged to reweave our world. Reweaving entails the gift of knowing where to look. We have spread the world out before us—in its discrete parts. How do we look at these parts so as to reweave meaning and hope?

Unweaving is largely the work of our science. Reweaving is the domain of philosophy, religious thinking, moral reflection, and spirituality, as these are undertaken by sensitive reflection that knows where to look and, while recognizing that scientific thought has forever rebuilt the loom, understands that spiritual insight is more urgent than ever. The images of unweaving, weaving, and knowing where to look can serve as entree to this issue of *Zygon* and perhaps for interpreting the quest of religion-and-science more generally.

Southgate’s theme takes on flesh and blood in the feature section of this issue, *Crossing Species Boundaries*. Multiple unweavings of innumerable “glowing strands” of the biological rainbow have brought us to the amazing situation in which we are able to take apart the genome that encompasses a variety of species and rearrange the parts in specific genomes to which they are not native. We are astonished at our own prowess as weavers, but we also question what we are doing. We ask whether our new fabric is right or wrong or permissible or dangerous or even desirable. British

medical researcher Neville Cobbe provides a full-length report on this unweaving and reweaving, "Cross-Species Chimeras," along with his own proposals for moral and Christian theological reflection. Stephen Modell (medical researcher, public health) and Bernard Rollin (philosophy, animal and biomedical sciences) add their own elaborative analysis and reflection. For most readers, the unweaving and reweaving described in these articles will be as breathtaking as the responsibility for interpreting and assessing the fabric we are producing is sobering and mind-stretching.

Discussions like this one of cross-species boundaries are not uncommon in *Zygon*; they have been included in our mission since the beginning. Recently, however, we have received feedback calling for more intense attention to practical issues that affect the welfare of the human community. Associate Editor Don Browning wrote in a September 2005 editorial marking our fortieth anniversary, "*Zygon* at 40: Its Past and Possible Future," that the journal "should continue to pursue fundamental theoretical issues on the relation of science and religion . . . and 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" (p. 530). This sets a difficult agenda, but we are committed to it. In March, we published an interfaith symposium on Issues in Biomedicine and Ethics that contributed to this same goal. (These articles are featured by our publishing agent, Blackwell Wiley, for free distribution at [www.blackwell-synergy.com/toc/zygo/42/1](http://www.blackwell-synergy.com/toc/zygo/42/1).)

Also in March, we initiated a discussion of whether work in religion-and-science has come to the point where it requires reassessment and whether we possess the maturity of thinking that can undertake such a reassessment. The March editorial asked two questions: whether the base of human experience represented in our work needs deepening and broadening and whether our audience is too narrowly conceived.

We sent that editorial to fifteen individuals who are working explicitly on issues of religion-and-science. We published the first four responses as guest editorials in June. Six more appear in this issue, and the remaining five contributions will be in December. Not a single editorialist has said "We're doing fine, leave things as they are."

John Polkinghorne (physics, theology) leads off with his concern that the reality of the world's religions must be actualized in the religion-and-science discussion, reminding us that whereas educated persons throughout the world can agree on basic scientific understandings, there is an inherent pluralism on fundamental religious beliefs that will be reflected in the engagement with the sciences. Michael Ruse (philosopher of science) offers a memoir of his years of involvement in the religion-and-science discussion, along with sharp assessments of both his scientific and religious studies colleagues in the discussion. In his frank opinion, there is much work of substandard quality. He echoes opinions that surfaced in

our fortieth anniversary symposium that historical studies are largely undervalued in our discussions.

Gregory Peterson (philosophy, theology) is just as frank in his assessment that the jury is still out on the judgment whether theology as it is practiced today is up to the challenge of engaging science, citing the precarious state of theology in universities. His agenda is for theology to focus on its “unique domain of inquiry”: questions of ultimate concern. Biologist-theologian Celia Deane-Drummond seems to track a similar concern in her call “to establish a common language” for the religious and scientific communities that centers on “wonder” and “wisdom.”

Eduardo Cruz (theology) takes Richard Dawkins’s critique of religion as a historic challenge for theology to overhaul itself so that it can contribute credibly to humanness in our time. In the view of Taede Smedes (philosophy, theology), theology’s ability to engage science has been compromised by a cultural form of scientism that renders it impossible to engage in genuinely theological interaction with science. An overhauled theology will insist on going back to the most basic questions: What is theology? What is science? What are the differences and possibilities for conversation between theology and science?

In short, these guest editorialists are agreed that significant redirecting is called for on the theological side of the religion/science engagement. It is clear that this series of editorials invites further response and interpretation. Just what is the shape of the agenda or agendas that are proposed? I have begun the task of interpretation here, with the sincere invitation for readers to make their opinions known. We will publish responses and also add them to our Web site, *www.zygonjournal.org*.

In his review article dealing with Gregory Feist’s recent book, *The Psychology of Science and the Origins of the Scientific Mind*, psychologist Robert Glassman argues for an expansive understanding of the mind and science that can entertain pertinent theological insights. Theologian Amos Yong’s review article reprises the work of cosmologist Trinh Thuan.

Our Articles section opens with the argument presented by philosopher Alejandro Rosas for the origins of morality in natural selection. Rudolf Brun (biology) takes up directly the challenge to theology that I referred to above with his proposals for genuinely naturalistic theology. The second installment of historian C. Mackenzie Brown’s study of nineteenth-century Hindu responses to Darwin and evolutionary forms of thought provides a rich elaboration of the kinds of issues Polkinghorne highlights in his editorial. Social scientist George Adam Holland accomplishes two tasks in his piece—he introduces the reader to the growing field of extended cognition and at the same time describes an example of its usefulness for elaborating theological concepts. Lyman Page (pediatric medicine) proposes that brain development from child to adult phases throws light on a process of synaptic winnowing that may contribute to understanding both

our capacity for culture and the derangement found in persons who suffer from schizophrenia.

The issue concludes with theologian Thomas King's study of belief and disbelief among three modern Roman Catholics and the philosopher Jean Paul Sartre. King suggests that their struggles are instructive for understanding how faith and doubt can coexist even among ardent believers.

Unweaving and weaving—Christopher Southgate has given us yet another metaphor for interpreting our journey through the worlds of religion and science. Our hope is that readers will bring their own efforts to those of the authors we present in this issue.

—Philip Hefner

• **Web site features** •

*www.zygonjournal.org*

**Free downloads**

For a limited time, articles from the interfaith symposium "Issues in Biomedicine and Ethics" are available in pdf free of charge, even to nonsubscribers. Authors are Fatima Al-Hayani, Mohammad Farimani, Philip Hefner, Stephen Modell, Ann Pederson, and Byron Sherwin. Access and download the articles at *www.blackwell-synergy.com/toc/zygo/42/1*.

**150 articles on the cognitive sciences**

Forty years of digitized back issues constitutes a vast library of resources. The cognitive sciences are a case in point. In most of our forty years we have published offerings in this area—150 articles in all, 7 percent of our total, beginning in 1966 with Hudson Hoaglund's "The Brain and Crises in Human Values." Our Web page features a survey of these articles by Internet editor David Glover, with a comprehensive bibliography of the articles. Glover's survey is an addition to our efforts to make the journal Web site a useful supplementary resource to the forty years of back issues.

• **Call for Articles** •

**Agenda for Religion-and-Science**

We are seeking articles on the theme of the March 2007 editorial and the guest editorials that appear in the June and September issues. Editorials are posted on the *Zygon* Web site. If you have a proposal along these lines, contact the editor at *pnhefner@sbcglobal.net* or *zygon@lstc.edu*.

**Extended Mind**

We seek articles dealing with the concept of extended mind and in particular on the work of Andy Clark. Submit proposals to the editor at *pnhefner@sbcglobal.net* or *zygon@lstc.edu*.