# **Editorial**

#### RELIGION AND SCIENCE—TWO-WAY TRAFFIC?

What does religion contribute in the dialogue with science? It often has been lamented that the dialogue encourages one-way traffic: Science makes a great impact on religion, so the comments go, but there is little or no discernible reciprocity; religion makes no impact on science.

There is truth in this assessment. In much of the discussion, religion is challenged to conform to the standards set by science—standards of method and language as well as standards for defining truth. Perhaps most of all, religion is pressed to adapt to a naturalistic worldview. It is proper to ask for an accommodation to scientific portrayals of the natural world, since religion focuses on the nature and destiny of the world and our lives in it. Today, the most fruitful and authoritative description of the world are those of science. Because all of the world's religions formulated their visions in prescientific times, it is clear that if those visions mean to engage us today, they require reformulating.

It is a mistake, however, to take the naturalistic scientific worldview as a limitation or a boundary. If modern history teaches us anything at all, it is that science is highly successful at defying boundaries and breaking through limitations. Science has taught us that nature, whether the natural world outside us or our own human nature, is not settled or staid. Merriam-Webster defines *staid* as "sedateness" and "prim self-restraint"—precisely what nature is not, according to our scientific understanding. Consider the realm of the immense, the macroscopic: the universe itself defies our imagination in its age and breadth; it is expanding faster all the time, driven by energy sources that we do not understand, hence we speak of "dark matter" that we cannot see. There is no single agreed-upon scenario depicting the future of the cosmos. Or consider the realm of the very small, smaller even than the microscopic. Quantum mechanics describes the subatomic world that we call counterintuitive because it does not conform to our common sense and ordinary experience. In this Year of Einstein, physicists talk much about "entanglement"—the extraordinary phenomenon that one particle can change the behavior of another particle at a far distance. One physicist calls this "the closest thing we have to magic"

## 4 Zygon

(Overbye 2005). Human nature possesses its own counterintuitive character. Three billion nucleotides within each of us, of which we have no conscious awareness, are determinative for who we are. Cognitive scientists, with their theories of folk wisdom—folk psychology, folk physics, folk theology—describe how our minds have been shaped by a commonsense worldview that must be corrected in many places by the more sophisticated outlook that comes through learning and also defies our primordial shaping.

Far from constraining us, the scientific worldview continually brings us to the brink of amazement as it suggests vast blank spaces in our knowledge and hints of realities that beggar the imagination. Science itself points us to the "MORE" that William James speaks of in his analysis of religious experience, the "power beyond" that lies on the other side of our present knowledge (James 1908, 485–519). We can understand why Einstein himself said that if he accepted what his theories of the quantum world pointed to, he would feel "silly," and physicist David Albert adds that entanglement is "really weird, a profoundly deep violation of an intuition that we've been walking with since caveman days" (Overbye 2005).

Religion also specializes in the counterintuitive and the "MORE." The discipline of Buddhist meditation, for example, represents the seriousness of a vision that in fact seeks to retrain the body and spirit so that they can recognize that the goal of human life itself lies in a counterintuitive realm. Ronald Green (1988) has described how all of the world religions seek to convince their adherents of the counterintuitive proposal that it is finally in their self-interest to subordinate self-interest to a larger altruism.

This is religion's contribution to the enterprise of science: to probe the MORE and the Beyond of the nature that science describes and explains. Mihaly Csikszentmihalyi (1993, 248) speaks of this as the focus on possibilities, on what the world *can become*. This is the realm of the spirit. Spirituality stands at the center of religious vision, even as it animates many who are not religious in any conventional way. Spirituality, the concern for future possibility, is fundamental to human nature. When religion focuses on what the world can become, it represents this essential element of the human.

This vision of the MORE undergirds a sense of individual worth, a sense of human purpose, and the value of vocation. As Green argues, the vision that all humans are kin, that they stand in solidarity and equality despite external signals to the contrary, is the foundation of moral behavior (Green 1988, 139–42).

Scientific knowledge as such does not originate any of these ideas. Scientific method has no means for discerning dimensions of the MORE. It can, however, focus its efforts to deepen our understanding of them. Scientific study does not originate the idea of altruism, but it throws considerable light on the phenomenon. It does not originate ideas of morality,

but it increases our knowledge of how ethics is rooted in human nature. Similarly, it does not originate individual worth and dignity, but, once acknowledged, they are illuminated by the sciences, particularly the social sciences. Most recently, science is turning its attention to the study of spirituality—again a phenomenon that is brought to it from outside its own purview.

It would be an error to think that science can set its own agenda of research and knowledge independently of other dimensions of human nature, including religion, that do in fact contribute to the scientific agenda. It is an equally gross error to miss the point that science can contribute enormously—and fundamentally—to our knowledge of areas of human concern that do not, as such, originate with science itself.

What of naturalism? Our ideas of nature are fractured by science as it leads to ever more breathtaking frontiers of knowledge, just as they always are set on edge by religion's insistence that we look ahead to the future and its possibilities. Supernaturalism often is set over against naturalism as an antipode. Could it be that talk about the supernatural is, at a deeper level, the reminder that naturalism itself is not staid? Could the supernatural be an invitation for the naturalistic worldview to undergo the same dramatic and counterintuitive changes that have marked our ideas of nature?

Readers will find that the articles in this issue open many windows on the possibilities of both religion and science and their hints concerning the MORE. The symposium on Marc Bekoff's stunning research on animals is a good place to begin our thinking. Donna Yarri (theology) introduces these articles by four religious studies scholars: Yarri herself, Graham Harvey, Jay McDaniel, and Nancy Howell. Bekoff, who describes his studies as cognitive ethology and animal behavior, closes the symposium with an expansive response to the religious thinkers.

The six articles that follow cover a broad range. Theologian Wolfhart Pannenberg presents an interpretation of the modern engagement of theology and science. We initiate what will become an ongoing discussion in these pages with John Carvalho's (molecular genetics) proposals for what constitutes a "scientific worldview." Charlene Burns (theology) provides grounding for altruism in the very nature of God. Anthropologist Russell Tuttle explores some possibilities deriving from a careful survey of our knowledge of human evolution.

Two psychologists bring the issue to a close: John Teske addresses "how myths, narratives, and stories engage human beings," and Daniel Helminiak reflects on the possibilities for an explanatory psychological theory that encompasses both spirituality and religion.

—Philip Hefner

# 6 Zygon

Green, Ronald. 1988. *Religion and Moral Reason.* New York: Oxford Univ. Press.

James, William. 1908. *The Varieties of Religious Experience: A Study of Human Nature.* New York: Longmans, Green.

Overbye, Dennis. 2005. "Quantum Trickery: Testing Einstein's Strangest Theory." New York Times, 27 December.

#### **New for 2006**

Two new possibilities are now available to *Zygon* readers:

1. All of the back issues—forty years—have been digitized and are available for reading and searching. The *Zygon* Web site has useful cross-referencing and supplementary materials, and from to time we will organize discussions of key articles.

Readers can access the material at either www.blackwellpublishing. com/zygon or www.blackwell-synergy.com. (If you experience difficulties, contact customerservices@blackwellpublishing.com.)

2. The *Zygon* Web site is up and functioning at *www.zygonjournal. org.* We post features about the journal, excerpts of some articles, calls for papers, and cross references to digitized back issues.

### **Call for Papers**

An International Conference on Body and Mind: Science and Spirituality Perspectives

December 6 - 8, 2006 Chulalongkorn University, Bangkok, Thailand

Deadline for submission of abstract or paper proposal 15 June 2006

For information:

Dr. Soraj Hongladarom Department of Philosophy, Faculty of Arts, Chulalongkorn University, Bangkok, Thailand Tel. +66(0)2218 4756; Fax +66(0)2218 4655

e-mail hsoraj@chula.ac.th

Conference Web site <a href="http://www.thousand-stars.org/TSBSG/">http://www.thousand-stars.org/TSBSG/</a>