



flourished, however. Today, science is more likely to be the arbiter, and it exercises scrutiny of religious belief. Religion, however, continues to be a major cultural presence.

Flanagan's "spaces of meaning" and Strassberg's "components of cultures" make the same point—that religion and science are never alone together, whether in conflict or in dialogue, as non-overlapping magisteria or as integrated modes of thinking.

What difference does all this make? Two important responses come to mind: (1) The task of understanding the relationships between religion and science is enlarged and rendered more complex. (2) Contradictions between religion and science are subsumed within a far more powerful movement in human experience to seek the cooperation and complementarity between religion and science and all of the components of culture or spaces of meaning operating within any given social time and space.

1. Understanding. Within the peer group that is conventionally known as the religion-and-science field, the prevailing approach abstracts religion and science from the cultural and social context, analyzing them as they exist in and of themselves. From this approach there has emerged an enormous amount of research and publication, almost all of it within the framework of academia. Methodologies have been sharpened, central concepts have been formulated, and enduring problems have been identified. This work on methodology, concepts, and problems forms the substance of the field as we know it today, at least in academic circles.

In some respects, this work is phenomenological in character, resulting in an engagement that respects the integrity of both religion and science. Attention to the cultural mix and social forces in which religion and science occur represents contextualizing—which often has been considered antagonistic to the integrity of religion and science. In the academy, the relations between theological expression and the study of religion are to this day uneasy; the former is said to be ideological, the latter, reductionist. Similarly, science and the cultural study of science do not mix well, and the same charges are made—ideology versus reductionism. Cultural studies frequently play a "debunking" role that seems to diminish the truth-claims of both science and religion.

Although this antagonism is real and has indeed marked the engagement between religion and science, Flanagan and Strassberg call for an advance: Our understanding will be enhanced if we recognize that in and of themselves, religion and science are what they are in the company of the elements of their culture. The culture is not static, and its constituent elements, including religion and science, are always relating to each other in a dynamic and surprising variety of ways. Our aim cannot be to minimize cultural factors, just as it is not to perform a reductionism on religion or science but rather to understand the fullness of each element of culture in its own integrity and also in its interrelationships.

In these terms, we discern one of the greatest challenges to religion-science studies in the years ahead: to transcend the antagonism of phenomenology and contextual studies and instead bring both approaches to bear in a new and richer and more adequate understanding of religion and science and their interrelationships. Conventional academic practice might prefer to separate the two approaches, even assign them to separate departments—constructive religion/science thinking and historical-cultural studies—but a more creative option would integrate the two. Two examples come to mind. First, self-interested and competitive behavior is posited to describe the processes of evolution, specifically evolution-based theories of altruism. The culture of the United States, in which much of this theorizing occurs, is largely defined by a competitive, self-reliant spirit, which is embodied in the economics of the free market. Is this consonance of the scientific theorizing and the cultural matrix pure coincidence? Second, research in genetics and other life sciences has been absorbed to a significant degree into medical research and practice, as well as into the market economy that sustains all aspects of medicine. Medicine and market exist in a culture marked by a passionate denial of death and an equally committed religious respect for life. Research in the life sciences, with its medical applications, is inseparable from both that denial of death and respect for life; science and medicine are in fact vehicles of the denial and the respect.

Are science and religion to be abstracted from the culture that embraces them, as if that culture were irrelevant for understanding the phenomena in question? Or is our understanding of both science and religion enriched if our approach takes the whole into account and explores the relevance of the culture for the scientific quest for truth and the religious search for meaning? It must be clear that the issue here is not that either the science or the religion is culturally conditioned but rather that they are part and parcel of the culture's struggle for understanding.

2. Contradiction or cooperation and complementarity? Many discussions describe the relationships between science and religion in terms of conflict. Media throw their spotlight on the scientists and the religious thinkers who express this conflict. The deep forces of culture, however, which deserve more attention, work for unity between the two. This movement toward cooperation or complementarity may work with loosely conceived ideas of science and religion that seem faulty to the professionals in each field. Nevertheless, since most people in a culture assume that the elements or meaning spaces of culture coexist in harmony and meaningfulness, they will form their own personal syntheses that satisfy their quest for coherence, even in the face of skepticism from the experts. Experts may insist on criteria of philosophical sophistication, doctrinal correctness, or scientific rigor, while nonspecialists are generalists in their thinking; they work out their own personal, commonsense syntheses that allow for wholeness rather than disjunction of meaning. These personal syntheses may

invoke idiosyncratic speculations that are elaborated in great detail, or they may be frustratingly inarticulate, relying on such simple assertions as “I simply do not have any difficulty relating my religious faith and science” or “God has created both religion and science, so they cannot conflict.” Although this cultural pressure for consonance rather than conflict receives very little attention in most religion-science thinking, it raises several important questions: Does this cultural pressure for consonance engender proposals for understanding religion and science? Do these proposals reveal significant aspects of science or religion that would otherwise go unnoticed? What are the dynamics of this cultural pressure? What are the issues of contrast between this cultural force and the forces for dissonance? Why does our culture embrace both trends?

There may be a paradigm shift in the works here for the field of religion-and-science. The present dominant paradigm engages in abstraction, viewing religion and science as relatively “pure” entities that, to their detriment, may become victim to cultural entanglements that involve strategies of debunking and defensiveness. This way of thinking relies on an older metaphysics that identifies the “essence” of science or religion in contradistinction to the entangling “accidents” of culture. The newer paradigm insists that there is no abstract purity in either science or religion, because they exist inherently as expressions of the culture in which they thrive. If we are to understand science and religion, we must explore their embedded fullness in their culture and society.

The menu of articles served up in this issue of *Zygon* certainly underscores the incredibly broad range of thinking in the religion-and-science domain. The reader can judge how deeply the cultural embeddedness of this domain is probed in these pages. William Grassie (religious studies) opens the discussion with a Thinkpiece that presents his farewell comments as he retired last year as director of the Metanexus Institute; his words have significance beyond the specific occasion on which they were delivered. In the section “Quantum Physics and Beyond” we present two efforts to explore the vistas opened by quantum physics: Religious studies scholar David Klemm and physicist William Klink take up the question of consciousness, while Lothar Schäfer continues his conjectures on transcendence, which appeared in *Zygon* in September 2006.

Six articles form the second segment of the issue. Joseph Cosgrove (philosophy) interprets Simone Weil’s spiritual critique of modern science. The provocative question “Does psychiatry need a public philosophy?” is broached by Don Browning (religious studies). Theologian Lluís Oviedo reviews a recent major conference on the cognitive scientific study of religion. Allan Russell (physics) and Mary Gerhart (religious studies) propose how “divine conjectures” may be explored in the context of science. Physicist Nidhal Guessoum explores the possibilities for understanding how the Qur’an figures in the conversation with science. In the final article in this

section, Jeffrey Koperski (philosophy) elaborates what he considers to be both bad and good ways to respond to Intelligent Design theory.

Wentzel van Huyssteen delivered the Gifford Lectures in 2006. Four commentaries on those lectures appear in our concluding segment, with a final response by van Huyssteen himself. The commentators are Barbara King (biological anthropology), Gregory Peterson (religious studies, philosophy), Wesley Wildman (theology), and Nancy Howell (religious studies).

Poet Alan Nordstrom, whose work has appeared in these pages in years past, supplies a coda for this issue of *Zygon* and also for all our reflection on religion-and-science, as he witnesses to the broader range of our queries and the urgent questions that stretch our minds to their very limits.

Our hope is that our offerings will provide that stretch for all of our readers.

—Philip Hefner

#### REFERENCES

- Flanagan, Owen. 2007. *The Really Hard Problem: Meaning in a Material World*. Cambridge: MIT Press.
- Strassberg, Barbara. 2005. "Magic, Religion, Science, Technology, and Ethics in the Post-modern World." *Zygon: Journal of Religion and Science* 40:307–22.

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**Nancey Murphy**—philosopher and theologian whose work covers a wide range of themes in religion/science, particularly neuroscience and the idea of soul.

**Willem B. Drees**—physicist and theologian, who has made fundamental contributions to the development of naturalistic modes of religious and theological thinking.

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