Editorial

THE MYTHIC GROUNDING OF RELIGION AND SCIENCE

Science and religion reveal to each other things that are immensely important and at the same time not always welcomed—things that are seldom vivid in the self-awareness of practitioners, whether they be scientific or religious. Science reveals to religion that if it intends to interpret the ways of God in the world it must recognize that the traditional worldviews that bear religion's vision are not viable today. This is good news, because it invites religion to frame its vision in fresh ways so that it can truly challenge contemporary minds. The message is not always received as good news, however, because it awakens the discomfiting awareness that religious thinkers and communities must extend themselves to the breaking point if they are to rearrange their worldviews and even rethink how divinity presents itself in the new context of experience.

Of course, science does not simply state the issue and leave religion alone to sort things out. Science remains a conversation partner—either unintentionally or by design—and provides feedback to the efforts of religious thinkers to take the measure of scientific knowledge. Because its vision is interwoven with our understandings of the natural world and human life, religion can hardly ignore this challenge from science. This word that science speaks to religion is widely recognized; it has been acted upon by several generations of theologians—with greater or less success.

Religion's revelation to science is much less frequently mentioned. It unveils the fact that science itself is driven by a fervor and commitment that draw upon mythic assumptions. This is good news, because it opens a way for scientists to reassess their goals and methods, but it often is received as bad news, because it sometimes throws a harsh light on cherished motivations. Science is not a superficial undertaking; it presses its practitioners to the limit of their personal discipline and mental creativity. As such, it calls forth resources of belief that run very deep in human nature.

The scientist's project is at least as audacious as that of the religious pilgrim. Three pounds of gray matter located in the cranium of a small and short-lived creature who inhabits an infinitesimally small sphere in a colossally large universe whose history is twelve billion years and still counting—that is where the scientist begins. And this creature dares to chart the

origin and history of that universe in which it is embedded, dares to hurl its imagination and reasoning beyond the boundaries of space and time. It is as if a cell in my body should propose to study me and imagine my origin, my history, and my nature! Such daring is driven by curiosity and genius, to be sure, but these in turn are propelled by primordial forces of psyche and mind that are fueled by myth. Science is a courageous and vulnerable venture of trust—trust in nature and in the human mind. Because science does not itself supply the energy for this venture, it cannot persist apart from mythic supports.

Individual scientists make enormous commitments to their scientific work; in no other human vocation is their discipline and commitment surpassed. For its part, society invests huge sums of money in scientific work, including a vast educational system. Such commitment by both individuals and society rests on deep springs of human motivation that draw upon myth. Individual scientists and the scientific community as a collective do not control the myths, however; myths are imposed upon them by our society and its various institutions. Government, business, and universities all bring their own mythic supports when they relate to science. Science, like religion, is a powerful force, and society always seeks to be master of that power. Religion and science, though powerful, are vulnerable to manipulation by myths that they themselves do not forge. Individuals do sometimes concur with the myths that govern their work, but we cannot impute responsibility for myth to individuals alone.

Why is it important to recognize the mythic undercurrent in scientific and technological endeavor? Because it discloses to us more of the complexity in the relationship of science and religion—to each other and to the cultural context in which they both exist. Bronislaw Szerszynski points out that seeing all science as grounded in theology or myth permits us to ask different kinds of questions of scientific claims and technological developments—not just Is it true? or Does it work? but also What theology does this assume, and what are the implications of embracing that theology? (Szerszynski 2005b; 2005a, chap. 3). In asking this question, religion makes a significant contribution to the self-understanding of science and its goals.

What sorts of myths might ground science? What difference does it make? Myths of Quest come to mind. The Quest is one of the most deeply rooted facets of human nature. Its many mythic forms share important features but differ in their fundamental import: Ulysses, Jason seeking the Golden Fleece, the quest for the Holy Grail. Ulysses' journey is a struggle between cosmic forces of good and evil as he seeks his home. Jason meets with death in his quest. The Grail quest is for healing, purity, and communion with God. Science may be driven by any of these motivations—struggle against evil, a journey of defeat and death, a desire to find healing and transcendence. Battle myths also may be at work; like the

Babylonian Marduk, scientists may aim at conquering chaos, thereby inaugurating the creation of a better world. We might also mention the myth of Sisyphus, which points to the absurdity of human striving.

Myth poses the questions Why do we do science? and What are our expectations? That the dedication of scientists and society may be galvanized by a variety of motives does not mean that all motives are equally worthy and wholesome. Analyzing and assessing our mythic drives is the stuff of religion. The implications of the different mythic energies in science deserve scrutiny; some are more desirable than others.

In 1970, theologian Langdon Gilkey discerned the powerful "myth of the new scientific or technological man . . . who knows the secrets of things . . . and therefore how they work. . . . Consequently he is the man who can control these forces which he now understands and bring them into the service of human purpose" (Gilkey 1970, 79–80). Both destiny and freedom—themes of classic myth—are touched on here. Gilkey and Szerszynski criticize this myth for its assumption that humans are all-knowing and omnicompetent.

An awareness of myth may not affect the methods of science or the formulation of concepts and theories, but the goals and the specific research projects will surely be affected by such awareness. The aim of controlling nature is quite different from that of healing, just as the desire to conquer a chaotic and unfriendly nature differs from that of gaining access to transcendence through the study of nature. The implications of these often unexamined mythic drivers speak directly to the focus and direction of scientific and technological development.

From this perspective, science and religion are kin, because the motivations for religious devotion also require monitoring and critique; not all religious purposes are equally worthy or wholesome.

Recognizing the place of myth in science opens up fundamental vistas for the trialogue between religion, science, and society. Society has a stake in how both religion and science are conducted. Science and religion both rest on powerful mythic intentions that are altruistic—committed to the welfare of the world. Both also pose a threat to society today, because they have allowed other myths to govern their practice: science, the myths of the all-knowing, omnicompetent human controller in a battle against nature that does harm to environment and distorts human ambitions; religion, myths of exclusivism and chosenness that foment division and violence among people. We often consider the mythic components irrelevant, insisting on the scientific side that the human controller can rely on reason alone and on the religious side that some otherworldly revelation decrees chosenness for true believers.

Science and religion must converse and criticize each other's governing myths while society holds both accountable for what they believe about themselves.

Readers will find the issues of the deeper meanings of religion and science lurking just below the surface of the articles presented in this issue. In their Thinkpieces, John Caiazza and Kirsten Birkett urge us to probe deeply in interpreting the current scene. The three articles on technoscience and human nature touch directly on the primal layers of human meaning: Theologians Michael DeLashmutt and Henk Geertsema focus on the ways in which science and technology redefine human nature, while geophysicist Alfred Kracher suggests that writing about extraterrestrials is a kind of meta-analysis of human morality. Donald Braxton and Terrance Klein, both religious studies scholars, approach the natural/supernatural question from contrasting perspectives; their reflections help us sort out how myth figures in contemporary life. Ashok Gangadean (philosophy) and Bruce Greyson (psychiatry) ask probing questions about our experiences of spiritual transformation, thus adding to our accumulated discussion on spirituality in scientific perspective.

We conclude the offerings with five essays on the nature of science and scientific method, a theme that John Carvalho opened up for us in March and that will continue in future issues. The reflections on science in the following pages are from three scientists—Paul Boehlke (and coauthors Laurie Knapp and Rachel Kolander), Lyman Page, and Matthew Orr—and from philosopher Jeffrey Wattles and theologian Aaron Milavec.

—Philip Hefner

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