

# *Embodied Religion and Science*

with Philip Hefner, "Embodied Science: Recentering Religion-and-Science"; Ann Milliken Pederson, "The Nature of Embodiment: Religion and Science in Dialogue"; James W. Haag, "The Hefnerian Legacy: Rethinking the 'Nature' of Naturalism"

## EMBODIED SCIENCE: RECENTERING RELIGION-AND-SCIENCE

by Philip Hefner

*Abstract.* Neither religion nor science is first of all a realm of pure ideas, even though religion-and-science discussions often assume that they are. I propose that a concept of *embodied science* is more adequate and that religion-and-science should center its attention on *science as enabler for improving the world* (SEIW). This idea of science is rooted in Jerome Ravetz's concept of industrialized science and Donna Haraway's technoscience. SEIW describes the sociocultural context of science in commercial, government, and university settings. The chief focus of religion-and-science consequently takes into account five basic issues: (1) the kind of world we want, (2) liberating science, (3) human action and ethics, (4) religion and the world's possibilities, and (5) recovering myth. An underlying presupposition of the discussion is that understanding the world always involves as well an understanding of our being-in-the-world.

*Keywords:* embodied science; Donna Haraway; possibility; Jerome Ravetz; religion-and-science; SEIW; technology

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This essay takes its place in a series of suggestions that I have made in the last few years to reflect on the focus of our discussions of religion and science. I mean to continue the proposal made in my essay in the *Oxford Handbook of Religion and Science* (Hefner 2006; see also 2008) that we describe the field of our considerations in the form of a compound noun: *religion-and-science*. In this present piece, I suggest that our discussion center on the idea of *embodied science*.

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## THE EMBODIED AMBIGUITY OF SCIENCE

I perceive a trend to consider religion-and-science to be a realm of pure ideas. In this realm, scientific ideas are held to be impersonal knowledge of a world that is objectlike and value-free (Goldman 1990, 131), while religious ideas consist of beliefs, doctrines, and dogmas. The burden is placed on religious thinking to take the measure of scientific ideas; there is no corresponding challenge placed to scientific thinking.

Approaching either science or religion from the vantage point of pure ideas falsifies its actuality. This is the background for my proposal that the engagement be relocated to the domain of embodied science and religion. I leave the discussion of embodied religion for another occasion; my focus here is on embodied science. This focus gives us better chances to grasp science's ambiguous presence in our social life. In actual practice, science functions at the behest of funders who expect scientific research to produce results that can be applied to meet their goals. Commercial funders expect the profitability of their corporations to be enhanced, which means that returns to corporate investors must be increased. Government funding serves the interests of society, including military, health, and environmental interests. University researchers are caught in a continual quest for funding grants in order to support their own work, their labs, and the education of their doctoral and postdoctoral students. Because this is in the interest of the university, rank, tenure, and salary are directly linked to funding success. This is nowhere more clear than in the area of medical schools and university hospitals where the interest of individual scientist, corporate business, society, and university converge in billion-dollar enterprises.

Science in these circumstances is not the realm of pure ideas, even though pure ideas may enter into and emerge from the process. It is embodied science, culturally conditioned science—what Jerome Ravetz some forty years ago termed “industrialized science” in his classic work *Scientific Knowledge and Its Social Problems* (1971). Ravetz did not mean by this term science done in what we would commonly call industrial settings, within commercial corporations. He referred to the fact that science is no longer the “little science” that characterized work in the nineteenth century but rather science done under commercial, government, or university auspices that is characterized by interaction with technology, in which competition with other teams and funders is frequently significant, and, in the university, rewards of publication, degrees, tenure, rank, and salary are correlated with success in the competition. Ravetz called attention to scientific work whose products are scientific information that becomes an industrial commodity. Other terms have been used to highlight this character of science today: “strategic science” and “incorporated science,” for example. Historian of science Shigeru Nakayama prefers “the Japanese term *taiserka kagaku* (Establishment Science) which stresses its characteristic of tight and rigid

incorporation into the present establishment” (Nakayama 1990, 145). Donna Haraway speaks to this same phenomenon with her term *technoscience* (Haraway 1997, 3 et passim). Ravetz writes,

The “industrialized science” of the present can be distinguished from the “academic science” that dominates the folk-memory of leading scientists of the older generation, in terms of the capital-intensity of the tools of scientific work and the consequent new social relations within the world of science. We now see emerging a “critical science,” in which science, technology, politics, and ultimately the philosophy of nature are involved, and which may be the most significant development in the science of our age. (1971, 5)

Science has taken this turn largely because of society’s intentions for science. Science and the technology associated with it are essential for our survival. Life as we know it today could not carry on without the science and technology upon which we are dependent. Without this scientific-technological infrastructure billions of people would perish. Society considers science too important, its stake in science is too great, to permit scientific work to proceed on a large scale without direction by society’s needs and wants and enablement by society’s funding resources. Science and scientists did not design the move from little science to big and industrialized science; it came about through the complex processes of culture and society in which science is unavoidably embodied.

Religion-and-science thinking for the most part does not place this embodiment of science at the center of its reflection but rather considers it to be a side issue. We cling to a notion of pure science—free from conditions of research and technological involvement that actually prevail today. In Ravetz’s harsh judgment, we cling to the folk-memory of pure science. (Think of how cognitive scientists speak of “folk-thinking.”) In religion-and-science discussions, we seem to accept what Steven Goldman calls the mindset of scientific practitioners themselves that “the object of scientific knowledge remains the impersonal, object-like value-free world that it was for the founders of modern science. . . . scientists behave as if the object of scientific reasoning were independent of the reasoning process of the reasoners and of the social determinants of their own behavior” (1990, 131).

So, for example, we discuss evolution as if it were a pure, disembodied idea and debate the significance of such topics as our descent through the primate line or whether Darwinian thought leads to a relativistic ethic or how evolution relates to the various religious myths of creation. If we were to take embodiment seriously, we might discuss evolution in terms of its role in the practice of agriculture and medicine, which would lead us to reflect on our domination of the ecosphere, as well as therapeutic manipulations of humans or enhancements that introduce the discussion of Transhumanism. Evolution taken as pure idea gives rise to vigorous debates about complex philosophical and historical issues that frequently generate much heat in public discussion but little real advance in understanding or public

policy. Such discussions are not in touch with the urgencies of the actual lives we lead. In contrast, the embodied force of evolution touches on the actual lives of nearly everyone, points to the ambiguous impact of science, and raises the most neuralgic questions of personal behavior, ethics, and public policy.

I call the embodied presence of science ambiguous because science confronts us with challenges and decisions to which there is not a single, correct response. The research results of embodied science do not present us with univocal (“of one voice”) testimony, with one clear meaning for us to act on. The word ambiguous indicates that we are faced with more than one possibility for action. Consequently, we must decide, and the decisions frequently are difficult and full of risk.

#### A NOTE ON TECHNOLOGY

Although there are those who distinguish sharply between science and technology, I follow Nakayama, Ravetz, and others in the opinion that this distinction is mainly of historical significance. There are interesting theoretical and practical differences between what we call science, technology, and engineering, but in the practice of today’s science, as Steven Goldman writes, “they overlap to such a degree that it seems pointless to attempt to distinguish them” (1990, 143). There may well be science practiced in a few places that is not immersed in technology. However, for the most part today’s science cannot be carried on without the technology that provides the basic data—the process of knowing itself is impossible without technological assistance—and, of course, the data provided correspond to the capabilities and shape of the technology; the technologically obtained data are what must be interpreted by scientists. In addition, in industrialized science, the purpose for undertaking the specific scientific endeavor is a technological application. The practice of science has become more similar to that of engineering, while engineering has become more and more “scientized” (Goldman 1990, 144). Donna Haraway captures both the spirit of current developments and the practice in her term *technoscience*. This term suggests the “implosion of science and technology into each other in the past two hundred years . . . [an] alliance [of] material, social, and semiotic technologies . . .” (1997, 50). Technoscience suggests a concentrating “of effects in the webs of knowledge and power” (p. 51). It recalls Ravetz’s idea of “critical science” that I referred to earlier. Embodied science today is technoscience in its aims, its methods, and in its role in society. Technoscience expresses the essential place of science, technology, and engineering in society’s attempt to promote human welfare and survival in the face of challenges posed in such areas as health care, education, communications, national security, energy production and use, and in our relations with the natural environment—to mention only a few of the more salient areas.

There are strong voices, especially among scientists, who dispute the view that the idea of pure science is but a folk-memory of an outdated perspective. Cell biologist Ursula Goodenough argues eloquently for a sharp distinction between science and technology, in both theory and practice. She fits perfectly Goldman's description above of how scientific practitioners view the object of scientific knowledge. She writes:

Nature is out there, doing her thing for some 13.7 billion years at a minimum. In the activity we call science, we very-recent humans have learned to ask questions of Nature and find out how she does things and how she has done things over time.

Once we understand how Nature does things, then this information becomes a resource for a second activity, variously called technology or engineering. It is easy to distinguish technology from science in that technology by definition entails human artifacts or inventions that make use of one or more understandings of Nature's ways. Those who feel that they can control the dialogue by rhetorically challenging the validity of established understandings of the universe and its history are basically whistling in the dark. . . . From my perspective, the science/religion dialogue is centered on responding to the account of Nature brought to us by scientific inquiry. . . . the scientific account provides the "given" since the way our universe works is, indeed, a given. (Goodenough 2000, 2)

In this view, scientific knowledge precedes technology, and the two are quite different activities. Science in her view is the given, because it represents a transcript of how Nature does things. The scholars I have cited dispute that technology waits for scientific knowledge before it can do its work. They argue that the relationship is more complex, that technology also produces knowledge, apart from science. The chief difference between Goodenough's view and that of Ravetz, Goldman, and others is that the latter believe that the science and technology are so complexly interwoven that attempting sharp distinctions is futile. Ravetz and Haraway hold that such sharp distinctions are misleading and dangerous because they fail to recognize the issue of power. Goodenough holds to the view of science that Abraham Edel associates with Plato and Aristotle, while the others I have cited believe that this view, although still important, is not an accurate or reliable descriptor of science in our time. Her stance is important because, however unrealistic it may be, it represents a protest against an enslavement of science that ought not to be silenced.

#### BEYOND PURE IDEAS

I am not suggesting that we abandon totally our view of science as a realm of ideas but rather that we give more attention to embodied science as the partner for engagement with religion. Which of these ideas we focus upon makes a difference for the engagement in terms of its substance as well as its goals and its basic problematic. Furthermore, our particular historical moment challenges us to give priority to one of these ideas of science over

the other. Faced with these two ideas of science, we will be pressed to think more deeply about the purposes of the religion-and-science field and the ways we carry out those purposes.

As technoscience becomes more essential for human survival, control of nature and of ourselves becomes more urgent. Our level of control and our stake in that control for our own welfare are the points at which the ambiguity and risk of technoscience are heightened. Success in handling our technoscience will bring us new and better stages of life, whereas failure means perversion, suffering, and even death—and we recognize that there is neither unalloyed success or failure but rather genuinely ambiguous outcomes in which success and failure, improvement of life and degradation, are woven together in the same fabric of outcomes. Hans Jonas tackles this in his *The Imperative of Responsibility: In Search of an Ethics for the Technological Age* (1984). These issues of control, risk, and responsibility are prime candidates to move into the center of reflection for religion-and-science—not only because of the danger of unforeseen consequences but also because technology and the human life it sustains require increasingly high levels of human competence and reliability, and these in turn call for ever higher levels of responsibility.

#### EMBODIED SCIENCE AS ENABLER FOR CHANGING/IMPROVING THE WORLD (SEIW)

Embodied science entails an alternative, perhaps a complementary, description of science in place of science described as impersonal knowledge of an objectlike value-free world. Even though some practitioners may demur, embodied science is undertaken today with the expectation that it will serve our survival by enabling us through its knowledge to change the world and ourselves. More specifically, facing the challenges that threaten our survival, we think of change in terms of *improving* the world so as to make human life better and at the same time serve the sustainability of the natural environment in which we live. For this view, I suggest the term *science-as-enabler-for-changing/improving-the-world*, for which I use the acronym SEIW. It is science perceived in this way, SEIW, that I propose is the primary partner to be engaged in our work in religion-and-science.

Although this understanding of science, as enabler of changing the world, is tied especially to our own historical moment, scientific knowledge has been understood as giving humans power to control the world of nature and themselves at least as far back as Frances Bacon in the sixteenth century (1561–1626), when modern science as we know it was taking shape. Classical thinkers such as Plato and Aristotle may have pursued knowledge as a contemplative exercise, akin to vision, as Edel says; the modern period has connected knowledge of the world, preeminently science, to control of nature and self (Edel [1955] 1995, 262).

Beyond the insight that the idea of SEIW may provide into the nature of science, it opens up profound understanding of human beings and their relation to their world. As with all biological species (and perhaps this also could be said of the elements of the physical world as viewed by physics and chemistry), humans are located *in* a world, not *on* or *alongside* a world. We are implicated, involved—shaped by our world. We are *constituted* by reciprocal flows of matter, energy, and information that continually pass through the permeable membranes of skin and culture that separate us from the world that does so poignantly environ us. Our involvement is structured by both our receptivity to the world and our active efforts to shape that same world, make it friendly to us, establish our control over it, even as it shapes us. Receptivity and world-improving describe the rhythm of our situated life in the world. Industrial or technoscience, technology, and engineering are paradigms of how we relate to the world—that is one reason they are so powerful. Their very existence and their flourishing express something very real and true about the fundamental nature of being human. They make an anthropological statement. We might say that they paint a picture of a world-within-us as surely as they speak of a world-out-there. When we engage the world with a view to improving it, we reveal the kind of creature we are (Hefner 2003).

WHAT KIND OF WORLD DO WE WANT? HOW DO WE WANT  
TO BE IN THE WORLD? THE DIFFERENCE SEIW MAKES FOR  
RELIGION-AND-SCIENCE

Engaging SEIW is an engagement with ourselves and with our basic human nature. We must keep this in mind when we speak of engaging or dialoguing with science. Placing SEIW as the primary partner in the religion-and-science conversation relocates the center of the engagement. The focus shifts from trying to reconcile pure ideas of religion with the pure ideas of science to exploring questions of what kind of world we want and what constitutes improvement for the world and, finally, how we want to fashion our own being-in-the-world as humans. The importance of this shift in focus can hardly be overestimated.

If we accept the problematic that I am suggesting, religion-and-science will take some new directions. It becomes more complex, in that we soon discover that it is impossible to separate the being-of-the-world, which is most often what we think science is about, and our human being-in-the-world. They are two dimensions of the same reality, and in our questioning they turn out to be two sides of the same question. How we view science and how we practice it express strong statements of how we view our relation to the world—as surely as they express our understanding of the world.

The line of thinking I propose points us to five issues, and I conclude my discussion by elaborating each of these briefly.

1. *Centering on what kind of world we want.* This issue should be one of the items, if not the chief one, on the agenda of religion-and-science thinking. The question is not one of what we desire alone but of what we believe is in the best welfare of the world—its people and its constituent ecosystems. As I elaborate below, this desire for the world at its core has to do with possibilities—ours as individuals and as communities as well as the possibilities of the natural world.

All of the disciplines of academia and the human community can be brought to this issue; religion has its own contribution to make. Ethics is a key element, but worldview and spirituality are just as important. The Big questions come to the fore: What is the purpose of our lives in this world? What role do we play? What is the proper niche of the human species in the planetary system? Such questions are not the most popular in academic circles, but they are among the most frequently asked by people around the world. Macro as well as micro issues in nearly every discipline, including that of religion and theology, come into play.

2. *Liberating science.* Ravetz speaks of the emergence of a critical science, which

will develop a new philosophy of science, and a new philosophy of nature and of man's place in it. For this, it can draw on a suppressed tradition within natural science itself, which saw beyond the accumulation of facts, and beyond the domination of nature, to the welfare of humanity living in harmony with itself and its neighbours. Whether such a philosophy could flourish within the context of our industrial civilization, and whether the new science based on such a philosophy could gain influence in time to avert the destruction of civilizations, are unanswerable questions. (Ravetz 1971, 30)

This idealism concerning science is as old as Bacon's "philanthropic science," which held that the true end of knowledge is "for the benefit and use of life; and that [scientists] perfect and govern it in charity" (*The Great Instauration*, cited in Ravetz 1971, 436).

Although these sentiments were written by Ravetz nearly four decades ago and by Bacon almost four hundred years ago, they are as fresh as if uttered today. This critical science that focuses on the benefit and use of life, governed in charity, exists deep within the soul of science itself. We have seen it flower impressively in several fields in the past half century, perhaps most significantly in the area of environmental sciences. Yet Ravetz's concern that it may not grow strong enough to avert our destruction is still a realistic one.

Haraway is very clear about the possibilities for technoscience to emerge from critical examination as an instrument of renewal and a more wholesome human existence. Technoscience is not itself evil; how it is understood and carried out determines whether it works for good or for ill. Technoscience is, in other words, in need of its own liberation.



Is it inappropriate to think that by recentering its focus on science, from the idea of science as the search for the truth of nature in the form of pure ideas to that of SEIW, religion-and-science can be a force for liberating science to rise above its industrialized enslavement to actualize its higher ideals? I propose that religion-and-science should take a chance on this possibility. In the process religions may experience a kind of liberation also.

3. *The changed situation in human action and ethics.* In his aforementioned book *The Imperative of Responsibility*, written in the late 1970s and early 1980s, Jonas opens with a long paragraph dealing with what he calls “the altered nature of human action”:

All previous ethics . . . had these interconnected tacit premises in common: that the human condition, determined by the nature of man and the nature of things, was given once for all; that the human good on that basis was readily determinable; and that the range of human action and therefore responsibility was narrowly circumscribed. It will be the burden of the present argument to show that these premises no longer hold, and to reflect on the meaning of this fact for our moral condition. More specifically, it will be my contention that with certain developments of our powers the *nature of human action* has changed, and since ethics is concerned with action, it should follow that the changed nature of human action calls for a change in ethics as well: this not merely in the sense that new objects of action have added to the case material on which received rules of conduct are to be applied, but in the more radical sense that the qualitatively novel nature of certain of our actions has opened up a whole new dimension of ethical relevance for which there is no precedent in the standards and canons of traditional ethics. (Jonas 1984, 1)

Jonas sees clearly and deeply the fundamental changes in the nature of nature—including human nature—that technology and technoscience are bringing about and rendering commonplace. Advances in nanotechnology and genetic and neuromedicine since the time Jonas wrote these words have only raised his insights to a higher power. Some of these changes are captured in the wide range of meanings that we associate with recent thinking about human enhancement and Transhumanism. They are examples of Jonas’s point: They are not merely “new objects of action.” Rather, they are novel in at least two respects. These actions (1) alter the very nature of the ethical agents who are carrying out the ethical reflection and (2) are so interwoven in an enormous and complex web of interrelationships that their impact is virtually impossible to forecast, raising the bar for our exercise of responsibility for these actions.

Such changes also hold great import for religious belief, practice, and theology. Human action and ethics will be integral to religion-and-science that takes SEIW into account.

4. *Religion is about the world’s possibilities.* If the recentering of religion-and-science that I speak of points science to the repossession of its essential vision, it also can enable religions and religious thinking to focus

on their primary vision. Religion is preeminently concerned with possibility. Speaking within a Christian perspective, our faith and theology are caught up in a gospel that presents a message about God's possibilities for the creation—at its origins in God's work of bringing the creation into existence, ongoingly in the continuing creation that, in classical terms, takes the shape of redemption, sanctification, and discipleship, and in the consummating work of God that is the content of eschatology. In every phase of its existence, as well as its preexistence and postexistence, the creation is understood to be the domain of God's Spirit making possibilities actual. The world is constituted by an ongoing process of transformation.

Possibility is a concept of both alterity and interiority. The possibilities of the world constitute an Other, and as such they move our vision beyond our own satisfactions; our vision must attend carefully to the Other in order to adequately discern its possibilities. To consider our own possibilities brings us face-to-face with the Otherness of our own being. For many religions, possibilities lead us to engage the Otherness that is God. Possibility is also an aspect of our interiority in that it reveals a fundamental dimension of human nature, perhaps the most fundamental: the ability and the near-obsession to imagine that which is not actual—the possible—and working to make it actual. In wrestling with our imagination, we encounter our own interior possibilities.

Theologically speaking, possibility is associated with the Spirit and spirituality. As Mihaly Csikszentmihalyi writes, "Spiritual values, spiritual ideas, symbols, beliefs, and instructions for action . . . point to possibilities to which our biological inheritance is not yet sensitive. The sensate deals with what *is*, the spiritual deals with what *could be*" (1991, 17–18).

Religion—in its thought and its practice—is preoccupied with possibility. This is the basis for ethical reflection and moral practice, as well as for constructing worldviews and for the practices of spirituality. The later decades of the twentieth century saw this preoccupation transform Christian theology as Jürgen Moltmann (1965), Wolfhart Pannenberg (1969), Ted Peters (2000), and many others drove home the message that the creation is constituted by the future that God is bringing into being.

Engaging embodied science as SEIW brings religion into concrete engagement with possibilities. The religious traditions of the world, Christianity in particular, bear witness to our recognition that this engagement with possibility is also an ambiguous one. We are after all creatures of finitude, whatever our amazing scientific and technological capabilities. Our discernment of possibilities is not unclouded. Our attempts to actualize possibility are not without flaws; our judgment is faulty. The results we produce are both successful and tragic. This ambiguous dimension is a constant companion on our journey of possibility bringing ethics into a prominent position and also our wrestling with evil and the tragic.

5. *Recovering myth.* As an essential instrument of survival and changing the world, science leads us into engagement with the deepest realities of human experience that are marked by possibility, ambiguity, and tragedy. We experience science-as-enabler-of-changing/improving-the-world in the practice of medicine, in developing military capability, in manipulation of the natural environment, and in other such basic human activities. This experience ushers us into the realm where we must make decisions that Jonas speaks of, and they are genuinely ambiguous; they interweave benefit and degradation, good and evil, confidence and fear. This is the realm in which we know failure as well as success, in which unintended consequences frequently carry our decisions in directions that we do not foresee and bring their own immense problems. In each of these areas, we come face-to-face with a level of experience with which our traditions of myth, art, and other forms of prescientific wisdom are well acquainted. These older traditions are fully engaged with ambiguity, finitude, and tragedy.

As we live out our twenty-first century lives as those enabled by science and technology to improve the world, we participate in three dimensions of existence in which access to the resources of classic myth is particularly enriching for us. The first is in our existence as creators or co-creators. When we consider improving the world, we know ourselves to be creating what is new and beneficial. There is no excitement that matches that of creating—we sense that we are in tune with whatever is most real when we are bringing the new into existence, and even more when it promises to be beneficial. Jewish tradition holds this to be so important that it understands that the will of the creator God was to make a world that is imperfect so that human creatures can follow the mandate to join in God's creating so as to make the world less imperfect than they found it. Religious traditions associate human creating with the spirit of God's creating. Secular thinking associates it with the spirit of Humanness, with an uppercase *H*.

In the act of birthing the new, the creator comes face-to-face with power. Creating unleashes power, and it is the essence of power to defy attempts to control it. The intersection of power and creation is plumbed in depth in a great deal of our classic myth. Think of the Prometheus myth, the Sorcerer's Apprentice, the Frankenstein story, the tale of the Monkey's Paw, Shakespeare's *Lear*, or, perhaps most profoundly, the Jewish legend of the Golem. These classic sources depict the fundamental human experience of startling creative capabilities that in turn unleash power beyond the creator's expectation and understanding, always with unforeseen results that are often tragic. Norbert Wiener, the brilliant mathematician who was a creator of the field of cybernetics and artificial intelligence, titled a book on these very themes of creativity and power *God & Golem, Inc.* (1966)

Creativity caught up in power embodies ambiguity. The witness of myth that millennia of experience have bequeathed to us brings home the message that good and evil, noble intentions and ignoble consequences, knowledge

and ignorance, control and helplessness are the stuff of human experience as we carry out our basic nature as improvers of the world. In classic myth and legend, instrumentality of creative power varies: broom, buckets, and water; a monkey's paw; politics, as in Shakespeare's characters; the ability to create life, whether human life or the life of the golem. For Wiener it was cybernetics, the computer, and artificial intelligence—an early vision of our lives empowered by embodied technoscience.

At this level of experience, we discover that we are contemporaries with the myths of ancient Mesopotamia, Greece, and the ancient scriptures of the world's religions. We take our place in the long history of the human story. We are the sorcerer's apprentice, just as we are Prometheus and Frankenstein, and in the moment, we know the force and wisdom of the pre-scientific struggle that myth represents, even as we recognize the irrelevance of any literal conflict between myth and scientific fact. Rather than a competition between the premodern and the scientific images of self-conceiving, we come to know an experiential symbiosis in our struggle to negotiate the demands of being human in our own time. We come to know what Paul Ricoeur was referring to when he spoke of retrieving the power of myth in the journey from our childhood naiveté to a critical and reflective second naiveté. Here we have an item for the agenda of religion-and-science: constructive work toward fashioning a symbiosis of modern science and premodern myth—in the service of our understanding who we are in the cosmos that science has opened up for us.

Embodiment permeates our endeavor from first to last. The practices and theories of science and religion are embodied in a world, just as our reflecting on science and religion is our way of working out our own embodiment in the world.

#### NOTE

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