

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"

THE HEFNERIAN LEGACY: RETHINKING THE "NATURE" OF NATURALISM

by James W. Haag

Abstract. Philip Hefner calls for religion-and-science to shift attention from pure ideas to embodied ideas. He urges scholars to get back to the Baconian idea that science is intended to enhance life; in Hefner's wording, we must give attention to "science-as-enabler-for-changing/improving-the-world." I believe that this is the realm of overlap between all academic disciplines—what I call the *pragmatic overlap*. To make his argument Hefner mentions two forms of "conventional wisdom" that need to be rethought. First, he is worried that a "pressure toward naturalism" prevents certain words (such as *teleological* and *transcendence*) from having instructive meaning. Second, with this move toward naturalism Hefner believes we dismiss as archaic all valuable implications of traditional religious myths and symbols. He rightly highlights these exceedingly significant concerns. However, narrowing our focus to the implications of naturalism alone misses the root crisis. That crisis can be articulated as: "*conventional wisdom*" regarding nature is too unsophisticated to account for the phenomenon it depicts, and furthermore, this understanding of nature controls the methodological, metaphysical, and practical versions of naturalism acquiring societal acceptance. Accordingly, an alternative vision of nature is needed to transform our current "conventional wisdom" such that Hefner's worries are addressed.

Keywords: Terrence Deacon; emergence; Philip Hefner; morality; naturalism; nature

James W. Haag is Senior Lecturer of Philosophy at Suffolk University in Boston. His address is 400 Marlborough St. #2, Boston, MA 02115; e-mail jameshaag@hotmail.com.

[*Zygon*, vol. 45, no. 1 (March 2010)]

© 2010 by the Joint Publication Board of *Zygon*. ISSN 0591-2385

www.zygonjournal.org

One of the more forward ways of interpreting Philip Hefner's erudite achievements is as such: Intellectual progress is most likely to succeed when the discussants relinquish their agendas and find a middle ground. As Hefner is noted for saying, we want to get at things as they really are. I believe this challenge is the motivating drive for both scientists and theologians, even if each gravitates toward different kinds of explanations. Accomplishing this task will require worldview flexibility and humility.

Hefner calls for us to focus our discussions on issues that are "in touch with the urgencies of the actual lives we lead" (2010, 254). His method calls for religion-and-science to shift attention from pure ideas to embodied ideas (embodied science, in particular). He advocates avoiding forced matches between science and religion simply because we believe they ought to work. Seeking one-to-one correspondence is nearsighted in its ignorance of the obvious incompatibilities that must be taken seriously. All too often, as he notes, this is the atmosphere of conflict analogies as evidenced in the evolution/creation controversies. Instead, scholars need to get back to the Baconian idea that science is intended to enhance life. In Hefner's wording, we must give attention to "science-as-enabler-for-changing/improving-the-world" (p. 256). I believe that this is the realm of overlap between all academic disciplines—what I call the *pragmatic overlap*. This is not to say that Hefner disavows something like "pure ideas" in either science or religion (though it would be interesting to hear what he believes these might entail); rather, it is an effort to improve tangible results by recognizing our lives as being-in/of-the-world.

To make his argument Hefner mentions two forms of conventional wisdom that need to be rethought. First, he worries that a "pressure toward naturalism" prevents certain words (such as *teleological* and *transcendence*) from having instructive meaning. Second, with this move toward naturalism, he believes we dismiss as archaic all valuable implications of the traditional religious myths and symbols. He rightly highlights these exceedingly significant concerns. However, narrowing our focus to the implications of naturalism alone, I believe, misses the root crisis: "*conventional wisdom*" regarding nature is too unsophisticated to account for the phenomenon it depicts, and, furthermore, this understanding of nature controls the methodological, metaphysical, and practical versions of naturalism acquiring societal acceptance. Accordingly, an alternative vision of nature is needed to transform our current conventional wisdom such that Hefner's worries are addressed. In this article I point to emergence as that alternative.

UNDERSTANDING NATURE

I contend that a pressure toward naturalism is not the issue; instead, it is the *type* of naturalism toward which we are currently being pushed. Naturalism is an abstract term that has been understood in various ways. Unfortunately, for many, naturalism has become synonymous with eliminative

reductionism. This undoubtedly is what Hefner means by our conventional wisdom regarding its current use. Since the rise of modern science in the seventeenth century, thinkers have collapsed all notions of cause into efficient causation—the collisionlike interactions of basic particles. Aristotle’s effort to deal with causation in a fourfold schema was met with contempt because of its apparent reliance on nonphysical causes. As science tightened its grip as the most superior of all knowledge systems, reductionistic perspectives pushed alternative conceptions of causation to the margins.

This process of breaking things down and analyzing the ever smaller parts unquestionably has provided information about our cosmos once thought impossible to know. However, there have been other philosophical consequences, especially in metaphysics and ontology. More precisely, it is not naturalism *per se* but rather the ubiquitous eliminative vision of nature informing this approach that is problematic. The result of this eliminativism in the history of science and philosophy is that nature becomes something “out there,” “that which is studied.” Images of rocks, trees, rivers, and “wild” animals dominate our psyches supporting the type of conventional wisdom that motivates Hefner to critique the notion of pure ideas. This version of naturalism has resulted in our free will being an illusion (Wegner 2002), our gods being delusions (Dawkins 2006), and our morals originating in a universal mental faculty (Hauser 2006).

However, it is one thing to say that all phenomena pertinent to human becoming can be (theoretically) *explained* via naturalistic causes and something else to say that these same phenomena are *explained away*. We need not be eliminative naturalists.¹ Efforts to reshape our understandings of nature are becoming more and more prevalent (Soper 1995; Haraway 1990; Crosby 2002). In the religion-and-science discussion, Hefner’s has been a voice central to this task. Consider his poignant statement “We are not so much moving through or over nature, as we are natural creatures who represent a discrete station on nature’s way” (Hefner 1993, 55–56). Within this alternative notion of nature, human becoming is not against, outside of, or indifferent to the processes of the world. Instead, human life itself is consistent with, internal to, and concerned with the dynamics of the cosmos. We do not occupy a passive location where things just happen to us; instead, existence is an intricate interplay that fully embeds human beings in the here and now. This view pulls our attention away from the general to the particular, away from the beyond to the within.²

This alternative pressure toward naturalism is about adopting the method that is most likely to account for what philosopher Owen Flanagan calls “the really hard problem”—the dynamic processes that result in a move from matter to meaning. This profound interdependence between matter and meaning is a connection I see as self-evident, even necessary. We should therefore be compelled to situate all knowledge as an interaction with *this*

world, at the same time acknowledging the vast complexities this world entails. To reiterate, naturalism need not be reductive in an eliminative sense. Hefner's resistance to naturalism is valid if we accept that the conventional wisdom on this topic is eliminatively reductionistic. However, as I have argued, another version of naturalism should be embraced, one rooted in a nuanced consideration of nature. We must not throw out the naturalistic baby with the eliminativistic bathwater.

If this new naturalism is going to thrive, we must avoid exchanging a flawed scientific outlook on conventional wisdom for a religious one. Religion is not immune to skewed notions of nature, either. The vitriolic language of scholars such as Richard Dawkins and Sam Harris is surely rooted in a concern for what they might term the conventional wisdom that supernatural (inflationistic) explanations are unavoidable. The power of Hefner's proposal is that it avoids any uncritical acceptance of the "pure ideas" of science *or* religion as the magic bullets of our clarifying efforts. Straightforwardly, there is no pure nature. By avoiding exceedingly myopic views of science and religion we can locate a place for genuine convergence where the task is constructive. At this intersection, science and religion (and other disciplines) are part of a knowledge-constructing process that engages the subtlety of important questions.

There certainly is reason to be skeptical; the history of philosophy is littered with claims to accomplish this very task. However, I assert that there is a considerable divergence with this approach. The appearance of mind, symbolic abilities, language, and ethics in the cosmos can literally be said to have emerged. It is not a stretch to think that something like emergence explanations are the only possibility for careful accounts of these phenomena. That is, the intuitions we have about what may be termed mysterious causal processes point toward the type of explanation that emergence provides. Forced positions that attempt to reduce meaning to matter or somehow separate them have failed on many fronts—in part, as I have argued, because of our misunderstandings of nature. Admittedly, emergence theory is currently more about posing questions than supplying answers, but asking the right questions and identifying where we have gone astray is crucial if a type of Hefnerian "improvement" is to be accomplished.

DYNAMICS OF EMERGENCE

My argument thus far has been that a naturalistic worldview should be not feared but embraced. Obviously, this weighs heavily on there being a type of scientific explanatory system that can justify such a move.

Like the beginning of the twentieth century, the twenty-first century is seeing a rise in proposals about and interest in emergence. As Hefner contends elsewhere, this reinvigorated focus on emergence is drawing considerable attention from a variety of thinkers because it is embedded in a

common experience we all share. From the origins of life to conscious experiences there appears to be a common logic inherent to each. Unfortunately, like their historical counterparts, contemporary versions are primarily descriptive, typified by claims for nonreducibility, novel causal properties, and denial of the causal closure principle. Generally, such definitions appeal to a part/whole distinction, in which properties of the whole system appear in some way unprecedented and discontinuous from properties of the components. The ambiguities of this approach have led to a rather promiscuous use of emergence terminology.

As an alternative, I am persuaded by the dynamics of emergence approach developed by Terrence Deacon, several prominent themes of which I highlight here.³ When we look at instants of emergence in the world, we are disinclined to think of them as the result of mere chance. That is, complicated things give the impression that they arise teleologically. However, the second law of thermodynamics—the increase in entropy—tells us that without perturbation disarray tends to happen, and complicated phenomena are not the norm.

By moving from a descriptive theory of emergence to an explanatory one, Deacon's task is to explain with no gaps, no handwaving, and no space holders the full emergent dynamical process by which mattering (virtue, love, representation, information, and so forth) arose from matter (physics and chemistry). Emergence becomes the term used to depict a specific class of transitions between dynamical levels. In a complex three-level system of dynamics regimes are defined with respect to the global attractor geometries of their state spaces and their dependencies on one another. These are thermodynamics (as currently understood in close-to-equilibrium conditions), morphodynamics (roughly including far-from-equilibrium thermodynamics and consequent self-organizing processes), and teleodynamics (roughly including end-directed dynamics such as found in living systems capable of evolution and mental processes). The transitions from thermodynamics to morphodynamics to teleodynamics are here defined as emergent transitions and can be shown to have a characteristic form that in each case inverts the traditionally invoked holistic aphorism such that “the whole is less than the sum of its parts (and their relationships)” because each transition is characterized by the influence of a previously absent level of intrinsic global constraints.

THE PRAGMATIC OVERLAP

This seems relevant to Hefner's task because the pragmatic overlap of “embodied ideas” is epitomized in what we express as ethical experience and moral cognition—quite literally described as emergent forms of consciousness. That is, paying attention to the “urgencies of the actual lives we lead” pushes us into the realm of moral questions and issues. Hefner's plea to

liberate us from the “objectlike and value-free” world is itself a way of paying attention to the emergent feature of embodied ideas. We might say that morality is the necessary convergent result of intersubjectivity. It did not appear because it evolved via genetic or cultural evolution—once a threshold of complexity was crossed, new constraints automatically appeared. Our moral principles are not somehow “out there” waiting to be discovered. That larger disposition that I am calling intersubjectivity allows for their emergence. There is not some structure in the brain that inevitably leads to morals; we are not physically designed in some special way. Rather, morality arises out of the interactions of social individuals where complexity explodes with the appearance of symbolic communication. We literally can entangle our experiences with the experiences of others.

With the theme of intersubjectivity, theologians and religious scholars might consider this the expansion of consciousness into the world. The increase of interconnections, synergies, and intercoherence are the hallmarks of a type of naturalistic transcendence. There is no a priori necessity that a spiritual life be dependent on any type of dualistic separation. A naturalistic pursuit, as I have articulated here, embraces Hefner’s notion of embodied science specifically in its method of questioning the vast intricacies and mysteries of *this* world—using not an eliminative mechanistic approach but one that takes seriously the whole spectrum of emergence from matter to meaning.

Of acute significance here is an assessment of how value emerges in the world. This generation and future generations doubtless will face decisions that are not only more challenging but also more crucial than those of past generations. Part of the challenge involves avoiding absolutist claims made by both scientists and religious scholars. Facing these daunting moral challenges, many will find authoritarian or fundamentalistic perspectives attractive and turn to them. Moving to embodied ideas allows us to deal with the practicality of these issues instead of their ephemeral truth. Here is where I see Hefner’s notion of ambiguity as such a powerful tool for the religion-and-science community. The power of embodied science, as supported by government and market economics, cannot be ignored or rejected in the process of evaluating value. The position we will find ourselves in will be one of intense intersubjectivity resulting in both positive and negative consequences. Embracing this challenge means learning to accept the reality of ambiguous information. On this, I believe Hefner’s is a prophetic voice.

This speaks directly to Hefner’s concern over the “conventional wisdom” that religious myth is obsolete. There is no reason to assume that a shift to emergence necessitates a denial of the power of myth. In fact, the very notion of myth is wholly entangled in intersubjectivity, so the rejection of our historical narratives is, as Hefner notes, not only irresponsible but, from an evolutionary perspective, also inappropriate. The emergentist

risks peril by denying the novel causal contributions of every human being in cosmic history. Said differently, the ability each of us has to causally influence the minds of countless others is not hindered by time and space. Notice the causal power of past minds on our own: Aristotle, our parents, the authors of religions' ancient scriptures—the intense intersubjectivity is nearly infinite. The retrieval of myth in Hefner's tactic allows us to confidently affirm that the causal locus we call a human mind is vastly larger than the signal processing occurring within a brain, because human intentionality is as radically interintentional as it is intersubjective.

Although not incompatible with the search for ultimate meaning, sacredness, or value, this shift to emergence will likely conflict with certain religious positions. However, I believe that such conflict will result more from an encounter with the "pure ideas" of religion than from something we might term embodied religion. Admittedly, nothing about this approach exempts it from the ambiguity that Hefner articulates; there is nothing in emergence theory that guards against potential errors of judgment and action. However, a dynamics of emergence approach is likely to be most advantageous in religion-and-science's efforts to be world- and self-valuing.

CONCLUSION

In Hefner's impressive career he has attempted and achieved the status of relevancy. In a vast sea of extraneous intellectual ideas and concepts, Hefner's has continually been a voice pointing us toward the "urgencies of the actual lives we lead." He certainly is well versed in the convoluted ontological and epistemological arguments scientists and theologians have engaged in, but his efforts have always been to move us forward. As has been noted by many scholars, for example, Hefner's notion of the created co-creator is the most versatile and accurate depiction of the human being's situation. We are not responsible for our own existence; we are not independent of the environment and world in which we find ourselves. Any dualities that force separation—mind/body, nature/culture, science/religion—are unacceptable. I close with a quote from Hefner that I believe states our situation poignantly: "The human person has emerged within the process of physical and biological evolution as a set of dynamics, enabled finally by the emergence of the human brain, in interaction with its world, including the culture of that world" (Hefner 2000, 73). I propose that an emergent dynamics worldview and a new vision of nature offers the very connectedness with pragmatic issues that Hefner implores us to notice.

NOTES

A version of this essay was delivered at the annual meeting of the American Academy of Religion, Chicago, Illinois, 2 November 2008.

1. The readers of *Zygon* are familiar with those (religious) naturalists of a noneliminative stripe: Karl Peters, Ursula Goodenough, Jerome Stone, and others. Hefner, no doubt, is not avoiding these scholars in his assessment of the “conventional wisdom.” Rather, I believe, he’s merely noting that these scholars are not easily described as conventional. We are not at a loss for progressive and promising proposals regarding noneliminative versions of naturalism; we are simply struggling to make these a part of the conventional wisdom of our ethos.

2. In line with this view, consider Michael Kalton’s description of transcendence:

[Horizontal transcendence] finds its anchor in life rather than mind, thus displacing human consciousness from its privileged place. The movement from earth to cosmos, from biosystem to life, is a form of transcendence that is characteristic of degrees of abstraction rather than a movement towards some kind of Absolute metaphysical dimension. There is no cosmos posited apart from the historically ongoing one within which we find ourselves, nor is there life apart from ongoing living, at whatever level it is considered. Instead of the typical vertical transcendence of the Greek inspired tradition, the movement of this kind of spiritual cultivation is horizontal, perfecting our relationship with the world of life about us. (Kalton 2000, 195)

3. For more on Deacon’s approach, see Haag 2008, 45–82; Deacon 2003; 2006.

REFERENCES

- Crosby, Donald. 2002. *A Religion of Nature*. Albany: State Univ. of New York Press.
- Dawkins, Richard. 2006. *The God Delusion*. London: Bantam.
- Deacon, Terrence. 2003. “The Hierarchic Logic of Emergence: Untangling the Interdependence of Evolution and Self-Organization.” In *Evolution and Learning: The Baldwin Effect Reconsidered*, ed. Bruce Weber and David Depew, 273–308. Cambridge: MIT Press.
- . 2006. “Emergence: The Hole at the Wheel’s Hub.” In *The Re-emergence of Emergence: The Emergentist Hypothesis from Science to Religion*, ed. Philip Clayton and Paul Davies, 111–50. New York: Oxford Univ. Press.
- Haag, James W. 2008. *Emergent Freedom: Naturalizing Free Will*. Göttingen: Vandenhoeck & Ruprecht.
- Haraway, Donna J. 1990. *Simians, Cyborgs, and Women: The Reinvention of Nature*. London: Routledge.
- Hauser, Marc D. 2006. *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong*. New York: HarperCollins.
- Hefner, Philip. 1993. *The Human Factor: Evolution, Culture, and Religion*. Minneapolis: Fortress.
- . 2000. “Imago Dei: The Possibility and Necessity of the Human Person.” In *The Human Person in Science and Technology*, ed. Niels Henrik Gregersen, Willem B. Drees, and Ulf Görman, 73–94. Grand Rapids, Mich.: Eerdmans.
- . 2010. “Embodied Science: Recentering Religion-and-Science.” *Zygon: Journal of Religion and Science* 45:251–63.
- Kalton, Michael. 2000. “Green Spirituality: Horizontal Transcendence.” In *The Psychology of Mature Spirituality: Integrity, Wisdom, Transcendence*, ed. M. E. Miller and P. Young-Eisendrath, 187–200. London and Philadelphia: Routledge.
- Soper, Kate. 1995. *What Is Nature: Culture, Politics and the Non-Human*. London: Wiley-Blackwell.
- Wegner, Daniel. 2002. *The Illusion of Conscious Will*. Cambridge: MIT Press.