

## Reviews

*The Essence of Phenomenology and Its Meaning for the Scientific Study of Religion.* By THOMAS RYBA. Toronto Studies in Religion, Vol. 7. New York: Peter Lang, 1991. 268 pages. \$47.59.

Phenomenology as a philosophical theory and practice of description is widely referred to and used in many disciplines in the humanities and social sciences, but there is considerable disagreement as to its precise meaning and method. Most readers will associate philosophical phenomenology with Husserl's monumental work and its wide-ranging influence on subsequent philosophers, whereas scholars in religion will think of the phenomenological stances of Van der Leeuw, Bleeker, and Smart, to name just a few of the well-known proponents of the phenomenology of religion. But as Ryba makes clear, there reigns a great conceptual confusion, if not to say "methodological obscurantism" (p. 239), as to the precise meaning of phenomenology in the modern study of religion. In spite of numerous definitional debates and attempts at greater clarification, the prevalent attitude among religion scholars still seems to be that "phenomenology, as a method, is anything one wishes it to be" (p. 208, n. 103). Yet there exists a wide interest in the phenomenological method as a technique for presuppositionless description linked to the dynamics of consciousness, the conceptualization of objects and ideas, and the construction of valid knowledge considered foundational to the whole scientific enterprise.

The author has set himself a very challenging, critical task by investigating the rich diverse meanings of phenomenology with the aim of constructing, on the basis of detailed historical analyses, a unifying synthesis for the present revitalization of the use of phenomenology in both philosophy and the scientific study of religion. This is a philosophically demanding work of the highest order that takes any unsuspecting reader out of his or her conceptual slumber by carefully excavating the historical archaeology of phenomenology as an idea, a widely ramified semantic field, and a sophisticated philosophical and scientific method with a history that antedates both Husserl and Hegel. Ryba argues convincingly that the original matrix of phenomenology was philosophy, and that one cannot recognize the claim of the phenomenology of religion to methodological and theoretical autonomy as completely legitimate. On the contrary, he thinks that a return to the original philosophical meanings of phenomenology can help to crystallize its definition and unify its methodological diversity, and that such constructive work of developing a clarifying synthesis might inject a new vitality into the phenomenology of religion.

This aim is pursued through ten tightly argued chapters concerned with the diversity of historical meanings of phenomenology. Ryba begins with an

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examination of the semantic potential of *phainomenon* and *logos* among the ancient Greeks, linking both discussions of the meaning of knowledge and science. Ryba is the first to show that six different philosophical notions of phenomenology were developed by philosophers and scientists *prior* to Husserl, and he devotes a chapter to each of them. I know of no other study that elucidates so brilliantly the complex history of phenomenology as a long-established idea and method. But, unfortunately, this important work of historical recovery has not yet found the acknowledgment it deserves, and the publication of this research in a relatively little known scholarly series does not help the diffusion of its findings. It is interesting to see that the new *Oxford Companion to Philosophy* (ed. Ted Honderich [Oxford: Oxford Univ. Press, 1995]), can still simply describe phenomenology as “one of the most important philosophical movements of the twentieth century . . . founded by Edmund Husserl,” which “is often viewed not as a new philosophical view about old epistemological problems, but as a new method of doing philosophy, and one speaks then of the phenomenological method. Sometimes, one even talks of the science of phenomenology, which is claimed to have its own method and subject-matter” (Honderich 658–59).

Anybody who cares to read Ryba’s carefully crafted historical study can no longer take such an assertion at its face value. Ryba shows that the German philosopher Johann Heinrich Lambert, in his work *Neues Organon* of 1764, was the first to construct a phenomenological theory of knowledge presented as a “transcendental optics,” a complex process of conceptualization that clearly anticipates Husserl’s “perspectival variation,” his “most important technique for bringing essences to intuition” (p. 33). Ryba, therefore, sees Lambert as a true precursor of Husserl’s work of one hundred fifty years later.

The first English use of the noun *phenomenology* is found in John Robison’s article “Philosophy” in the 1798 edition of the *Encyclopedia Britannica*, but it is charged with a meaning different from that found in Lambert. A brief chapter is devoted to the significance and differences of Robisonian phenomenology before Ryba analyzes in great detail the phenomenology and dialectic of spirit so central to Hegel’s philosophical project. Here, as elsewhere in the book, it is helpful to consult the perceptive charts accompanying the text where Ryba suggests a more dynamic schematization of the Hegelian dialectic, in contrast to its conventional understanding, by taking into account Hegel’s phenomenological perspective.

Considerable details on the different approaches to phenomenology are provided in the chapters on William Hamilton’s work on the role of phenomenology in philosophical psychology dating from the 1850s, the philosopher and scientist William Whewell’s understanding of phenomenology in his philosophy and taxonomies of the inductive sciences (1837), and the American philosopher Charles Sanders Peirce’s approach to phenomenology as semiotics. Following the critical analyses of their ideas, Ryba then examines the eidetic method and central features of Husserl’s own phenomenology. The objects, ends, and techniques of Husserl’s phenomenology are discussed without exhausting all the themes and influences pertaining to Husserlian phenomenology.

In the last two chapters, the author presents a synthesis of his findings. He compares and contrasts the different definitions of phenomenology given by the seven philosophers and then attempts to overcome their equivocality by

developing unified phenomenological procedures with their different constituent steps, which progress from pure observation and description to dialectical deconstruction of ideational appearances over phenomenological reduction, essential observation, and description to the development of taxonomies. To give these procedures greater transparency, it would have been helpful to apply them to some specific examples rather than leave their discussion at the abstract level of general definitions. The last chapter presents in the briefest possible way the philosophical meaning of phenomenology for the scientific study of religion. It lists various definitions of phenomenology used by scholars of religion without analyzing them any further and simply suggests adopting the general, unified meaning of phenomenology, which transcends the various individual phenomenologies, following the procedures developed in the previous chapter.

I sympathize with the author's wish to clear up the ambiguity surrounding the "phenomenology of religion" and to call upon scholars of religion to reflect more critically and philosophically on their task. But he himself does not take up this important challenge, so that scholars of religion will find the sparsity of remarks in his concluding chapter a considerable disappointment, especially when he finishes with a quotation from the Dutch scholar C. J. Bleeker, known more for the confusion rather than clarity of his writing on the phenomenology of religion. There is no engagement here with lively contemporary discussions in the phenomenology of religion, no examination of the suggestion of a "new-style phenomenology" made by Jacques Waardenburg (*Reflections on the Study of Religion* [The Hague: Mouton, 1978]), and no examination of the description of the phenomenological task that forms part of the integral approach of Georg Schmid (*Principles of Integral Science of Religion* [The Hague: Mouton, 1979]). Following the tasks of uncovering the diverse historical meanings of phenomenology and providing a unifying synthesis, it now still remains to apply these achievements in much greater detail to the study of religion. But that would really require another book.

Comparative epistemological reflections could also lead to fruitful further lines of inquiry. When Hegel is quoted as describing appearance as "the process of arising into being and passing away, a process that does not itself arise and pass away, but is *per se* and constitutes reality and the life-movement of truth" (p. 61), one is reminded of the Buddhist theory of causation, just as Lambert's and Husserl's perspectivalism of perception may be compared with the Jaina theory of *anekantavada*, or the many-faceted aspects of reality in their indefiniteness of being. But such comparisons would go far beyond the aims so clearly set out at the beginning of this work.

Ryba's quality and precision of thought represent a definite advance in our understanding of phenomenology; they also provide an excellent foundation for further phenomenological thinking and creative developments. The book includes a wide-ranging bibliography and meticulous notes but is marred by certain misprints and the occasional use of exclusive language where "man" alone still remains the only subject of philosophy. A further critical wedge, far transcending the limits of a review, could be driven into the whole phenomenological enterprise by raising postmodern doubts about the very validity of the universalizing claims regarding the various objects, ends, and methods of

phenomenology itself, but that would again require another study. In spite of its limitations, the present work greatly extends our knowledge in studying the phenomena of philosophy and religion. It can be highly recommended to anyone concerned with these fundamental matters who also remains passionately convinced of the need for clarity of thought and the power of conceptual analysis and synthesis in the construction of all human knowledge, whether philosophical or religious.

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*Darwin's Dangerous Idea: Evolution and the Meanings of Life.* By DANIEL C. DENNETT. New York: Touchstone, 1995. 586 pages. \$16.00 (paper).

Daniel Dennett, one of the foremost and controversial scholars in the philosophy of mind, opens this major work with a cherished song from his childhood. The song, entitled "Tell Me Why," explains the beauty of the natural world in terms of God's creative acts. Why do the stars shine? Because God made them. Why is the sky blue? Because God made it, too.

After telling us that this song still brings a lump to his throat, Dennett states, "And then along comes Darwin and spoils the picnic. Or does he? That is the topic of this book" (p. 17). The central theme of this book could hardly be summarized any better. Throughout, Dennett is concerned with the question of intelligent design. Surprisingly, he concedes William Paley's point at the outset: the designed character of the universe is indicative of intelligent artifice. But, Dennett's strategy is quite the opposite of Paley's. Design is to be explained not in terms of an Intelligent Artificer but of intelligent artificers. These artificers are the algorithms that make up Darwin's dangerous idea: evolution by natural selection. In a significant sense, Dennett's work is an exercise in natural atheology, an attempt to disprove the existence of God (and other skyhooks) by an appeal to the natural world through the lens of a Darwinian philosophy.

*Darwin's Dangerous Idea* is divided into three major sections. Roughly speaking, section 1 is given over to theoretical considerations, section 2 gives a naturalistic and Darwinian account of the evolution of the universe and the emergence of life, while section 3 is devoted to the emergence of mind, meaning, and ethics.

The themes and arguments developed in section 1 are tremendously important for the construction of the worldview that Dennett enunciates in the latter two sections. The reader, initially primed with an account of the major elements of the modern synthesis, is then plunged into a series of intriguing and controversial claims about the nature of Darwinian theory.

As already indicated, Dennett acknowledges that design requires intelligence. He states:

So Paley was right in saying not just that Design was a wonderful thing to explain, but also that Design took Intelligence. All he missed—and Darwin provided—was the idea that this Intelligence could be broken into bits so tiny and stupid that they didn't count as intelligence at all, and then distributed through space and time in a gigantic, connected network of algorithmic process. (p. 133)

Equally important, however, is Dennett's utilization of the concept of design space to explain the roles of chance and necessity. Borrowing from the work of Jorge Luis Borges, Dennett envisions a library of Mendel, housing all the possible genomes that can be read in the course of evolutionary life. Each book represents a genotype, and Earth's evolutionary history is simply one of the uncountably many possible walks through this library of Mendel. What determines this walk? What makes the possible actual? Natural selection and only natural selection.

Dennett warmly embraces the Panglossian paradigm of hyperadaptationism: for every adaptation there is a reason, and every physical trait is the result of adaptation. To buttress the adaptationist program, Dennett borrows two concepts. The first, from game theory (and more specifically from chess), is that of the forced move. The second, from engineering and architecture, is that of reverse engineering. Dennett's discussions here are among the best in the book, and the insights he draws from these fields are a real contribution to discussions on natural selection.

Dennett admits, as Stephen J. Gould has charged, that sometimes adaptationist thinking can get out of hand. But, he asserts, this is not because adaptationist thinking is flawed but only because it has been misused. Given Dennett's strongly adaptationist viewpoint, it is only natural that Gould ends up being a target for Dennett, and indeed, Dennett spends much of chapter 9 sparring with Gould and all of chapter 10 attacking Gould directly. It becomes very clear that Dennett has read Gould quite closely but with a jaundiced eye. Much of this discussion is stimulating, and many of Dennett's criticisms deserve a thoughtful reply. But is also the case that Dennett's reading is strongly unsympathetic, citing the most contradictory of Gould's statements (not hard given his enormous output) and then interpreting them in the most unfavorable light.

Whereas the first section is largely devoted to theoretical concerns (the possible), the second section is primarily concerned with explaining what has, in fact, happened (the actual). Dennett frequently refers to Darwin's theory of natural selection as a universal acid, for what natural selection does is explain design not from above (with mythical skyhooks) but from below (with cranes). Darwin's dangerous idea, then, is not simply an explanation of the history of biological life but a means of explaining, well, everything.

With this universal acid at hand, one can even explain the origin of the universe and its evolution from the Big Bang to the formation of matter, stars, planets, and the conditions for the emergence of life. The proper mode of explanation is, as always, in terms of cranes, not skyhooks. God, being the latter, is ruled out, and the anthropic principle, whether weak or strong, is fairly summarily written off. In Dennett's mind, anything is better than a skyhook, even an infinite chain of big bangs and big crunches. It is here as well as at several

other points that one can perceive some of the circularity in Dennett's reasoning. Dennett is nearly compelled to endorse an infinite series of big bangs and big crunches because of his prior commitment to the type of reductionist explanation that Darwinism supposedly entails, but he doesn't seem to see that if one does not hold this prior commitment to reductionism, then the alleged superiority of the infinite series is less than compelling and, as has been frequently charged, multiplies entities beyond necessity.

Dennett's self-assurance, however, carries him beyond any and all philosophical difficulties and propels him into the third section of the book, which deals with the emergence of mind, meaning, and morality. Those who are familiar with Dennett's previous books and essays in the philosophy of mind will find much of the territory to be familiar here. Mind is the result of a long evolutionary process, formed by the parallel operations of the brain, a "Swiss army knife" of disparate cognitive functionalities that together produce the multiple drafts of the ongoing self-narrative that makes up you and me. Meaning is determined not by intrinsic intentionality but by context and relation. That's all.

More interesting is Dennett's account of ethics, which also takes on evolutionary spin. Dennett, however, does not side with the sociobiologists and endorses instead (borrowing from Dawkins again) a science of memetics, based on the cultural evolution of memes, or culturally transmitted ideas. Culture introduces a new phase of evolution, and the rules have changed. In the course of cultural evolution, good ideas and bad ideas appear. Some of these ideas, culled over millennia from religious and philosophical thought, are ethical ideas, and some of these ideas turn out to be "good tricks." Enough of these good tricks make up a given culture's "moral first-aid manual." There is nothing absolute about this manual, because the variety of possible cultures in design space is near infinite, and many of these cultural arrangements, while disparate, may be equally good. What counts as good Dennett never directly addresses, which leaves the account problematic. One can only assume that this is something that is simply decided upon by a sort of Rawlsian social contract. Ethics, like all other things, is constructed by cranes.

While an antireligious and, particularly, antitheist diatribe runs throughout the book, this becomes particularly egregious (and indeed painful) in the final chapters. Throughout, Dennett needles, rebukes, or makes fun of theistic explanations and religious beliefs to such an extent that he comes to appear far more intolerant than those whom he perceives as the epitome of intolerance. Dennett endorses the view that philosophical theology is playing tennis without a net (p. 153), asserts that the cardinals of the Roman Catholic church are as antiquated as the Beefeaters who guard the Tower of London, and argues that "safety demands that religions be put in cages too—when absolutely necessary" (p. 515). After all this, Dennett surprisingly returns to the song of his childhood and speculates that if we endorse a version of Spinoza's pantheism, then maybe the song is true after all, and the world is sacred. One might be willing to take this position a little more seriously if Dennett had actually engaged intelligently in the debate, but in a text of this length that indexes fifty-eight references to God and none to a major theological thinker or philosopher of religion (with the exceptions of the references to Paley and a polemic against directed-evolution

theories, including those of Pierre Tielhard de Chardin), it is clear that a balanced discussion is not what Dennett is after.

The reader who is familiar with the work of Richard Dawkins will find here many of the same or similar motifs, arguably vulnerable to many of the same criticisms. In defending the hyperadaptationist program that explains every course in evolution, Dennett runs the perennial risk of turning the phrase "survival of the fittest" into a trivial and uninformative tautology, where it is the fit who, by definition, survive. Dennett's reductionism is not always as obvious as Dawkins's but is nearly as thorough and with the same deficiencies. Throughout, Dennett also appears to embrace a naively realist understanding of the sciences. The sciences tell us the truth about the world, are linearly progressive, and are bound, in time, to explain everything in a fashion fairly in accord with our current understanding. Arguably it is the author's mathematical and computational Platonism that buttresses these viewpoints. Dennett breezily takes for granted that all of nature is mathematically explicable and that our world is, indeed, only one of many possible trajectories through design space. But, one wonders, isn't Platonism the ultimate skyhook? For why should the universe be mathematically explicable at all?

Unless strongly sympathetic to Dennett's program at the outset, most readers will find this work by turns stimulating, infuriating, provocative, and insightful. Despite serious flaws in Dennett's central position and treatment of religious viewpoints, this work is so bristling with ideas that it is worth the effort of a close reading. Even if one disagrees with Dennett—and there is plenty to disagree with here—*Darwin's Dangerous Idea* provides enough original material on philosophical interpretations of natural selection that it will be difficult to ignore.

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*Cosmic Beginnings and Human Ends: Where Science and Religion Meet.* Edited by CLIFFORD N. MATTHEWS and ROY A. VARGHESE. La Salle, Ill.: Open Court, 1995. 433 pages. \$41.95; \$21.95 (paper).

This collection of articles is the published version of a symposium by the same title at the Parliament of the World's Religions, Chicago, 1993. The twenty-four contributors represent a cross-section of the world's religions and of various disciplines in natural science, philosophy and theology.

The organizers of the symposium asked a number of noted natural scientists, as well as other, humanistic scholars who are interested in religion and science, the same three questions:

1. What are your views on cosmic beginnings (including life and humanity)?
2. What are your views on human ends, especially as this relates to the framework of cosmic beginnings?
3. What do you think should be the relationship between religion and science?

The questions are answered by almost all the contributors to this volume, even by the author of the introduction. The result is a wide-ranging, multicultural, and interdisciplinary collection, which could serve as a kind of introduction to current issues in the debate between religion and science. The quality of the collection is uneven, as one might expect. Some essays are brilliant, while others are muddled confusion or mystic syncretism. Some of the short chapters are in fact responses to previous contributors, although the editors have not made this clear. Nevertheless, the volume as a whole provides a valuable collage of viewpoints and makes for interesting and informative reading.

It is impossible to respond to all of the positions outlined in a volume of this type in a brief review. We will simply canvass the various chapters and provide some brief comments.

The first two contributions, by James Kenney and Clifford Matthews, respectively, do not orient the reader to this book as well as the concluding essay by Roy Varghese. Varghese clearly sets forth two competing perspectives: scientific materialism versus religious viewpoints. He also covers the implications of each for the questions of meaning and origins that this volume considers.

The contributions of theologians to this volume are concerned, broadly, with ethical themes. Mary Hunt argues that the insights of feminist theologians should be made a more central part of the religion-science dialogue. This would lead to more participation, democracy, and diversity in the current debate. This chapter is seconded by a brief plea for ethnic and gender diversity in natural science from Alice Dan, a nursing professor and social scientist. The other theologian, Kenneth Vaux, discusses issues in biology and ethics. He suggests that an adequate ethical stance toward science and technology should be evocative (not provocative), ameliorative (not punitive), distributive (not exploitative), and tentative (not utopian).

The lion's share of the volume is devoted to writings from natural scientists, engineers and medical practitioners. Unfortunately, some of the scientists are not deeply familiar with the philosophy and history of religion. Thus, we find comments like, "Religion is personal knowledge, it does not require explanation to anyone. . . . Science, on the other hand, is accountable for its assertions" (p. 243), and, "Since western religion is irrational [!], it bears much less requirement to make sense or to be internally consistent than does science" (p. 203). While such comments detract from the volume, they do reflect part of the intellectual landscape in our age.

For the most part, the contributions of the authors cluster around four loci:

1. The relationship between religion and science, sometimes blending faith and science
2. The origins of the material universe
3. The origin and character of living things and of intelligence
4. Science and technology as related to society and ethics

We will now follow each topic in turn rather than the outline of the chapters as they appear in the book.

Should we incorporate religion and science? If so, how? As a student of Taoism, I was interested in the contribution of biochemist Hsing-Tsung Huang.

Few Taoist thinkers have incorporated modern science into their worldview, and this is the best exposition I am aware of. John Dobson outlines his philosophy of religion-and-science, a kind of New Age thinking grounded in the Hindu concept of *maya* (appearance, apparition, “misperception”). Dobson argues that modern physics best fits with an Eastern type of idealism. Raimon Pannikar gives us a phenomenology of natural science and Christian thought as an aid to comparing the two. He considers both as types of “kosmology” (i.e., worldview).

The late Roger W. Sperry lays out his cosmology in “A Search for Beliefs to Live by Consistent with Science,” a philosophical reflection on science and ethics. It is one of his last publications and can also be found in *Zygon* 26 (June 1991): 237–58.

Where did the universe come from? Edward Kolb and Timothy Ferris do a fine job of reviewing the evidence in favor of a Big Bang model. Ferris’s speculations about “spacetime foam” and an information-based philosophy of science are in fact labeled as highly speculative. Kolb mentions four fundamental forces, although these have now been reduced to three (p. 74). Generally these are good chapters. E. C. G. Sudarshan provides an equally fine review of current evidence for the creation and decay of subatomic particles, while Cyril Ponnampereuma gives an optimistic review of the evidence for extraterrestrial life and intelligence. Finally, John Leslie considers the merits of the religious and the atheistic explanations of the universe from a philosophical perspective. Philosopher and scientist Ian Barbour rounds off the discussion of this topic by considering and rejecting three religious responses to the Big Bang and also provides a careful and helpful analysis of four concepts of “contingency” with respect to the material universe.

Living things are a wonderful and complex part of our universe. Where did life come from, and what are its characteristics? Some living things are intelligent. Where does this mental life come from? Biologist James Shapiro draws lessons for the way we think about nature from bacteria and provides a fine summary of current theories concerning that most ubiquitous life form. Moving from micro- to macrobiology, Lynn Margulis and Michael Dolan set forth the Gaia hypothesis in their chapter, arguing that the future of science lies in an organic, participatory concept of nature. Whatever one thinks of “Gaia,” this particular conclusion, at least, is both sound and serious. Moving on to animal and human intelligence, philosopher Richard Swinburne argues that “science cannot fully explain the evolution of mental life” (p. 368) because mental events cannot be reduced to brain events. He claims that the obvious correlations between mind and brain do not fall under any natural laws and therefore require nonscientific, or “personal,” explanation.

A final locus of discussion in this book concerns the relationship between science and technology, on the one hand, and society and morality on the other. George Bugliarello, former president and now chancellor of the Polytechnic Institute of New York, writes a fine chapter on this topic. He argues that science and technology are at a crossroads. Noting the seemingly unbridgable chasm between science and religion or ethics, he outlines many challenges facing science and technology, including multiculturalism, the use and purpose (or end) of science, and the question of accountability. Rustum Roy, a well-known

physical scientist active in the growing field of science, technology, and society, teaches at Pennsylvania State University. His chapter puts forward the argument that our international technological system is in fact a type of religion. While I agree with him on the linkups of science with theology and of religion with technology (the former theoretical, the latter applied), I cannot accept some of his interpretations of the character of science. I do not agree that science is only about separate parts, is intrinsically reductionistic, and only provides details. As I argue more fully elsewhere, science can and does provide us with large-scale theories of the universe. These theories, in turn, provide material for metaphysical reflection (see my article "The Mutuality of Theology and Science" in *Christian Scholar's Review* 26 [1996], 12–35).

This is an interesting and diverse volume. Although the contributions, aimed at the level of the general reader, are of uneven quality, there is much fruitful and thought-provoking material collected in this book. I enjoyed reading it.

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