

# HUSTON SMITH REPLIES TO BARBOUR, GOODENOUGH, AND PETERSON

*by Huston Smith*

*Abstract.* Responses and clarifications are given to the three respondents to my recent book, *Why Religion Matters*, in which I discuss what I see as the drawbacks and inconsistencies of Darwinism. While certain of their criticisms are understandable, others are based on a misreading of my work. Finally, my critics fail to show that my book is mistaken in its central claim that the modern loss of faith in transcendence, basic to the traditional/religious worldview, is unwarranted, because science has not been able to disprove the metaphysical claim that transcendence exists.

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## RESPONSE TO IAN BARBOUR

Ian Barbour, my long-standing friend and fellow missionary son, is characteristically generous toward my work as a whole and in the present case to *Why Religion Matters* (Smith 2001). Virtually his only bone of contention concerns the prevailing theory of evolution, which he considers scientific and I consider scientistic. I agree that the naturalism from which that theory derives is the proper position for science to work from, which is to say that I fully endorse *methodological naturalism* and wish it well in the domain of science. But its successes there do not make naturalism an adequate philosophical position or worldview—Barbour and I completely agree here. Nor do its successes guarantee that its tool kit contains the wherewithal to explain everything that happens in nature, the decisive issue

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here being its resources for explaining how life, then sentience, and then consciousness arose. To argue that even the first of these—life—can derive from what is inanimate matter is reductionism, the view that occurrences on higher ontological levels can be explained by the laws that govern their underpinnings. E. O. Wilson's *Consilience* (1998) is the current conspicuous example of this.

Barbour is not such a reductionist; as a Christian, he believes that God was active in life's arrival. So, standing together thus far, where do we differ? As I read him, he thinks that theologians have no right to question the prevailing evolutionary theories in science, whereas I, acutely aware of the intimate link between the questions of how we human beings got here and what we *are*—are we theomorphic beings or basically complex organisms in environments?—consider theologians remiss if they do not keep sharp eyes on Darwinian claims. For unless those theologians are philosophical naturalists, they will believe that there are causes that methodological naturalism cannot get its hands on or even entertain. It would be wrong for theologians to ask scientists to admit supernatural causes into their theories; there they would abort the scientific project. But it is equally wrong for them to close their eyes to places where proximate, naturalistic causes are missing. For until satisfactory naturalistic explanations come along—and they may never—it is reasonable to believe that causes from outside nature (to wit, God's direct inputs) hold the answer.

Barbour prefers to ignore this route and locate God's work in what he has called a wider perspective. He does not expand on that phrase here, but elsewhere in his writings he notes as examples that God could be added to scientific theories as the first cause of everything, or (deistically) could have set things up in such a way that secondary causes would themselves generate life, or could use the uncertainty of particle movements as an *entrè* for Whitehead's "divine lure" that would influence them to jump in optimal directions. I agree that these moves should be explored. But, as I have said, unless theologians keep a sharp eye out for holes in reigning scientific explanations, they run the danger of having religious interpolations dismissed as fifth wheels, à la Ursula Goodenough's remark that (I paraphrase) of course people are free to *believe* that God is monitoring the whole show if they want to, but for explanatory purposes that's not necessary (see p. 200).

This brings us to the heart of the science-religion evolutionary debate, which amounts to a question of strategy. Those who control the religion phalanx of the dialogue give science the benefit of the doubt by assuming that the naturalistic causes it works with hold in principle the wherewithal to deliver the whole story. In every case I know where a new conjecture is introduced to rescue Darwinism—punctuated equilibrium to account for the absence of connecting links in the fossil record; the thousands of generations that (as Barbour says) *could* have included ancestors that would

link the radically diverse phyla in the Cambrian explosion to a single postulated ancestor—in all such cases the establishment in the science-religion dialogue, backed by the Templeton Foundation, gives Darwinists the benefit of the doubt. Is it naive to ask straightforwardly, Why?

Barbour closes his piece by expressing hope that I “will explore the path of Dialogue with the community of biological scientists as [I have] done with physical scientists” (p. 211). I find this suggestion ironic, because on the occasions where I have tried to set up public dialogues between pro- and anti-Darwinists, the pros have refused the invitation. (To document that would involve airing dirty laundry that would be inappropriate here.) More generally, my answer to his suggestion is that I have for the past decade been dialoguing in my own mind (and in short published pieces) with biologists more than with any other professional group. As an indication of this I will respond to several specific points Barbour makes.

He says that I am mistaken in thinking that evolutionary theory is supported more by atheistic philosophical assumptions than by scientific evidence. I persist, however, in standing by my point. Why? Because Darwinists begin by assuming common ancestry (as the antithesis of special creation) and then proceed to fit the fossil, embryological, biochemical, and anatomical evidence into that framework. Darwinists also assume (on naturalistic grounds) that genetic mutations provide the raw materials for evolution, even though they have no good examples of beneficial morphological mutations.

Pursuing the same point, Barbour writes that “the criticisms of neo-Darwinism that Smith cites have not been ignored by the scientific community, as he claims, but have been answered in great detail” (p. 207). Again I disagree. The kinder response is the one Goodenough joins Barbour in making, namely that the evidence for neo-Darwinism is “overwhelming,” though that claim is not spelled out. Sadly, however, the more frequent response has taken the form of ad hominem attacks directed at the critics, including attempts to silence them or expel them from the scientific community by labeling them “creationists.” Jonathan Wells, whose *Icons of Evolution* (2000) I cite in *Why Religion Matters*, tells me that although none of the factual claims in that book has been refuted, he has been the object of relentless ad hominem attacks, some on the order of hate mail.

Spinning off from the football adage that the best defense is a good offense, I will take the initiative and challenge Barbour’s assertion that “proponents of intelligent design usually assume a fixed plan or blueprint that is imposed on the world rather than an interaction between God and a dynamic and evolving world” (p. 209). My own looks into ID have turned up many of its advocates who argue for precisely such interaction. Barbour’s other statement on design, “All design arguments are also challenged by the presence of imperfect design, evil and suffering, in the world”

(p. 209), is likewise false. ID claims only that some features of the world and living things are designed. In the theory per se, the nature of the designer remains unspecified pending further evidence and/or argument.

#### RESPONSE TO URSULA GOODENOUGH

The clearest indication that Goodenough has misread my book occurs when she says that when it comes “to the real matter at hand, what I hear Smith to be saying is that he finds the scientific cosmology unappealing” (p. 200). This is wrong twice over. On page 193 of my book I say that science’s cosmology is “awesome beyond belief,” which is a far cry from considering it “unappealing,” for there are few emotions that I honor above awe. But let that pass. Goodenough’s deep mistake is to miss the fact that the central claim of my book is that we have unwittingly let our scientific cosmology displace traditional/religious metaphysics, which is more awesome than even the cosmology of science (see Smith 2001, 34–37). The displacement has been unwitting because we have not distinguished cosmology (knowledge of the physical universe) and metaphysics (our understanding of the whole of things, which includes the possibility that there is another world than the one science deals with). The criticism of *Why Religion Matters* that would carry force would show that the book is mistaken in one or more of its three interlocking presiding claims: first, that the *Chronicle of Higher Education* was on balance right in asserting in one of its book reviews (9 January 1978, 18) that “If anything characterizes modernity it is the loss of faith in transcendence, in a reality that encompasses and surpasses our quotidian affairs”; second, that it is preeminently science that has eclipsed the transcendence that is central in the traditional/religious worldview; and third, that the eclipse was unwarranted because science (which is restricted to cosmology) has discovered nothing that disproves the metaphysical claim that transcendence exists.

I can understand Goodenough’s discomfiture over my characterizing the sacred depths she finds in nature as no more than Post-Its affixed to nature’s surface. She finds this an unusual reading of her book because eleven of its twelve chapters are devoted to nature’s sacredness. The issue, though, is not how much of her book is devoted to sacredness but how deep in nature (and how far across its vast sweep) sacredness extends. Sacredness is a quality, qualities are correlates of experience, and experience (according to science) is an attribute of organisms. It follows (does it not?) that because organisms exist only as rivulets on a single planet, a tiny mote in our 15 billion light-years-across universe, Post-Its is a generous analogy for suggesting how deep and wide in nature sacredness extends. *The Sacred Depths of Nature* (1998) contains some of the most lucidly beautiful science writing I have ever come upon; Goodenough has the gifts of an accomplished hymnodist. But logically (it still seems to me) my point

stands. The sanctity she ascribes to nature is very nearly author-dependent. Without her, and those similarly endowed with her sensibilities—all latecomers in the cosmic drama—nothing exists but qualitiless states of affairs.

In passing, I do not say that the scientific worldview renders the humanities and religion “obsolete,” only marginal for the chattering class, a British phrase I wish I had come upon before my book went to press. The *hoi polloi* watch television in the evenings; the elite discuss ideas.

Though she doesn't mention the book, Goodenough devotes her third paragraph to the flagship book I use for my chapter on scientism, Bryan Appleyard's *Understanding the Present: Science and the Soul of Modern Man* (1992). Between us we exactly replay the reception that book received when it was first published in England. There England's leading scientific journal, *Nature*, called the book “dangerous,” whereas the *Times Literary Supplement* saw it voicing important truths that needed to be spoken, evidence again of how much ideology vectors science-religion discussions. My disagreement with Timothy Ferris (with whom Goodenough sides) is that he defines scientism so narrowly that of course *by his definition* it isn't much of a problem. Goodenough charges me with name-calling in my handling of Ferris and (in the same breath) my treatment of Richard Dawkins, Stephen Jay Gould, Carl Sagan, E. O. Wilson, and by implication (though she does not mention it) her own *The Sacred Depths of Nature*. I do not believe in name-calling and apologize if I resorted to it. I do wish, though, that she had addressed my criticisms of those parties instead of dismissing my criticisms with her epithet.

On the other hand, she is entirely right in calling me on my unnuanced, across-the-board rejection of emergence as an explanatory concept. The three sentences I devote to that subject occur in the context of my discussion of evolution where I question emergence's credentials for explaining how new qualities—in this case sentience—could arise from states of affairs in which they are totally absent. Charles Hartshorne taught me that the distance from insentience to sentience is an infinite distance. A ton of feathers is a coherent concept, for feathers have some weight. But if feathers had zero weight, no number of them could add up to even an ounce. Process philosophy's panpsychism derives from this realization. Because sentience cannot emerge from insentience, sentience must be present from the start.

I am beginning to feel that I am bickering with Goodenough, however, so let me get down to the real issue that divides us, which is Darwinism. I claim that the evidence for it is extraordinarily thin, whereas she considers it “robust” and “overwhelming” (p. 200).

To propositionalize my understanding of where things stand, Neo-Darwinism combines Darwin's theory (1. All living things are descended with modification from common ancestry, and 2. Modification has been due

primarily to natural selection acting on random variations) with genetics (3. Natural selection acts by causing changes in gene frequencies, and 4. New variations arise through random genetic mutations). I shall work backward through these four claims.

4. In order for genetic mutations to contribute to evolution they must benefit the organism in nature (i.e., they cannot merely be beneficial in the sense that an experimenter selects for them in the lab). The only naturally beneficial mutations that have been observed are biochemical (e.g. those that produce antibiotic resistance in bacteria), whereas evolution requires novel morphologies, and naturally beneficial morphological mutations have not been observed.

3. Mendelian and molecular gene frequency changes in response to natural selection have been observed, but the existing evidence for single-gene and DNA sequence changes hardly qualifies as “overwhelming.”

2. There is good evidence that natural selection acting on random variations can produce changes in nature, but all changes observed thus far are no more dramatic than those observed in domestic breeding, which is to say, limited to changes within species. Perhaps the best examples are still changes in finch beaks on the Galapagos Islands, which are slight and reversible.

1. The evidence for universal common ancestry is thinnest of all. Common ancestry may pertain in some cases—as within the human species or the cat family—but by and large the fossil record is an embarrassment rather than a help, with large jumps and gaps far outnumbering the rare examples of transitional series. Even a transitional series does not demonstrate common ancestry, any more than a series of automobile models produced in different years demonstrates common ancestry. As with automobiles, a transitional series may be the result of serial creation rather than descent with modification. Serial creation can be ruled out only if a natural mechanism (i.e., one not requiring intelligent agency) is provided; and no such mechanism has been proposed that consistently fits the evidence. In other words, mere similarity does not establish common ancestry as opposed to common design. Embryology is also an embarrassment to the theory of common ancestry since (contra Ernst Haeckel) early embryos don't look similar. And the biochemical data are a dismal mess, with different molecules giving different results, even in supposedly closely related species. Barbour, by the way, relies on only a single molecule, cytochrome C. Darwinian biologists assume common ancestry and then fit the evidence into that framework. They do this for the same reason Darwin himself did, because the principal alternative is separate creations.

The second half of Goodenough's piece turns to the last third of my book, which presents the religious alternative to the scientific worldview. I find little of consequence in her observations here. She notes that the fact that most people have approached the world religiously doesn't make the

approach true, which is redundant because I devote an entire chapter, “This Ambiguous World,” to not just conceding that point but arguing for it. As for my attempt to align science and religion by suggesting how the science story might read if we thought of it as authored by spirit instead of mindless matter, I would not expect someone who explicitly rejects the idea of a Creator to think well of my scenario, which I put forward as no more than “a likely tale,” which is to say my best shot at the subject.

When, toward the end of her piece, Goodenough gives us her understanding of religion’s role in life and history, that role turns out to be in her eyes an important one. Indeed, this is one of the lovable features of her book; she really loves religion. All the while, however, she rejects its most important claim, its claim to possess distinctive ontological truths. Her position here is identical with Gould’s and Wilson’s. As she puts it, religions help us “to transform ourselves, to situate ourselves, to orient ourselves . . . they satisfy our longing to belong and educate our emotional lives in ways that keep us psychologically and spiritually integrated” (p. 203). To which I reply that, at their best, they do indeed do these things, but most effectively when their claims about the *world* are believed. There will be no peace between science and religion as long as scientists claim exclusive competence to describe the world’s furniture. When religions try to horn in on that competence, Goodenough tells us, “they will fail again and again—just as religious ‘explanations’ of disease, historical events, and other phenomena have failed in the past” (p. 203). Her assertion echoes exactly Wilson’s assertion that prescientific opinions about the world are “wrong, always wrong,” and this requires that I say to her what I say to Wilson on page 231 of my book. Such assertions hold only as long as we are talking about *cosmology*—this world, which I concede to science at the very start of my book. They do not hold for metaphysics, which introduces the question of whether a world other than the physical universe exists. About metaphysics scientists have nothing to say, but (pardon my sarcasm), conceivably they *could* listen.

#### RESPONSE TO GREGORY PETERSON

I thank Gregory Peterson for the many nice things he says about *Why Religion Matters*, but its “weeds” and “wrong moves” are what are of concern here. Peterson rightly recognizes that the distinction between science and scientism is at the heart of my book, and he faults me for not distinguishing between them clearly. I think, however, that what actually upsets him is that I do not draw the line between the two where he thinks it should be drawn. This, of course, holds for my other two critics as well, especially in what I say about Darwinism.

As to whether I define science too narrowly, it is for a clearly stated purpose that on pages 191–92 of my book I define it as narrowly as possible, beginning with the only definition I consider incontrovertible; namely

that science (through its technology) is what refashioned the world that traditional people lived in into the world we inhabit today. The hard sciences are what fueled the technology that effected this change, and we had better believe what they tell us, for they have knockdown proofs for their central hypotheses. With DNA and the genetic code, molecular biology is now also in the “you better believe us” hard science camp, but where experimental proofs for hypotheses are lacking, their truth-status moves from certain to probable with every step in that direction weakening science’s right to dictate what we believe. When those hypotheses are used only as working tools for further research, the amount of evidence that supports them is an internal affair for working scientists, and the rest of us should keep our noses out of the discussions. But when they impact worldviews, as Darwinism emphatically does, it is wrong—morally wrong, I personally feel—to claim for Darwinism anything like the noetic rights the hard sciences are entitled to.

When Peterson characterizes my treatment of light as cavalier, I think he reads the way I relate it to Spirit too literally, overlooking my admission that “if you think that I am leading up to saying that physics tells us that light is God you are wrong. [It is only] the boost physics has given to light as a *metaphor* for God’s creative activity that is dazzling” (p. 140).

Peterson asks if science is to blame. At the start of the book, I say that neither science nor scientists are the direct culprits. It is important to understand me here, so I shall quote from the paragraph where I address that point explicitly.

The latest journalist to interview me remarked that I seemed to be angry at science. I corrected him. I am angry at *us*—we modern Westerners who, forsaking clear thinking, have allowed ourselves to become so obsessed with life’s material underpinnings that we have written science a blank check. I am not talking about money here; I am talking about a blank check for science’s version of what constitutes knowledge and justified belief. The impressiveness of pure science enters, but for the public at large the miracles of technology have generally been more important. (Smith 2000, 4).

I of course agree that many things besides science went into the arrival and making of modernity, but I do not take them up because, as I say on page 24, this is a book about worldviews.

In the second half of his review Peterson turns to the final third of my book where, having said what I wanted to say in the way of social criticism, I return to my own professional field and propose some understandings about religion that might stand us in good stead as we collectively work out our religious future. That second half touches on many points, and most of them relate to technical issues in the history of religion—Peterson has really written two reviews, one that is appropriate for this journal and the other more befitting the *History of Religion*. So I will mention only one of his major complaints, namely, that I exaggerate the unity that underlies



the manifold religions. He mentions my *Forgotten Truth* (1993), which is indeed devoted to “The Common Visions of the World Religions” as its subtitle read, but he may not be aware of its sequel, *Huston Smith: Essays on World Religion* (1995), which deals with their differences. It is three times as long as the first book.

At one point Peterson does go back to science when he says that “it is unclear why Smith should be so wholly opposed to attempts by theologians to engage in dialogue with the sciences” (p. 219). This truly surprises me. When (on page 202 of my book) I refer to the California Bay Area’s Center for the Story of the Universe, the Institute of Noetic Sciences, and the Center for Theology and the Natural Sciences, I applaud all three for their “important projects” in furthering the science-religion dialogue. And *Why Religion Matters* can itself be read as my own entry into the dialogue, as are the entries of the three reviews that are printed here.

#### CLOSING REMARKS

As I said in the book, in one that cuts as wide a swath as this one does it is important to have hotlines to specialists in the fields it touches on. Jonathan Wells was my hotline to evolution while I was writing the book, and he has provided me with most of the empirical evidence against Darwinism that I cite in my responses to Barbour and Goodenough.

I want to close by saying something that for me is very important. Concerned though I am with the intellectual loopholes that I see riddling Darwinism, I am more concerned with the way Darwinists are behaving toward biologists who are sincerely and competently critical of the reigning theory. Gregg Easterbook put the matter well in a column for the *New York Times*: the status of Darwinism today requires religious terminology to describe it. It is the dogma of our time, and anyone who questions it can expect to be excommunicated from the scientific establishment.

I wish to thank my critics for taking time from their busy schedules to respond to my book. And my special thanks to *Zygon* for granting me space to respond to their criticisms.

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