

Evolutionary Psychology

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Book Review

This Land is Your Land

A review of David Sloan Wilson's, *Evolution for Everyone: How Darwin's Theory Can Change the Way We Think About Our Lives*. Random House, Inc.: New York, 2007, 390pp. \$ 24.00. ISBN: 978-0-385-34021-2 (hardcover)

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When it comes to understanding the natural world, from plants to planets, nothing beats a scientific approach. Unless, of course, the understanding concerns the relations among humans, gods, and religions, in which case it seems the rules for understanding our world change, and for many, supernatural explanations and received wisdom suddenly become compelling. This paradox, the selective use and disuse of a scientific world view, has been famously rationalized in Pascal's Wager. The 17th century mathematician and defender of Christianity theorized that assuming God's existence, and living in faithful accord, was clearly the best bet. If you are right, he supposed, you gain salvation, and if you are wrong, well, at least you haven't lost anything. Whereas, if you assume that God doesn't exist you gain nothing, regardless of whether you are right or wrong. There are, however, a few problems inherent in this view. Why assume that God would reward faith motivated by fear rather than honest skepticism? Why assume that believing in God is the same as living morally, or that a non-believer of good character is doomed to hell? The wager also supposes that religious faith leads to infinite good without cost to individuals or society - and that is a hard sell, given that the benefits many find in religious faith are accompanied by religiously motivated wars and killing.

Pascal's bit of game theory may not explain why many believe in God, but it does reveal a longstanding view that the reasons for religious belief are beyond the reach of science except, perhaps, in the weak context of arbitrary probabilities about the unknowable. Certainly, we can and should do better in explaining the origins of morality, faith and religiosity - by addressing the questions in terms of the evolution of individual and collective human behaviors.

In his ambitious, engaging book, *Evolution for Everyone: How Darwin's Theory Can Change the Way We Think About Our Lives*, David Sloan Wilson takes up the challenge of explaining the origins of faith, along with many other distinctive features of the human experience. The book stems from a university course he teaches of the same name, and is intended for a broad readership, including those with and without background

in science. Wilson cites a student evaluation in outlining the scope of the course (and book) which, "...provides a stimulating atmosphere within which biologists, psychologists, anthropologists, philosophers, social scientists, and even those in the arts can transcend traditional academic boundaries and collaborate in addressing mutually interesting questions..." (p. 9). Indeed, the book provides a useful introduction to the evolutionary underpinnings of a multitude of human values, emotions, and behaviors, including human faith, morality, cooperation, group-thinking, suicide, dancing, esthetics, homosexuality, writing, and laughter, among others. Wilson also aims to demonstrate how evolutionists think, and to make the basic scientific enterprise understandable and accessible, such that anyone, even "amateurs," can contribute. Wilson's enthusiasm can be infectious, and he effectively communicates some, though inevitably not all, aspects of scientific thinking on the subjects at hand. The discussions will provoke many scholars (not a bad thing) who will want to see different, better datasets and more rigorous analyses before buying-in. Some others will find the explanations and ideas at odds with their ideological commitments; though Wilson refrains from ideological bomb-tossing. He explains that he is an atheist, and reaches out to those who are religious, stating that science and religion can be "brought harmoniously together" (p. 1).

There are two particular issues that I would like to consider in this decidedly non-comprehensive review. First, I want to discuss a criticism that is certain to be made of *Evolution for Everyone*, and in doing so I will argue in favor of evolutionary studies of religiosity and the Woody Guthrie View (a new name for an ancient practice) of intellectual territories. Second, I will consider Wilson's broad claim to demonstrate and teach "how to think like" an evolutionary scientist.

The criticism I want to discuss has been made by several distinguished scientists, some religious and some not, who suggest that the scientific method alone is not up to the task of delineating the origins of faith and religion. In commenting on *Breaking the Spell* by Daniel Dennett, Freeman Dyson (2006, p. 8) says, "Religion...[gives] us hints of a mental or spiritual universe that transcends the material universe. To understand religion, it is necessary to explore it from the inside, as William James explored it in *The Varieties of Religious Experience*. The testimony of saints and mystics...is the raw material out of which a deeper understanding of religion may grow." In a review of *The God Delusion* by Richard Dawkins, Allen Orr (2007, pp. 22, 24) says, "It could, after all, be a brute fact of the universe that it derives from some transcendent mind, however question-begging this may seem...When thinking of those vast matters that make up religion—matters of ultimate meaning that stand at the edge of intelligibility and that are among the most difficult to articulate...people like James and Wittgenstein struggled personally with religion, while Dawkins shrugs his shoulders...What gives him the sense of authority presumably needed to...[comment on the nature of religion] at book length?" Simon Conway Morris also takes a dim view of efforts addressing the evolution of religions. In his book *Life's Solution* (2003, p. 316) he says, "Notwithstanding the quasi-religious enthusiasms of ultra-Darwinists [here referring to Dawkins], their own understanding of theology is a combination of ignorance and derision, [it is] philosophically limp...It seldom seems to strike the ultra-Darwinists that theology might have its own richness and subtleties and might...actually tell us things about the world that are not only to our real advantage, but will never be revealed by science." Similar objections were raised in his review of my recent book *The Evolving World* (Mindell, 2006) in which I discuss and provide branching diagrams illustrating the historical relatedness of various religious traditions.

These are odd statements from scientists, being offered in the context of studying the natural origins of faith. I do not want to mischaracterize the views of Dyson, Orr, or Morris, who will differ with each other on many issues; however, given the quotes above and the texts from which they were drawn, I think it reasonable to point out a general criticism that each makes independently. They see the lack of theological perspective or personal religious experience as a handicap, not just in grasping the positive value of faith, but as weakening an understanding of the natural origins, history and evolution of religion and faith. This raises an important question. Is a theological or religious insider's perspective necessary for scientific study of the origins, variety and history of religious cultures?

Theology, as the study of God or gods, religions, and the nature of religious truth, has a rich history, going back at least to the ancient Greeks, and it has played an important role in the birth of the western academic tradition. Though theologians may or may not believe in God, most have conducted their scholarship as religious insiders, taking religious claims seriously and viewing eternal religious truths as their topic of concern. This stems from a strong tradition within theology of going beyond discussion of documents, doctrines and histories, to practical involvement and a personal, experiential understanding of God or religious truth, lending authenticity, and sometimes authority, to their views. Without this personal involvement and commitment, there is little to distinguish theology as a discipline from philosophy and history of religion.

Thus, the criteria for theological insight differs from that of scientific insight regarding the evolution of faith and religion. With a theological perspective, one may aspire to understand and reveal truths about the supernatural, whereas with a scientific perspective one does not. In this light, a theological perspective is not required, and is potentially confounding, for the evolutionary study of religion and religiosity as components of human behavior, despite the recommendations noted above. If religiosity and faith are studied as variable human behaviors, whose history and development can be traced back in time and linked in their environmental and social context to similar behaviors across human groups and in other animal species (and there is consensus they can), then the appropriate background for these studies is in the natural sciences and humanities.

Further, the comments quoted above go beyond recognition that inexistence of the supernatural cannot be proven. They endorse the possibility that religious experience, as in the "testimony of mystics," relates to an objective spiritual universe, and does not emanate from the mystic's mind alone. On the surface, this openness appeals to our sense of fair play. However, as the openness to a supernatural, spiritual universe becomes a deference (particularly as in the statements by Dyson and Morris), natural explanation takes a back seat to mysticism. The possibility that transcendent experiences, emanate from the mind alone is entirely consistent with our current understanding of the physical universe, including brain chemistry and perception, whereas the possibility of an immaterial, spiritual universe, popular as it may be, is entirely lacking in support. Deference to supernatural explanation when a natural one exists is a scientific surrender. And, equally important, the many limitations of scientific explanation do not make mysticism any more credible.

Of course, comparative study of the material history and philosophy of theologies provides an essential basis for understanding the natural origins of faith and religion, and in this context, knowledge of theology is required. This is quite different, however, from

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saying that personal transcendent experience or even an insider's struggle with supernatural faith is necessary in explaining the natural origins of religion.

Periodic forays by religious fundamentalists into science, as with the political controversy over teaching Intelligent Design, and growing interest in an empirical understanding of the origins of behaviors often thought to be God-given and unique to humans (consciousness, morality, faith, and others as discussed by Wilson) are representative of the contested common ground for science and religion. Some advocate that science and religion be considered mutually distinct arenas of inquiry (non-overlapping magisteria or NOMA in Stephen Jay Gould's lexicon); however this view is not born out in practice. Rather, there is (and has long been) a spirit of unrestricted inquiry which can be exhilarating, maddening, or perhaps even terrifying, depending on your perspective. This alternative approach, currently more chaotic and more widely practiced than NOMA, deserves a name of its own, and I suggest that it be called the "Woody Guthrie View" (WGV) as celebrated in Guthrie's classic American folk song "This Land Is Your Land."

The refrain tells of the view's expanse:

*This land is your land, this land is my land
From California, to the New York Island
From the redwood forest, to the gulf stream waters
This land was made for you and me...*

And this among the verses provides the descriptive metaphor:

*As I was walkin'—I saw a sign there
And that sign said—no tress passin'
But on the other side— it didn't say nothin'
Now that side was made for you and me!*

WGV roughly describes the reality of overlapping, changeable, and differently perceived boundary claims around the interface of science and religion. This is not meant to suggest that all claims are equally valid - those issues may be sorted out by communities of scholars as time goes by. Studies of the natural origins of morality, faith and religion such as Wilson's are seen as intellectual trespassing by some but not others, and they exemplify the WGV in practice. My argument that a theological perspective or religious commitment is not required for the study of faith's origins helps justify the WGV in this case. Wilson's book attests that in the search for understanding the human experience, there is no sacred ground with "no trespassing" signs. He also demonstrates a personal respect for those with opposing views, and this may better promote mutual understanding (but not agreement), as these evolutionary issues are explored.

On to the second general consideration. One of Wilson's primary goals is to show readers "how to think like" an evolutionary scientist. He does this with far-ranging discussion about various traits, mostly behaviors, of humans and other animals, with frequent review of empirical studies. The discussions are lively and illuminating; but, I think he is only partly successful in meeting his goal. The book is an introduction to a particular kind of evolutionary thinking, not the full range by any stretch. Wilson specializes in evaluating potential adaptation, including adaptiveness of group behaviors, and, not surprisingly, his teaching and thinking focuses on them. A predisposition to favor adaptive explanations, for both individuals and groups, is woven into the fabric of his

evolutionary thinking. This thinking entails evaluating how observed behaviors can be explained as enhancing reproductive success. Alternative explanations for traits, de-emphasizing reproductive success, receive little attention. As one example, in discussing change in religions Wilson (p. 259) says, "To some extent, religious beliefs are just like genetic mutations: they arise arbitrarily and only the ones that work are retained by imitation and selection." A possible key role for chance events of human history and the frequent linkage among beliefs are not mentioned. The continued existence of traits is evidence that they "work" and are adaptive. It becomes axiomatic that natural selection produces adaptations and little else. Wilson (p. 18) says, "Learning about natural selection is like having a premature orgasm. You think it will take a long time and lead to a tremendous climax, but then it's over almost as soon as it began." I would agree that, unfortunately, the learning about natural selection and evolutionary thinking concludes prematurely.

Preoccupation with adaptive explanation is a common criticism of human behavioral evolution studies, including evolutionary psychology. Of course Wilson is well aware of this (citing Buller, 2005), and emphasizes the need for evolutionary psychologists to address the criticisms. However, acceptance of alternative concepts is not the same as integrating them into research. Acceptance of non-adaptive mechanisms and explanations can be similar to the acceptance of the "Terms of Agreement" when you install new software on your computer. You are asked if you "Accept" the terms written in a small box with many long sentences, most of them hidden and requiring a long scroll bar to be used as (as if) you would read the box's entire contents. You click the "Accept" button, impatiently, and...you get another box with a scroll bar. A few such boxes in my contrived example might be as follows.

"The appearance of various behaviors and mental functions as discrete, modular, or adaptive targets of selection, may be artifacts of human perception, reflecting misunderstanding of developmental, genomic, physiological or environmental effects..."

ACCEPT

"Current functions for traits can be very different from previous or original functions, weakening assumptions regarding their adaptive origins and maintenance. Traits and whole organisms may represent a hodge-podge of compromises with re-engineered components, resulting from inelegant, minimally harmful changes over time..."

ACCEPT

"Chance events, including those of earth history, local environmental change and genetic drift, can and do play seminal roles in the differential success of individuals, populations and species exhibiting variations in behaviors of interest..."

ACCEPT

After the last "Accept" button is hit, comes a feeling of harassment: "Okay, I've accepted that non-adaptive explanations exist; now, can I finally get on with consideration of adaptive explanations?" This accept-but-do-not-embrace factor reflects our tendency to see

the world in terms of the phenomena that most interest us or that we are best prepared to study. When you have a hammer, the world seems full of nails and loose boards. Adaptation via natural selection is a powerful explanatory concept; so powerful that adaptation as explanation for particular traits morphs all too easily from an “onerous” hypothesis requiring testing and strong evidence (see Williams, 1966), to a common assumption, with the testing focusing only on the nature of the adaptation.

Wilson distinguishes two approaches to evolutionary studies. He says, “I am an evolutionist which means that I use the principles of evolution to understand the world around me. I would be an evolutionary biologist if I restricted myself to the topics typically associated with biology, but I include all things human [e.g. values, religion, esthetics]... That makes me an evolutionist without any qualifiers” (p. 1). This corresponds to his view and lament that many evolutionary biologists stop short of applying evolution to key components of human culture and behavior. This dichotomy leaves little or no room, however, for the many evolutionary biologists that recognize the necessity of applying evolutionary understanding and methods to the study of evolved human culture and behavior, but who remain skeptical regarding the efforts made to date.

This skepticism stems from differing assumptions, methods, and standards among research groups studying evolution at different levels of biological organization. Studies of evolution at many levels have been transformed over the past 30 years by the availability of large molecular sequence, and more recently of gene expression, data sets, with particular focus on the evolution of genes, gene expression networks, genomes, proteins, protein function, and the developmental, morphological and physiological traits dependent on those molecular sequences. The heritable molecular basis and regulation of many behaviors are more complex and less well known, and this contributes to the differences among research cultures within the broad field of evolutionary science. These differences, little discussed by Wilson are part of the reason for the limited dialog between “evolutionists” and “evolutionary biologists.” Wilson conflates disagreement regarding research assumptions and reliability of methods or particular datasets for studying cultural evolution with the wholesale “...denying [of] its [evolution’s] relevance to human affairs” (p. 4).

I doubt that such denial among evolutionary scientists is common, and I think that does bode well for the exciting enterprise that Wilson and many others pursue. Extending our scientific understanding of the origins and evolution of religiosity, morality and other human attributes, and making the issues clear to general audiences, can show the scientific progress well beyond the unsupported speculations of Pascal. Disagreement and alternative views of the explanatory boundaries for science and religion are one more component of the human condition in need of better understanding, and as long as this is the case, freedom of mutual inquiry regarding the explanations offered by science and religion, along the lines of the WGV, can be expected.

Evolutionary biologists unfamiliar or uncomfortable with the analyses presented in *Evolution for Everyone*, and cultural anthropologists unconvinced of the relevance of evolutionary biology might consider the well-reasoned long-term view outlined by Wimsatt (2007, p. viii), “Scientific-cultural liaisons now blossom, and new progress in all of the human and Darwinian sciences could result from richer and more appreciative interdisciplinary interactions. Hopefully, enough practitioners of traditional disciplines will recognize that it is again time for new infusions for the health of all and will resist the temptation to erect defensive conceptual trade barriers.” Wilson’s *Evolution for Everyone* helps to show the way forward and deserves broad consideration.

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