Book Review | *Evolution and the Big Questions: Sex, Race, Religion, and Other Matters*

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As one reads through the introduction to David Stamos’s book, his declamatory phrases about evolution (or evolutionary biology) and its various antagonists reminds me of the preliminaries to a TV bout from World Wrestling Entertainment. There is much posturing, accompanied by ominous forewarnings of the impending battle, but by the time the card is finished, the fights themselves turn out to be scripted, inconclusive and involve much less drama than was initially promised.

Any book that combines evolution and sex in the title automatically creates certain expectations – one wonders what could be added to sex, race and religion to create even more explosive content? While I began the book with anticipation, the sense of unease created by the title unfortunately only grew as I read the introduction and then moved into the nine chapters, each with its own declamatory title that begins “Evolution and...” Stamos clearly sees himself as a champion, but his foes are much less clear-cut than he maintains at the outset.

The advice he notes from the editorial staff at Blackwell to move away from the anthology he proposed to this current volume has created some of the problem. Their instinct was accurate, as an anthology of various previously-published writings on evolutionary ideas, put together in the manner of an eighteenth-century natural history museum where the intellectual relationships (should there be any) are left to the reader to discern, would have been a waste of trees. Yet the book tries too hard to present a
dialectic, when in fact Stamos is at his best explicating the work that such an anthology might have contained. Every chapter contains nuggets of explanations of the work of other people that are clear, fair and well-written; the resulting analysis that purports to move the dialectic on toward some victorious conclusion is much less persuasive.

Stamos, who teaches philosophy at York University, begins: “There is a debate raging in virtually every college and university in the Western world, and also widely among the public. It is whether evolutionary explanations – Darwinian explanations – can legitimately be extended to the big questions that vitally concern us, questions that fall outside biology as normally circumscribed” (1). These big questions deal with “matters between the sexes, racial issues, religion, and so much more.” Stamos sees this debate as “the interdisciplinary question par excellence,” and his book as “a critical introduction” that operates “on a number of levels” as it engages both the general public and an audience of students in college and undergraduate university courses. This is all fair enough, but the task he has set himself is surely an arduous one (even as a critical introduction) and he then unfortunately proceeds to hobble the argument with a series of dubious premises and debatable conclusions.

He offers the magisterial statement that he is not concerned with “the defense of evolutionary biology per se. That debate is dead among scientists and the intellectual world as a whole.” Had this statement been left as it stood, the reader might wince a little and move on, but Stamos goes further, making the claim that “evolutionary science is one of the greatest and most solid of human achievements, possibly even the greatest of all time” (2). He then declaims “to deny evolution is to deny the very nature and value of evidence itself,” for reasoning that is not based on evidence that ignores it or even fights against it, is reasoning that invites moral condemnation.” To further anchor the extreme position and throw down the metaphorical gauntlet, “disrespect for evidence translates psychologically and socially into a culture of lies and power politics, not a culture that values truth and justice.”

One might by this point (and on page 2!) be forgiven for thinking Stamos just has an axe to grind and that the “critical introduction” would be better represented as an intellectual offensive. The enemy has yet to be named, though (not surprisingly) it is soon identified as those proponents of the “intelligent design theory” that Stamos says is merely creation science in a new guise. He pulls no punches: “This theory, along with its previous incarnation as creation science, is essentially mythological thinking masquerading in a lab coat. It is the attempt to take a way of thinking common to frightened and ignorant people living in pre-scientific societies, a way of thinking possibly rooted deeply in human nature, and to make it intellectually respectable. But no matter how it is dressed, its explanations are not real explanations, it makes no testable predictions (because one cannot test the will of an invisible creator or designer), and it opens up no fruitful lines of research. In short, the public has been
bamboozled by an enormous propaganda machine driven by the religious right wing” (2-3).

Stamos’s “critical introduction” then takes on the rhetorical purpose of a foray into hostile territory, “to question whether and to what extent evolutionary biology shines light on the big questions debated in the humanities and social sciences, questions that concern us all. Adding evolution to these questions has the effect of making them controversial in the extreme” (3).

Whatever the reader’s opinion of the clarion call against the unsavoury proponents of intelligent design theory (whoever the “far enemy” on the right might actually be), however, Stamos fights his particular battle against the “near enemy” on the left of those who adhere to the Standard Social Science Model (SSSM). Discussed by evolutionary psychologists Leda Cosmides and John Toomby in their 1992 publication “The Psychological Foundations of Culture” and then pilloried by Paul R. Gross and Norman Levitt (Higher Superstition: The Academic Left and its Quarrels with Science, 1998), the representations Stamos offers himself of the SSSM model are sufficiently vague that they would not survive contact with the evidence of what “those people” actually do. Acknowledging that he “can only paint in broad strokes in this introduction,” Stamos promises the real dirt will emerge in the ensuing chapters, but that it is “useful at this point to set the nature of the debate as an opposition between evolutionary models and the SSSM. Understanding each in its pure form will help to recognize and evaluate them when are mixed” (3).

While Stamos doesn’t admit his volume is intended as a salvo in the so-called Science Wars, the attempted depictions of the two solitudes “each in its pure form” is more than a clue. One wonders who pushed him at places to the ultimately indefensible positions he takes, however, because elsewhere in the book he offers a reasonable assessment of what is needed in terms of the “big questions” he identifies: “The truly interdisciplinary challenge, then as I see it, and it is the real debate, is to try and figure out as best one can just where the SSSM is right and where it is wrong and to be fearless about it, even if that means throwing political correctness to the wind at times. Biology in general and evolutionary biology in particular need to be taken seriously, both if we want to truly understand the human condition and if we believe knowledge is power and we want to support the most effective ways of bettering the world” (8). Had he focused on explicating the applications of evolutionary biology instead of asserting a dichotomy between it and some SSSM “other,” the book would have accomplished more than unfortunately it does.

The first two chapters, “Evolution and Knowledge” and “Evolution and Consciousness,” explore how we know what we know, and why and how we came to think it. While I have real difficulties accepting language about the evolution of scientific theories by natural selection as anything but a category error, Stamos skips
through “evolutionary epistemology” en route to a discussion of consciousness that poses the question about what distinguishes humans from animals. Both chapters remain inconclusive, as he itemizes the problems with applying evolutionary biology to these issues. The anchor for these first chapters, though, is found in the third chapter, on “Evolution and Language,” in which he points up Noam Chomsky’s idea of a “universal grammar” that is (in effect) hard-wired into our genes and therefore able to be considered in terms of evolutionary advantage and natural selection. While arguably something of a chicken and egg scenario, language comes first, and then epistemology and consciousness. Thus however inconclusive his application of evolutionary biology to knowledge and consciousness in the first two chapters, the way in which we are able to conceive of these two things and then to communicate them in language “seems best explained by standard evolutionary principles” (86) thanks to Chomsky and Steven Pinker.

Unfortunately, just as the book and its argument gets on track, we reach the metaphorical centrefold, “Evolution and Sex.” Essentially a Cook’s tour of research exploring mating, sexual activity and reproduction in terms of evolutionary biology, it is an interlude that plays to the student audience, one suspects, and signals the start of a series of stand-alone chapters on “big questions” that do not advance the debate in any constructive direction. To make things worse, that Chapter 5 is “Evolution and Feminism,” and Chapter 6 is “Evolution and Race” reflects a move from centrefold to centre stage and some questionable performance.

While you may need to go through the sequence of Stamos’s argument in each of these chapters to be convinced of my assessment, he in effect argues that we are who we are because of our genes, and genetic selection thus likely has taken place both in terms of gender and race. He recognizes the explosiveness of both claims, but says “objective” science must account for the ways in which a variety of environmental pressures and opportunities have resulted in selection of certain genetic traits that may be linked either to gender or to race. As much as he was playing to the crowd in Chapter 4 in talking about sex, here Stamos is self-consciously standing apart from the crowd to provide a perspective on what evolutionary biology might teach us about both gender and race. It is a dangerous tack, as he realizes: “At this point my own motives have probably come under suspicion, but I really do not care. My only desire has been to argue that, from an evolutionary point of view, there is nothing inherently mistaken or wrongheaded, let alone evil, in supposing that there are racial...differences in IQ or in other character traits within wide-ranging species such as Homo sapiens” (149). Not content to leave it at that, he continues: “Any aversion to research in this area is basically socially and politically motivated, it is not biologically motivated [sic]. At the end of the day, when all is said and done, it remains possible—indeed, quite possible—that from a modern evolutionary point of view there are innate statistical differences, even significant differences, in aptitude and behaviour between different human races” (149, Stamos’s emphasis). While after this Stamos climbs on a rhetorical soap box,
calling for tolerance, and ends with quoting Martin Luther King Jr.’s wisdom about how it is the content of a man’s character that matters, not the colour of his skin, this reader is still made queasy about how similar arguments about racial difference have been used in the past to justify the most horrific of crimes against humanity. (Survey the literature on eugenics offered by entirely respectable and reasonable people in the 1920s and 1930s, for example, and how it later underpinned the work of Josef Mengele.) The aside with which the chapter ends is equally disquieting – the intellectual question as to whether there might be a racism instinct, linked to group membership or territoriality, which supposedly needs research to determine which “side” (evolutionary biology or SSSM) is correct about its nature and origins.

The next chapter, Chapter 7, is a lengthy exploration of the way evolutionary biology might account for or explain various possibilities for ethical behaviour. Stamos concludes that “morality in humans is neither socially constructed, primarily rational, no divinely revealed, but has a common core or denominator that is the product of our evolutionary past in hunting-gathering groups. As such, morality is not absolute (eternal and unchanging) and it is not personally subjective (a matter of what each individual thinks) but it is objective, in the sense that adaptive traits are objective in a species” (175). While he makes a good point about the objective character of adaptive traits and their capacity to be considered in evolutionary terms, morality is such a slippery fish that being able to (objectively) categorize it in a way that escapes the vagaries of cultural context seems impossible. When this supposedly adaptive trait of morality is tied to religion in Chapter 8, however, the fish escapes his grasp.

In “Evolution and Religion,” Stamos begins with a wholly inadequate assessment of what might be meant by religious beliefs, especially in terms of truth and falsity, before investigating three questions: “whether it is useful to view religious beliefs and practices as memes [proposed by Richard Dawkins and developed by others] subject to evolutionary processes....whether a religion instinct evolved in the human species, in similar fashion to the language and moral instincts...[and]whether evolution and religion can be legitimately combined into what is known as “theistic evolution” (178). These three questions – surely there might have been others? – are brusquely proposed and summarily dismissed. Even if all manner of religious beliefs could in fact be subsumed under the rubric of “theology” (which they cannot), Stamos declaims that “the spirit of theology is deeply incompatible with the spirit of science” (196-97). In the end, he concludes that “we have seen evolutionary principles applied to religion at the level of memes, then to the level of instincts, and then finally to the attempt to harmonize evolution with theology, all with devastating results” (213) for the objective character or validity of religious experience. Stamos might claim to find such a result “devastating,” but the reader is hardly surprised, given the incendiary start to the book and the perfunctory way in which this penultimate “big question” is considered.
Whatever flaws there are elsewhere in the book, Stamos deserves credit for even attempting to tackle such a huge topic as “Evolution and the Meaning of Life” in a final chapter. He explores the relationship between existentialism and evolutionary biology, reflecting on whether evolution adds, takes away or has no relevance for the meaning of life, and whether we have “an evolved instinctual need” to find meaning in our lives (215). He is clearly unwilling to live in an entirely meaningless universe; he is no existentialist, because he feels that humans have “a nature” (228), and as a species characteristic, such “nature” is not merely asserted by the individual. (“In evolutionary biologists, but not in existentialists, a deep instinct for the meaning of life is more or less satisfied, and it is one that cannot be satisfied in any way one chooses” (227).) In the end, he prefers Robert Nozick’s conclusion (Philosophical Explanations, 1981) that humans have two ways of satisfying their inherent desire for meaning, either through the pursuit of knowledge or through personal relationships. He sees this as “an evolved instinct for meaning,” something (in other words) that might confer an evolutionary advantage, musing in conclusion at the end of the book: “Even if physics is right and the universe as a whole has no meaning, it does not necessarily follow that one of its parts, life as a whole, has no meaning. And even if evolutionary biology is right and life as a whole has no meaning, it does not necessarily follow that one of its parts, my life or yours, has no meaning. In spite of the truths of evolution and physics, we each can still have a deeply meaningful life.” (229).

It would take more space than I have here to go through the whole book and identify the number of times concepts (like “instinct”) are reified in a way contrary to the “just the (evolutionary) facts” approach Stamos maintains he is taking, but by the end of the book, one is not entirely sure what the fight was about or who won. (In fact, his very last sentence almost indicates a conversion to the sort of position against which he rails in the introduction!) “Truth” and “fact,” like “science,” are used liberally as though their definitions are axiomatic and self-evident, and even what is meant by “evolution” has about as much semantic specificity as one finds in Thomas Kuhn’s use of “paradigm” in The Structure of Scientific Revolutions. The dialectic does not materialize, nor does an SSSM approach emerge from the nine chapters in a way even approximating the caricature found in the introduction to provide some counter-point to whatever light evolutionary biology shines on the various topics he covers. While Stamos is disdainful of hypothetical social scientists on the left and archetypal Christian conservatives on the right who do not get their science correct when it comes to understanding evolutionary biology, he opens himself up to an equivalent accusation of his own inability to understand what either of these groups (should they even exist in some objectively verifiable state) think about everything from sex to the meaning of life, with stops at morals, ethics and religion in between.

As a text in a course on philosophy of biology, Stamos’ book would be pedagogically useful if read in the context of some of the authors (like Richard Dawkins, Steven Pinker and Michael Ruse) that he cites. Were I able to wave a wand, however, I would
remove the chapters on sex, feminism and race, and challenge him to articulate more clearly the conclusions he tries to reach in his final chapter. Stamos deserves credit for wrestling with questions from which other scholars would happily shy away, and the implications of a universal grammar for the development of some adaptive traits we might label “morality,” “ethics” and “religion” are certainly intriguing. It is to be hoped that this book is a starting point for further reflection by him on these “big questions,” perhaps in a less overtly polemical context.

As for the apparatus in the book, the appendix (“Common Misconceptions About Evolution”) is short and not particularly helpful, though the short glossary identifies some of the terms with which a reader might not be familiar. The bibliography (entitled “References”) is to works cited or used, not to the field of evolutionary biology itself. The index of names and key words is important for the reader who wishes to read only portions of the book or follow only some of the questions Stamos considers. The book is attractive, well-laid out, and without any typographical errors – a worthwhile addition to a library of books on the implications of evolutionary theory, though itself needing to be read with caution.