

Book Reviews

what to make of the ... fossil record, and that is a right and necessary struggle. The so-called natural history of our planet has a lot of explaining yet to do" (p. 191).

Johnson does not explain who, or why, "most of us are struggling" with the fossil record, but by framing it in this manner and not explaining why he thinks this way, he is in danger of being perceived as not fully examining the evolutionary story he seeks to tell. Regardless of what some biblical scholars may think, evolutionary scientists think the fossil record provides a remarkably revealing picture of how life has unfolded on Earth over hundreds of millions of years.

Johnson spends quite a bit of time examining sexual reproduction in both the evolutionary and biblical accounts. He thinks that mammalian evolution (including our own hominin lineage) has been characterized by a long history of males forcing copulation on females. He cites a paper from 2006 in which forced copulation and/or sexual violence is the norm in guppies, ducks, and several species of flies, but that paper provides no evidence for its pervasiveness within the wider evolution story. More recently, a meta-review of mammalian sexual aggressiveness and coercion throughout the mammalian world identifies only four of thirty-two mammalian orders which have documented examples of such activity, and the author was able to identify only one species which represented a case in which sexual violence provided an adaptive advantage.³ Johnson's concern, of course, is that if such activity is the norm in the evolutionary story, it creates a conflict between evolutionary and biblical stories. However, we have no reason to think it is the norm.

Continuing his discussion of sexual reproduction, Johnson goes on to draw a conclusion about a particular evolutionarily strategy, one that is of special biblical interest—monogamy. He states, "Monogamy is not evolutionarily advantageous. It does not make sense" (p. 136). Actually, there are various types of evolutionary reasoning that explain how monogamy *does* make evolutionary sense under certain circumstances. Frequently the advantages relate to the father's active involvement in parenting and retaining the sort of relationship that will ensure the offspring he is caring for are really his own. Indeed, one investigation suggests that the movement toward monogamy in human evolution (compared to our promiscuous ancestors of several million years ago) may have played a significant role in enabling the massive increase in brain size that characterizes our lineage.⁴

As the book draws to a close, Johnson writes: "Is there a way to reconcile entirely the Hebrew intellectual world to the present evolutionist accounts, theistic or otherwise? I am now less sure ..." (p. 175). Although this question remains of the utmost importance, trying to get

a clear answer begins with being sure one has an accurate view of both stories. Does this book help to provide such a view? Of that, I am not so sure.

Notes

¹Darwin, *The Descent of Man*, Kindle Edition (2014), p. 23.

²See E. O. Wilson, *The Social Conquest of Earth* (Liveright, 2013) for a discussion of this point.

³Marcelo H. Cassini, "Sexual Aggression in Mammals," *Mammal Review* 51, no. 2 (2021): 247–55, <https://doi.org/10.1111/mam.12228>.

⁴For details, see Carl Zimmer, "Monogamy and Human Evolution," *New York Times*, August 2, 2013, <https://www.nytimes.com/2013/08/02/science/monogamys-boost-to-human-evolution.html>.

Reviewed by Darrel R. Falk, professor of biology, emeritus, Point Loma Nazarene University, Point Loma, CA.

DOI: <https://doi.org/10.56315/PSCF3-25Schaefer>

WILD EXPERIMENT: Feeling Science and Secularism After Darwin by Donovan O. Schaefer. Duke University Press, 2022. 328 pages. Paperback; \$28.95. ISBN: 9781478018254.

Donovan Schaefer is currently in the Religious Studies Department at the University of Pennsylvania. Although he is a member of a program focused on religion, he describes himself as an atheist. His interest in understanding religion more deeply, particularly as it relates to *affect theory* (an approach to knowledge and culture that focuses on emotions), is exemplified by his scholarly work and his close relationship with Alister McGrath—theologian, historian, mentor, and close friend.¹ While religious research might seem inappropriate for an atheist, one could argue that Schaefer presents an outsider's perspective in religious studies. In *Wild Experiment*, he examines the intersection of affect theory with science, religion, and secularism, and the development of conspiracy theories and racialized reasoning

Schaefer divides his book into Part I: Cogency Theory and Part II: Feeling Science and Secularism. Part I provides readers with a thorough understanding of the epistemological, axiological, and ontological stances present in knowledge making. Schaefer develops his idea to explore the interconnectedness of feelings, emotions, values, beliefs, and life experiences which drive knowledge making. Cogency theory is "a collection of perspectives on how thinking is made by feeling" (p. 10). Schaefer argues that "[n]ew knowledge feels true to us because it lands on our existing landscape of understanding in a way that fits. It clicks with the terrain already in place" (p. 6). Part II examines the historical background of the development of evolutionary theories, and the responses to these theories by religious institutions, particularly the Roman Catholic Church. This section connects the dots between affect, as an intrinsic part of knowledge-making, and evolutionary theories, racism, and the development of conspiracy theories.

Using the “click” metaphor, Schaefer explains how individuals align with information that “feels so good” (a common phrase used in the book). This *good feeling* grounds his cogency theory—the idea that we feel our way to knowing. He believes we cannot separate feelings from understanding because the two concepts are inextricably joined. To develop his theory, Schaefer appeals to Michael Polanyi’s *post-critical* understanding of the subjectivity involved in knowledge making, Thomas Kuhn’s concept of *incommensurability* arising from the biases brought into science by autonomous individuals, Nietzsche’s ontological perspective that we make our own realities based on personal experiences, William James’s fallibilist belief that all views are subject to fallibility, and evidence from science and technology studies (STS) that knowledge emerges from lived experiences. He further explains that the feelings involved in knowledge making can readily influence our willingness to accept scientific or biblical evidence—such as those associated with evolution, creation, climate change, and racism.

As Schaefer transitions to Feeling Science and Secularism, readers become aware of the pros and cons of the *click* that drives knowledge making. On the one hand, deriving joy from a topic or a task drives us to learn more, continuing the search for higher levels of understanding. On the other hand, this same joy can also pigeon-hole us into the same ways of negative thinking, as held by those who partake in conspiracy theories, racialized reasoning, climate denialism, and the age-old debate between evolution and creationism. Part II begins by detailing the historical background of the Darwinian era and the controversies that inherently arose within the church. Bringing in cogency theory, Schaefer points out that the feelings associated with religious values (creation, in this case) or scientific evidence (evolution, in this case) can cause us to dig our feet into the sand and refute someone with the same passion we each feel for the subject(s).

How does society breach this barrier and advance when feelings are so strongly held and difficult to address? Schaefer points out that good science employs a healthy system of checks and balances which keeps emotions in check and emboldens an ardent desire to find the truth. This checks-and-balances system embodies what David Hume refers to as “cool passions” and William James as the “nervousness about error” (p. 36). Schaefer suggests Hume’s “cool passions” are a drive for knowledge, which is tempered by a desire for truth, and James’s “nervousness about error” represents a healthy fear of being wrong, so one strives to “shun error!”² However, providing more evidence on a topic will not necessarily bring unity because two people can analyze the same evidence in many diverse ways. Understanding and appealing to the feeling individuals embrace are the keys to unification. We must have a willingness to listen to

the “out-group” and try to find “shared vibes,” (Schaefer quoting Jose Estéban Muñoz [p. 224]).

As Christians made in the image of God, we are fearfully and wonderfully made, knitted from the core of our being by a loving creator from our mother’s womb (Ps. 139:13–16). The thought of being “knit” by our creator suggests craftsmanship in which no two creations are identical. Thus, we could surmise that cogency theory somewhat aligns with our personal identity in and from Christ. We each have our own spiritual gifts, life experiences, and nonnegotiable values which we bring to the table to *mess with* (another common phrase in the book) our interpretations of information. It is our duty as Christians, however, to take accountability for our thoughts and actions and respond to information by following the scriptures. If we remain faithful, limiting emotion as much as possible, we might overcome some of the political and societal challenges we face, as well as issues related to creation care and climate change. I hope that by understanding Schaefer’s cogency theory we can more effectively communicate information to a broader audience, inspire people to become more accepting of “others,” and become better able to understand how others think and believe.

One observation: *Wild Experiment* has a wealth of information. It covers the complex and interdisciplinary nature of many topics in the social sciences, theology, biology, and history. While I believe Schaefer did his best to condense information, the onus is on the reader to do some additional background reading. I recommend this book for anyone interested in epistemology, behavioral science, STS, or anthropology. It provides a context for knowledge making that most social science and social-science related researchers will find interesting.

Notes

¹Donovan O. Schaefer, “The Territories of Thinking and Feeling: Rethinking Religion, Science, and Reason with Alister McGrath,” *Zygon* 57, no. 1 (2022): 200–222.

²William James, *The Will to Believe and Other Essays in Popular Philosophy* (Longmans Green, 1907), 18.

Reviewed by Rebecca Eagle-Malone, assistant professor of biology, Malone University, Canton, OH 44709.

HISTORY OF SCIENCE

DOI: <https://doi.org/10.56315/PSCF3-25Acemoglu>

POWER AND PROGRESS: Our Thousand-Year Struggle over Technology and Prosperity by Daron Acemoglu and Simon Johnson. PublicAffairs, 2024. 560 pages. Paperback; \$21.99. ISBN: 9781541702547.

In this book, two highly acclaimed MIT economists, and Nobel prize winners, make the bold claim that technological progress does not automatically result in