[*JSRNC* 15.4 (2021) 534-537] JSRNC (print) ISSN 1749-4907
http://doi.org/10.1558/jsrnc.20758 JSRNC (online) ISSN 1749-4915

Book Review

Edward O. Wilson, *Genesis: The Deep Origins of Society* (New York: Liveright Publishing, 2019), 153pp., $15.19, ISBN: 978-1-631-49554-0.

Edward O. Wilson, the Darwin of our times, commands an encyclopedic knowledge of biology as demonstrated in *Sociobiology: The New Synthesis* (1975). He is internationally recognized for ideas on biodiversity and biophilia (Wilson 1984, 1992, 2002, 2016; Kellert and Wilson 1993; cf., Arvay 2018). His *On Human Nature* in 1979 and *The Ants* (with Bert Holldobler) in 1991 won the Pulitzer Prize. Wilson's (2012) *The Social Conquest of Earth* was a *New York Times* bestseller. He was identified among the 25 Most Influential People in America by *Time Magazine* in 1995. PBS television aired the NOVA program *E.O. Wilson of Ants and Men* (Schulze and Townsley 2015). (Also, see Wilson 1994.) Wilson starts *Genesis*:

> All questions of philosophy that address the human condition come down to three: what are we, what created us, and what do we wish ultimately to become… By and large, philosophers have lacked confirmable answers to the first two questions, which concern the deep prehumen and human past, thereby remaining unable to answer the third question, which addresses the human future. (p. 9)

Pursuing the first two questions, Wilson provides a crash course on evolution, biology, and sociobiology. He surveys 3.8 billion years in 80 pages. Wilson reveals: 'Earth's biological history began with the spontaneous origin of life' (p. 31). He successively sketches the 'great transitions of evolution' identified as the origins of life, complex cells, sexual reproduction, multiple cell organisms, societies, and language. There are many fascinating points and examples. While details on ants become tedious, they reflect Wilson's great passion as an entomologist specializing in myrmecology. Referring to insects, not in zoological terms, but as policing, combat, and empire appear to be false equivalencies between insects and humans (pp. 86, 90).

Eusociality is defined as '…the high level of cooperation and division of labor in which some specialists reproduced less than others' (p. 35). Furthermore, '…eusocial species are those practicing altruism' (p. 35). Eusociality evolved relatively recently and occurs only rarely among animal species, although some are ecologically successful like ants, termites, and humans (p. 60). Examples are grandmother helpers, homosexuals, and monastics (p. 69). There is a single gene for altruism, but Wilson doesn't provide any evidence or elaboration (p. 81).

Ultimately genes seem omnipotent. Wilson asserts that: '…advanced social organization entails an increase in the complexity of the gene networks affecting social behavior' (p. 84). Again, this is a vague assertion without any evidence or explanation

provided. Some critics of sociobiology allege simplistic generalizations, biological determinism and reductionism, and/or social Darwinism (see Segerstrale 2000). The last chapter is 'The Human Story'. After citing some hominin fossils, this becomes another 'just so story' reminiscent of armchair speculation in nineteenth-century evolutionism.

Wilson exposes his perennial Hobbesian bias emphasizing intergroup competition and claiming that it is frequently lethal (p. 112). He asserts that 'Lethal violence during warfare is so common in human societies as to suggest that it is an adaptive instinct of our own species' (p. 118). Yet the oldest archaeological evidence for warfare that he cites is from 14,000 years ago (p. 120), very recent compared to the 5–6 million years of human evolution.

His second line of evidence appeals to the common ancestry of apes and humans. However, referring to raids, war, and conquest among chimpanzees with such human terms is another instance of false equivalencies (p. 117). He discusses aggression among the common chimpanzee (*Pan troglodytes*). He ignores the unaggressive bonobo or pygmy chimpanzee (*Pan paniscus*) extensively documented by primatologists like Frans de Waal (2005). Wilson does not explain how the two chimpanzee species and humans can be nearly identical genetically yet so extremely different behaviorally. Wilson asserts that: 'Their instinctive behavior is overlaid by a thin layer of culture' (p. 116).

Wilson's third line of evidence is hunter-gatherers and tribes, as if they are prehistoric survivors trapped in a time warp. The perennial exemplar of Yanomami aggression is advocated, based on Chagnon's ethnographic interpretation (pp. 119, 121). Wilson ignores the criticisms of dozens of other anthropologists who also work or worked with Yanomami, some many years longer. For example, 18 of Chagnon's critics affirm: 'We absolutely disagree with Napoleon Chagnon's public characterization of the Yanomami as a fierce, violent and archaic people' (Albert et al. 2013).

Selective use of literature reveals another problem—confirmation bias—citing only other Hobbesians like Napoleon A. Chagnon, Azar Gat, and Richard Wrangham (cf. Sponsel 2020). Wilson doesn't directly address his third question, except perhaps when writing: 'The capacity for language, science, and philosophical thought made us the steward and mind of the biosphere. Can we muster the moral intelligence to fulfill this role?' (p. 40). Here philosophy is admitted relevance, contrary to his initial claim (cf. Wilson 2014).

Genesis, a provocative title for some, says almost nothing about religion. It supposedly originates from tribalism as a product of natural selection (see Wilson 2014: 147-58; and Turner et al. 2018). Religion is reduced to fantasies enslaving many with dogma (pp. 9-10). Science is omniscient with all the answers, the exclusive monopoly on knowledge, understanding, and wisdom (cf., Smith 2001). Evolutionary biology provides the real facts on questions of origins.

Wilson's posturing is unsurprising. He identifies with scientific humanism as the only worldview compatible with science. He is one of the signers of the 2003 Humanist Manifesto III, along with the New Atheists Richard Dawkins and Michael Shermer (Haught 2008). (For religious naturalism see Crosby and Stone 2018, and compare Rue 2011 and Haught 2006 on whether nature alone is sufficient.)

Readers of this journal may find more germane Wilson's 2006 book *The Creation: An Appeal to Save Life on Earth*. There he argues for saving nature through an alliance between science and religion, the two most powerful social forces on our planet.

Economic, political, and cultural forces aren't mentioned. For a deeper scientific and evolutionary account of origins, see the book *Journey of the Universe* (Swimme and Tucker 2011), a companion to the film.

Returning to Wilson's opening statement, there are far more questions about the human condition than the three he identifies. Philosophy and religion as well as science can be pertinent (Kuperman 2010; Pojman 2006). Philosophy and science can be complementary as two different methods of knowing. Philosophy confirms through logical reasoning, argumentation, and validation. Science confirms through systematic collection of empirical data, testing hypotheses, and validation by independent researchers. Science and religion can be complementary, a pivotal presupposition underlying the field of spiritual ecology, or religion and ecology, as variously identified (Grim and Tucker 2014; Sponsel 2012). (See, for example, Barash 2014; Clayton and Simpson 2006; Frankenberry 2008; Haught 2000; and Wallace 2003.) Wilson's third question would engage subjects like values for which there is significant literature in philosophy, religion, and science (Kellert and Farnham 2002). Again, much of this can be complementary, rather than antithetical or mutually exclusive, contrary to Wilson's worldview.

In conclusion, Wilson's writings are extraordinarily eloquent, ingenious, insightful, fascinating, provocative, and influential, but on some points problematic, and occasionally even controversial. They are well worth reading.

References

Albert, Bruce, et al. 2013. 'Statement', 26 February (London: Survival International). Online: http://assets.survivalinternational.org/documents/891/2-2013-anthropologists-letter.pdf (accessed 29 July 2020).

Arvay, Clemens G. 2018. *The Biophilia Effect: A Scientific and Spiritual Exploration of the Healing Bond Between Humans and Nature* (Boulder: Sounds True).

Barash, David P. 2014. *Buddhist Biology: Ancient Eastern Wisdom Meets Modern Western Science* (New York: Oxford University Press).

Clayton, Philip, and Zachary Simpson (eds.). 2006. *The Oxford Handbook of Religion and Science* (New York: Oxford University Press).
Doi: https://doi.org/10.1093/oxfordhb/9780199279272.001.0001.

Crosby, Donald A., and Jerome A. Stone (eds.). 2018. *The Routledge Handbook of Religious Naturalism* (London: Routledge).
Doi: https://doi.org/10.4324/9781315228907.

Frankenberry, Nancy K. (ed.). 2008. *The Faith of Scientists in Their Own Words* (Princeton: Princeton University Press).
Doi: https://doi.org/10.1515/9781400829804.

Grim, John, and Mary Evelyn Tucker. 2014. *Ecology and Religion* (Washington, D.C.: Island Press).

Haught, John F. (ed.). 2000. *Science and Religion in Search of Cosmic Purpose* (Washington, D.C.: Georgetown University Press).

———. 2006. *Is Nature Enough? Meaning and Truth in the Age of Science* (New York: Cambridge University Press). Doi: https://doi.org/10.1017/CBO9780511809279.

———. 2008. *God and the New Atheism: A Critical Response to Dawkins, Harris, and Hitchens* (Louisville: Westminster John Knox Press).

Holldobler, Bert, and Edward O. Wilson. 1990. *The Ants* (Cambridge: Belknap Press).

Kellert, Stephen R., and Timothy J. Farnham (eds.). 2002. *The Good in Nature and Humanity: Connecting Science, Religion, and Spirituality with the Natural World* (Washington, D.C.: Island Press).
Kellert, Stephen R., and Edward O. Wilson (eds.). 1993. *The Biophilia Hypothesis* (Washington, D.C.: Shearwater Books).
Kuperman, Joel J. 2010. *Theories of Human Nature* (Indianapolis: Hackett Publishing).
Pojman, Louis P. 2006. *Who Are We? Theories of Human Nature* (New York: Oxford University Press).
Rue, Loyal. 2011. *Nature Is Enough: Religious Naturalism and the Meaning of Life* (Albany: SUNY Press).
Schulze, Shelley, and Graham Townsley. 2015. *E.O. Wilson of Ants and Men* (Boston: WGBH NOVA).
Segerstrale, Ullica. 2000. *Defenders of Truth: The Battle for Science in the Sociobiology Debate* (New York: Oxford University Press).
Smith, Huston. 2001. *Why Religion Matters: The Fate of the Human Spirit in an Age of Science* (New York: Harper-Collins).
Sponsel, Leslie E. 2012. *Spiritual Ecology: A Quiet Revolution* (Santa Barbara: Praeger).
———. 2020. *Nonkilling Anthropology: A New Approach to the Study of Human Nature, War and Peace* (Honolulu: Center for Global Nonkilling).
Swimme, Brian Thomas, and Mary Evelyn Tucker. 2011. *Journey of the Universe* (New Haven: Yale University Press). Online: https://www.journeyoftheuniverse.org/ (accessed 29 July 2020).
Turner, Jonathan H., Alexandra Maryanski, Anders Klostegaard Petersen, and Armin W. Geertz. 2018. *The Emergence and Evolution of Religion by Means of Natural Selection* (New York: Routledge). Doi: https://doi.org/10.4324/9781315111995.
Waal, Frans B.M. de. 2005. *Our Inner Ape: A Leading Primatologist Explains Why We Are Who We Are* (New York: Penguin Group).
Wallace, B. Alan (ed.). 2003. *Buddhism and Science: Breaking New Ground* (New York: Columbia University Press).
Wilson, Edward O. 1975. *Sociobiology: The New Synthesis* (Cambridge: Harvard University Press).
———. 1978. *On Human Nature* (Cambridge: Harvard University Press).
———. 1984. *Biophilia: The Human Bond with Other Species* (Cambridge: Harvard University Press).
———. 1992. *The Diversity of Life* (Cambridge: Harvard University Press).
———. 1994. *Naturalist* (Washington, D.C.: Shearwater Books).
———. 2002. *The Future of Life* (New York: Knopf).
———. 2006. *The Creation: An Appeal to Save Life on Earth* (New York: W.W. Norton & Co.).
———. 2012. *The Social Conquest of Earth* (New York: Liveright Publishing).
———. 2014. *The Meaning of Human Existence* (New York: Liveright Publishing).
———. 2016. *Half-Earth* (New York: Liveright Publishing).

Leslie E. Sponsel
University of Hawai`i
sponsel@hawaii.edu