Book Reviews

The dominion rule to subdue the earth should be "business as usual" for the Christian right.

In the conclusion, I was perplexed that Alumkal criticized Rick Warren's book *The Purpose-Driven Life* as a supporter of the false science of the Christian right. I read that book and also studied it in my congregation without noticing anything related to science or the Christian right. His criticism focuses on Warren's affirmation that the Bible is inerrant, which (to Alumkal) implies denying human reason. Furthermore, Alumkal quoted Mark Noll's books on the evangelical mind and affirmed that not much progress has been made. In conclusion, the Christian right is backing its affirmations with false science, promoting paranoia, and thus is highly detrimental to American society.

Christian readers (not just those sympathetic to the right-wing) will find some of the claims made in this book impossible to digest. Any conservative Christian who holds to the Bible as authoritative should note Alumkal's more liberal presuppositions about God, the Bible, and moral issues related to human sexuality. Sadly, Alumkal omits the moderate evangelical scholars who actively contribute to the conversations about these issues. After reading this book, anybody who is not familiar with Francis Collins, D. Gareth Jones, Mark Yarhouse, or Katharine Hayhoe would consider all evangelicals who comment on science as paranoid supporters of the Christian right. One wonders whether the author himself is, ironically, promoting an unfounded paranoia concerning evangelical Christians.

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TECHNOLOGY

TO BE A MACHINE: Adventures among Cyborgs, Utopians, Hackers, and the Futurists Solving the Modest Problem of Death by Mark O'Connell. New York: Anchor Books, 2017. 256 pages. Paperback; $16.95. ISBN: 9781101911594.

Mark O'Connell has produced a folksy account of his interaction with numerous leaders in transhumanism, "a liberation movement advocating nothing less than a total emancipation from biology itself" (p. 6).

Most of the book consists of accounts of visits with individuals and organizations representative of various emphases within this movement. The Alcor Life Extension Foundation is the world leader in cryonic preservation of a person's body (or just the head) after death, in anticipation of a time in the future when technology will exist to "resurrect" the person by uploading the pattern of neural connections in the cryonically preserved brain. (At the time of O'Connell's visit, it was preserving 117 "patients," including the head of baseball legend Ted Williams.) Carboncopies is representative of those seeking to develop "substrate-independent" minds, a technology that seeks to upload a person's mind into an emulation running on a computer. Grindhouse Wetware is representative of groups developing implantable technologies to enhance human sensory and other capabilities. (Even DARPA—the Defense Advanced Research Projects Agency of the Department of Defense—is supporting development of technologies to enhance the natural abilities of soldiers, such as exoskeletons.) Aubrey de Grey is representative of those working on radical life extension strategies that regard aging as a curable disease, making four-digit lifespans possible. The author also briefly discusses the idea of "the Singularity," an anticipated time when artificial intelligence will have surpassed human intelligence (somewhere around 2045 in the predictions of its most vocal proponent, Ray Kurzweil).

Though the emphases of those identifying with transhumanism are diverse, all look to technology to deliver them from the limitations associated with our physical bodies, including (but not limited to) aging and death, and hold "a conviction that we can and should use technology to control the future evolution of our species" (p. 2). Many view human beings as information currently encoded in a biological substrate that is a product of the vagaries of evolution, but which can (and should) be replaced by a superior version that is the product of technological design. Virtually all are devout atheists, looking to science rather than God for deliverance. As one put it, "Science is the new God … Science is the new hope" (p. 208).

O'Connell makes it clear that he is not a transhumanist, stating this explicitly at both the beginning and the end of the book. But he acknowledges a fascination with the ideas and aims of the movement, arising "out of a basic sympathy with its premise: that human existence, as it has been given, is a suboptimal system" (p. 2). While his basic approach is objective, there are numerous places where his sense of the strangeness of it all comes through.

Why should a reader of *PSCF* be interested in this subject? I admit that, as a reviewer, I approached reviewing this book with something of a sense of "why am I doing this?" Clearly, the foundational beliefs of the movement are directly antithetical to fundamental Christian beliefs about God, the good-

ness of his creation, and eschatology. (In fact, the author notes the affinity between the transhumanist aversion to the physical body and the ancient heresy of Gnosticism.) However, many of transhumanism's underlying ideas are part of the mental undercurrents of our time, such as the way we speak of ourselves in information-processing terms (for example, "I can't compute this"). Transhumanists take this perception of humanity to its limit. At the end of the book, the author sums up his experience this way: "I am not now, nor have I ever been, a transhumanist. I am certain I would not want to live in their future. But I am not always certain I don't live in their present" (p. 234).

Moreover, as the author notes throughout the book, the concerns that drive transhumanism (e.g., the reality of death) are similar to those addressed by religion and have a broad influence in society. For example, he notes that "Life extension [is] a long-term preoccupation for Google's founders Larry Page and Sergey Brin [and has] gradually become a part of the company's 'moonshot' culture" (p. 186). Additionally, Google's Vice President for Engineering, Ray Kurzweil, is the leading proponent of an upcoming technological Singularity. It is easy for Christians to forget the existential relevance of the fact that Christ has delivered "all those who through fear of death were subject to lifelong slavery" (Heb. 2:15 ESV).

This book was well written and enjoyable to read. It can serve as a helpful introduction to the subject for those desiring to know more about it.

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ALGORITHMS OF OPPRESSION: How Search Engines Reinforce Racism by Safiya Umoja Noble. New York: New York University Press, 2018. 256 pages. Paperback; $28.00. ISBN: 9781479837243.

Algorithms of Oppression is author Safiya Umoja Noble's polemic against the international search company, Google. Subtitled "How Search Engines Reinforce Racism," her book seeks to enlighten the reader on the impact that search results have upon the world, and how these search results commonly skew toward negative racial and social stereotypes. Her contention is that Google could change its algorithm to balance the results but refuses to do so, a contention which this reviewer questions.

The book of 186 pages, plus introduction and thirty-one pages of references, is divided into six chapters: (1) A Society, Searching; (2) Search for Black Girls; (3) Search for People and Communities; (4) Search for Protections from Search Engines; (5) The Future of Knowledge in the Public; and (5) The Future of Information Culture. It ends with a concluding chapter: (6) Algorithms of Oppression.

The author's points are as follows: First, the world relies on Google search results to gather, collate, filter, and deliver information, and the top 10 or 20 results are of utmost importance. Second, in the search space, Google is essentially a monopoly. Third, Google is not a public resource, but a company whose goal is to make money for its stockholders, not to deliver unbiased results. Fourth, Google's results are biased, although how their search algorithm works is private intellectual property. Fifth, the effects of biased results are far-reaching and destructive. Finally, Google could remove this bias from its algorithm but refuses, claiming that it is unable to do so.

Points 1, 2, and 3 are incontrovertible, and well supported by the author's references, anecdotes, and arguments. Points 4, 5, and 6 are not as well supported, yet they are the crux of the author's argument. The author certainly demonstrates that at the time of her writing, certain searches, for example, "black girls," provided top results that were primarily links to websites that were pornographic or hypersexualized advertising. Similar results are seen for "latina girls," "asian girls," and "hispanic girls." However, a search for "white girls," while producing some top-10 results that refer to pornographic sites, provided a much more balanced result.

The author produces a few examples of how Google seems to have "fixed" search results when some searches produced clearly racist results. One example is how Google responded to French and German laws stating that it is illegal to advertise or sell materials that deny the existence of the holocaust. When these governments informed Google that its search results provided links to such sites, Google responded by filtering the results to comply with the laws.

The author's contention from this example is that Google can alter its algorithm to produce unbiased results for *any* kind of search that may produce racist results. Google claims that its results are based on the well-known and well-published PageRank algorithm, and simply reflect what the public is searching for, what websites exist, and how they link to each other.

The book includes little proof that Google deliberately biases its results or can manipulate the results of any and all search queries that might produce socially and/or racially biased results. The author infers from news articles, interviews, research, and