

Review of Humanity 2.0 by Steve Fuller
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Humanity 2.0, by Steve Fuller, is a bold interjection into the landscape of oppositional discussions about progress, science, religion, and policy. Rather than quarantining modern secular intellectual thought from theology, Fuller embraces their shared lineage that forms the basis of discussions today on everything from human enhancement to novel instantiations of life. Through in-depth discussions of converging technologies (CT), the complex ideological and theological roots of Intelligent Design, and a proposal for empowering science education using theological tools, this work refuses to shy away from difficult questions about humanity's future, instead seizing them vigorously and boldly. Whether for its concisely effective history of social epistemologies through theological roots or for its advocacy of shedding fear in favor of understanding, this book will be of use to students and scholars alike.

The narrative of humanity's future is presented in five parts, each punctuated by section headings, resulting in a reasonably ordered book that can be referenced easily (making this an approachable book for graduate students or advanced undergraduates interested in this topic). Each chapter focuses on some theme of clash or conflict between ideologies or visions, giving extra meaning to the "2.0" in the title.

Chapter 1, "Humanity Poised Between Biology and Ideology", opens the book with an overview of the tensions between social sciences and biological sciences, as demonstrated by the struggle between our material and ideological natures: "To be human is to identify both an animal and an ideal" (7). From there, Fuller draws a circle of focus around the two key boundary issues in the social sciences that are unique to and universal for human beings, race and religion. The boundary issue of gender and/or sex is not included in this circle of focus; while not particularly surprising, this omission suggests a less revolutionary reframing than what could have been. While there is some brief discussion about the usual considerations of women's historical dis/empowerment regarding reproduction, the home, and public life, including in religious affairs (46-48), it does not go anywhere (such as past this chapter, minus a lone mention of Donna Haraway that was not indexed). Through an enriching yet convoluted tour of topics like the Cold War and the "memes vs. genes" controversy, the chapter concludes with a foreshadowing suggestion that through biotechnology and horizontal gene transfer we may in fact validate Lamarck over Darwin.

Chapter 2, "Defining the Human: The Always Already – or Never to be – Object of the Social Sciences?", discusses the "bipolar disorder" of humanity and frames its conceptualizations as disagreements recapitulated throughout history from the early division between Dominicans and Franciscans on the nature of God, humanity, and the rest of nature. This very engaging chapter highlighted contributions originating with Plato and Aristotle, continuing through John Duns Scotus' response to Thomist thought (Thomas Aquinas), and tying in to the contrasts between the Paris and Oxford universities. Table 2.1 (81) provides a neatly ordered binary sorting of philosophical and theological positions on issues like "epistemic certainty" and the nature of the "God-human relationship". To Thomists, the mechanical explanations of life start one onto a

“slippery semantic slope to saying that science finishes the work of theology because God turns out to be a super-mechanic whose *modus operandi* we come to fathom by studying the mechanics of nature – and extending and improving it through our technology” (107). This urgent taboo against mixing – whether of ideas, people, or technologies – is maintained, Fuller asserts, by controlling the way these issues are discussed. But it is also through communication that we can more effectively address the real substance of controversial issues like human enhancement. Rather than weakly appealing to some essentialist human nature, Fuller advises that principled objections to enhancement ought to focus on the magnification of inequalities in our society resulting from unchecked development (109).

The third chapter looks at the interactions between policy and converging technologies (CT): “A Policy Blueprint for Humanity 2.0: The Converging Technologies Agenda”. The idea of convergence emphasizes the trend of multiple technologies increasing in shared focus as well as in shared interactions while not necessarily being destined to meet at a specific point (124). Technologies like nanotechnology, biotechnology and information technology are discussed in both positive and negative feedback interactions within, throughout, and traversing policy in both the United States and the European Union. Additionally, their transgression of traditional disciplinary boundaries strain attempts to keep expertise separated (127) and promote the development of neologisms like Nikolas Rose’s “biological citizenship” and “neurochemical self” (131). Of particular interest is the insight surrounding artificial life, that technologies have moved from *simulating* to *instantiating* life (127) and that functional definitions of life have granted digital organisms authority as demonstrative examples of organic life (such as the Avida simulation in *Kitzmiller v. Dover*) (128). The end of the chapter revisits the limitations of objections to transhumanist-style technological enhancement that are based in violation of an essential “human being” and muses on the potential inequities of access and protection that would arise in today’s policy climate (161).

Chapter 4, “A Theology 2.0 for Humanity 2.0: Thinking Outside the Neo-Darwinian Box”, is the most controversial and bold chapter of the work, as the leap made there relies on several dicey assumptions. This chapter’s narrative flowed through discussions of philosophers of science serving as neo-Darwinian apologists to uses of Intelligent Design as a heuristic for discovery, and from applications of theology to promote science education to Teilhard de Chardin’s science-friendly “Theology 2.0”. Within this chapter lies the ambitious proposal by the author:

Here we move into what may be the most controversial aspect of my position, namely, that the active promotion of a certain broadly Abrahamic theological perspective is necessary to motivate students to undertake lives in science and to support those who decide to do so (180).

There are two difficulties with this proposal: first, there are distinct historical and cultural differences between the UK and the US, and second, the presumption of Abrahamic theology as the best tradition to use is ignorant of benefits offered by other religions. To support his proposal, the author cites higher performance by Christian students in the UK, some of whom were in religious schools, on science exams (180). However, as is noted by the author, there are numerous public-funded Christian schools in the UK because there is not such a distinct

separation made between church and state as in the United States. This difference in culture and history promises more complex challenges to applying any unitary solution or even problem definition to both countries, much less to the rest of Europe. The other shortcoming of a proposal to leverage Christian theology in science education is its narrow focus on Abrahamic tradition rather than an expansion to other theological realms. Openly identifying as a “Occidentalist” (a more politically correct word for “Eurocentrist”?), the author defends his Western, Abrahamic focus: “It is very unlikely that science would have taken the course it has – and valued[sic] as much as it has been – were it not for the Abrahamic belief that humans were created in the image of God” (183). While the historical foundations of modern science are certainly grounded in Abrahamic thought, in today’s cosmopolitan world it seems appropriate to build humanity’s (and science’s) future on a recognition of the value of Eastern collaborative philosophies in promoting integration and hybridization of thought. It is a little difficult to justify rejection of an essential humanity when a particular essential concept of a type of theology is championed. Despite these two concerns, the proposal is certainly provocative and insightful for its forays into territory often deemed strictly “off-limits.”

The final chapter, “Conclusion: In Search of Humanity 2.0’s Moral Horizon”, discusses the past, present, and future of suffering in light of early theological and modern civic justifications. Additionally, the author justifies his Occidentalism by pointing to a 19th century distinction of Western and Eastern religions as based on prophecy and wisdom, respectively (236). Therefore, it is because of the forward-looking character of Western Abrahamic religious tradition that we must look to it for tomorrow’s answers. Yet, when considering a secondary framing of this binary, that “the prophetic religions live ever in anticipation, the wisdom religions ever in adaptation” (237), one might wonder if more adaptation and a little less eagerness to progress might have avoided some of the troubles that plague us today. By suggesting that Western religious tradition can be revitalized for a new age, but that Eastern religious thought is immutably stuck, the author could be seen as relying on a familiar tool for a difficult task despite the ill fit. After all, the work concludes with the suggestion that “‘suffering smart’ may be less about extending your current mode of existence that exchanging it for one with a greater chance of achieving your aims more effectively. In that respect, the moral horizons of Humanity 2.0 are about defining what is in need of continual resurrection” (247).

Grounded in a palpable awareness of the integral relationship of theology to human culture and thought while gazing ahead to a future iterated yet (hopefully) matured, *Humanity 2.0* presents an interesting narrative of conflict, analysis, and (anticipated) synthesis. Buried within are also insights regarding Fuller’s participation in *Kitzmiller v. Dover*, which would be of interest to anyone wishing for more depth in the often over-simplified “Intelligent Design vs. Evolution” debate. Throughout, Steve Fuller certainly answers his favorite question: “Where are the politics?” Although perhaps overreaching in what it attempts to do, this work certainly will provoke discussion and re-evaluation of assumptions of science, theology, morality, the social world, and of humanity – past, present, and future.

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