Artificial Intelligence and Apocalypticism

with Robert M. Geraci and Simon Robinson, "Introduction to the Symposium on Artificial Intelligence and Apocalypticism"; Beth Singler, "Existential Hope and Existential Despair in AI Apocalypticism and Transhumanism"; Michael Morelli, "The Athenian Altar, the Amazonian Chatbot: A Pauline Reading of Artificial Intelligence and Apocalyptic Ends"; Victoria Lorrimar, "Mind Uploading and Embodied Cognition: A Theological Response"; and Syed Mustafa Ali, "'White Crisis' and/as 'Existential Risk,' or the Entangled Apocalypticism of Artificial Intelligence."

INTRODUCTION TO THE SYMPOSIUM ON ARTIFICIAL INTELLIGENCE AND APOCALYPTICISM

by Robert M. Geraci and Simon Robinson

Abstract. This is an introduction to the Symposium on Artificial Intelligence and Apocalypticism, which resulted from a conference hosted by the Centre for the Critical Study of Apocalyptic and Millenarian Movements (CenSAMM) in Bedford, UK. The introduction provides a brief history of scholarly work in the intersections of apocalypticism and artificial intelligence and of the emergence of CenSAMM from a millenarian religious community, the Panacea Society. It concludes by pointing toward the contributions of the symposium's essays.

Keywords: Apocalyptic; artificial intelligence; millenarianism; Panacea Society

Increasing media attention has brought considerable notoriety to the apocalyptic tendencies latent in how pop science and mainstream entertainment portray artificial intelligence (AI) (e.g., Sulleyman 2017; Holley 2018). Often, popular media interrogation of AI retains the shrill tone characteristic of reports about conflict between religion and science, but the apocalyptic questions complicate those simplistic perspectives. After all, if entrepreneurs, scientists, and engineers advocate a transcendent future of cyborgs and immortal minds uploaded into machines, then they have engaged in religious work. It might produce conflict with other religious

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workers, but only as competitors in the religious space, not as disenchanters of modernity. In the late twentieth century, scientists and engineers did, indeed, produce a new integration of robotics, AI, and apocalyptic religious ideas that has been labeled Apocalyptic AI by one of this introduction's authors. That movement has become culturally pervasive, and so it remains vital to the study of religion, science, and technology.

Alongside contributions from science fiction,[1] popularizers in robotics and AI produced the Apocalyptic AI movement in the late twentieth century by providing it with a scientific gloss. There were early claims about the potential for greatly improved human capacity through technology (Bush 1945), an "intelligence explosion" in AI (Good 1966), even the possibility of a technological Singularity where progress occurred exponentially (Ulam 1958). But it was the seminal work of roboticist Hans Moravec (1978, 1988, 1999) and the popularization of that work by Ray Kurzweil (1999, 2005), which provided the principal direction for Apocalyptic AI thinking. It was these two, with side contributions from other pop science authors,[2] who articulated the main themes: computer hardware will progress at exponential rates, resulting in human-equivalent AI followed swiftly by transcendently intelligent AI that we can match only through technologies merging human intelligence with the advantages of machine substrates. Moravec and Kurzweil thus position themselves at the vanguard of a posthuman future, one where we have replaced our human bodies with machine bodies that maximize our intellectual capabilities and make us competitive with and functionally equivalent to the never-human AIs. The posthuman society will then sweep across the universe in what Moravec calls a "Mind Fire" (1999, 167) and Kurzweil describes as the universe "waking up" (2005, 375).

Early in the twenty-first century, authors in this journal noted intersections between robotics/AI and religion. Anne Kull (2002) argued that theological consideration of human existence required attention to its cyborg nature. Antje Jackelén (2002) buttressed Kull's position, describing the potential for a *technosapiens* whose future mirrored eschatological religious promises. Based on her work at the Massachusetts Institute of Technology, Anne Foerst (1998, 2004) became the first theologian to systematically argue for the religious advantages of human beings building relationships with intelligent machines. During this time, Noreen Herzfeld (2002a, 2002b) noted that while digital technologies might have advantages that correspond to the promises of traditional religions, the advocates of such posthumanity were at odds with most promises of Christian transcendence. Her concerns have since been echoed by other influential figures in the study of religion and science, such as Hava Tirosh-Samuelson (2012, 2018), who critiques posthuman/transhuman promises from a Jewish perspective.

In essays (Geraci 2006, 2008) and a book (Geraci 2010), one of this introduction's authors articulated how the pop science claims of Moravec

and Kurzweil borrow their structure from Jewish and Christian apocalypticism (2 Baruch, 4 Ezra, 1 Corinthians, Revelation, etc.). Drawing directly on apocalyptic texts and the scholarly research on them, he describes Apocalyptic AI as the belief in (1) a dualistic universe of mind/body with accompanying dichotomies of machine/biology and software/hardware in which (2) Moravec and others experience alienation due to the failure of biological minds—the slow process of learning and the ultimate mortality of our bodies that (3) will be overcome in a glorious new world of computation—the Mind Fire—occupied by AIs and (4) human beings that have transcended their mortal condition by uploading their minds into machines. Even the two-stage apocalyptic vision of history, such as the thousand-year reign of Jesus on Earth before its final destruction and the creation of New Jerusalem, shows obvious influence upon the belief that technology will produce a paradise on Earth prior to the radical overthrow of biological life (Geraci 2010, 31).

An apocalypse is, properly speaking, a textual account of divine revelation or unveiling; popularly, however, the term apocalypse speaks to the end of the world through divine action, eco-cataclysm, nuclear war, or other causes. It is within that eschatological horizon—and the potential for human extinction—that many now interpret developments in robotics and AI. After all, the ultimate fate of humankind will be up for grabs if machines become so powerful that they think a thousand times faster than human beings.

The radical transformations promised by experts in AI and robotics were certainly not the only apocalyptic movement of modernity, many of which were more traditionally religious. In 2018, a group of scholars gathered in the home of such a community to discuss digital technologies on land alleged to be the original site of the Garden of Eden. To understand how a fascinating conference on "Artificial Intelligence and the Apocalypse" came to be held on the lawns of a Victorian house in an unremarkable market town in England, we need a quick journey back in time: it is a journey of connections and of how apocalyptic thinking endures in a confusing world.

In 2012, Ruth Kline—the last surviving member of the millenarian and apocalyptic Panacea Society—died. She had lived most of her life waiting for the return of Jesus Christ and the seventy or so Panaceans who had preceded her and were (it was thought by Kline) patiently waiting on the planet Uranus. Kline believed that together with Jesus they would all live forever in the Garden of Eden in its original location: Bedford, England.

The Panacea Society had its beginnings in 1919, in the aftermath of a war that introduced the modern world in all of its apocalyptic potential. Mabel Barltrop and three acolytes declared Mabel to be "Octavia," the eighth prophet of the "visitation" and the divine daughter of God. The Society must have seemed attractive to a certain kind of person living in the 1920s

and 1930s. They must have felt that theirs were broken and uncertain times and thus they were seeking solutions. They were almost exclusively wealthy single women and widows who bought houses in Bedford to be close to Octavia and to the Garden of Eden. This was a very English movement and a class structure was strictly adhered to (i.e., if you did not have money and a position in society you could still join, but only as a servant).

Barltrop and her followers began a media campaign aimed at getting the Bishops of England to gather in Bedford to open a sealed box of prophetic writings composed by Joanna Southcott (1750–1814). Barltrop discovered Southcott's writings a century after the latter's death and her own followers believed her to be the incarnated messianic child of Southcott, who had died alleging she was with child (a pregnancy supposedly made possible by god, not man) but whom an autopsy revealed to be not pregnant (see Allan 2011, 646; Lockhart 2014, 158–59). The Panaceans believed that Southcott's secrets of eternal peace and contentment were contained within the box. The male bishops ignored the pleas and likely held this female-led religious movement in disdain. The box remains unopened. The Panaceans' other work was directed toward an actual panacea: a healing cure for all ills. The cure consisted of drinking ordinary tap water infused with a linen square that had received Octavia's divine breath. Thousands of people from around the world requested and received the squares at no cost, and with only the expectation that they report back. A vast archive of these correspondences is held by the Panacea Charitable Trust; using them, Lockhart (2014) explores England's early twentieth century economy of religious communities.

With Ruth Kline's death, the organization ceased to be a religious society and became the Panacea Charitable Trust. Its considerable assets of property and money—accumulated over the years from the estates of the deceased Panaceans—now augment charitable work in and around Bedford. The Panacea Museum was created to tell the story of the Society, Joanna Southcott, and the visitation. In addition, in 2015 it was decided that a Centre for the Critical Study of Apocalyptic and Millenarian Movements (CenSAMM) should be established. One of the present authors had the honor of being selected as Project Director to create the center. There was no consensus among the trustees around what the center should be and what it would do, so the director set about creating an enterprise model. Gathering together Panacea trustees and interested outsiders, Robinson and his colleagues developed the enterprise model canvas—a strategic management and lean startup template—identifying the activities, resources, partners, and so on, which were needed to build the foundations for future success.

Success would mean that CenSAMM should function as more than just an academic exercise outputting dry academic concepts in impenetrable language, but instead have a broader appeal. Contemporary fears and

issues were to be brought under the spotlight. It was felt that a good way to tackle these issues would be to produce calls for articles for debates and conferences—anyone could respond—and at the same time to invite luminaries to share their knowledge in keynote addresses on the same stage as PhD students, teachers, artists—anyone who had something interesting to say on the subject. It was felt important that these events should be held within the Panacea "campus" and Robinson decided that a marquee in the Garden of Eden would be an evocative, unusual, and fun experience for speakers and audience. The CenSAMM board recognized that Bedford was not the best place to draw people (even though it is a mere 35 minutes from London, they have been correct in the assumption so far) so events have been professionally filmed and made available both live and as archived material via the Internet.[3] For those who did attend from the local community and, occasionally, from further afield—typically audiences of thirty or forty—there was plenty of opportunity to engage with presenters, ask questions, and join in with the debate.

The conferences were an attempt to illuminate and explain—from an apocalyptic and millenarian perspective—the issues of the day, such as climate change and radical religious violence, as well as historical events that had changed the course of history, such as the Reformation. There was, however, one issue that seemed to resonate the most. It was the unknown and misunderstood; entangled with scientific ethics and religion; it was hope and fear at the same time. And it was inevitable. It was, of course, the rise of AI; indeed, the debates about AI are littered with the language of Revelation. This was the connection: from a woman who believed herself to be the daughter of God to a marquee one hundred years later standing on a sunny lawn upon which she had once stood. But the apocalypse in question is a very different one than anything she would have imagined: will it spell the violent end of humans as some predict or result in humans becoming like gods as believed by others?

Among the contributions to the AI and Apocalypse conference, held on April 5–6, 2018, we include four essays in this symposium. Each of the four authors brings a fresh voice to the conversation, and each provides a new theoretical contribution to the broader study of religion, science, and technology. Beth Singler, who delivered the second day's keynote lecture (current co-author Geraci was responsible for the first), argues that anxiety stands at the root of both existential hope and existential fear in apocalyptic visions of AI. Following her essay, Michael Morelli creatively juxtaposes Paul in the Athenian agora with our contemporary desire to comprehend AI software agents. He reveals the overlap of religion and technology as we contemplate the ends to which we put the latter, and the importance of acknowledging those ends rather than obfuscating them. Victoria Lorrimar's essay adds to this theological reckoning of the ends to which technology might be put by engaging the question of embodiment

that circulates within Apocalyptic AI reflections. While pointing out the importance of embodied cognition for such considerations, she simultaneously encourages theological reflection on embodied cognition. She argues that theologians must take careful consideration of advances in AI and cognition, as these may help construct better understandings of the human condition and productive questions for theology. We finish with Syed Mustafa Ali's critique of Geraci's work on Apocalyptic AI. In his powerful remonstrance over the limitations of Geraci's analysis—that it misses the history and politics of race and colonialism—Ali makes a dramatic contribution to the study of religion, science, and technology more generally: he reveals the vital importance of critical race theory to our field.

In sum, the four essays here show the fruitful nature of CenSAMM's enterprise. They provide meaningful insights into the intersection of apocalyptic thinking and AI, and they represent new directions forward in the study of religion, science, and technology. We could not be more pleased with their contribution to the legacy of the Panacea Society.

Notes

[Correction added on 7 March 2019, after first online publication: The Notes section has been updated.]

1.   Most of the key figures in science fiction literature, though not film, are discussed in Geraci (2011). Note that in his early description of ultra-intelligent machines, Irving Good advises that we take science fiction seriously (1966, 33).

2.   For example, Vinge (1993) on the Singularity, Warwick on the threat of robotics ([1997] 2004) and on cyborgs (2003), Crevier (1993) and de Garis (2005) on AI, and Drexler (1987) on nanotechnology.

3.   Events can be watched online at https://censamm.org/conferences.

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