Science Fiction's Imagined Technologies

with Emanuelle Burton, "The Nuts and Bolts of Transformation: Science Fiction's Imagined Technologies and the Civic Imagination"; Michelle A. Marvin, "Memory Altering Technologies and the Capacity to Forgive: Westworld *and Volf in Dialogue"; Nathan Schradle, "In Algorithms We Trust: Magical Thinking, Superintelligent AI, and Quantum Computing"; and Zhange Ni, "Reimagining Daoist Alchemy, Decolonizing Transhumanism: The Fantasy of Immortality Cultivation in Twenty-First Century China"*

THE NUTS AND BOLTS OF TRANSFORMATION: SCIENCE FICTION'S IMAGINED TECHNOLOGIES AND THE CIVIC IMAGINATION

by Emanuelle Burton

Abstract. This is an introduction to the thematic section on Science Fiction's Imagined Technologies, which includes three articles that were presented at the annual meeting of the American Academy of Religion (AAR) in San Diego, CA on November 24, 2019.

Keywords: artificial intelligence; civic imagination; imagination; magic; memory; political change; science fiction; transhumanism

In this thematic section, we present a selection of the articles delivered at the November 2019 American Academy of Religion (AAR) conference, as part of a panel cosponsored by *Zygon: Journal of Religion and Science* and by two of AAR's program units, the Religion and Science Fiction unit and the Religion, Science and Technology unit. The panel, entitled "The Nuts and Bolts of Transformation: Science Fiction's Imagined Technologies and the Civic Imagination," invited participants to explore how particular works or movements in science fiction (broadly conceived) model potential versions of our sociotechnical future and provide the thinking ground for critical reflection on the role of various technologies in the present. In addition to the articles that follow, the panel included contributions from Mladen Turk on techno-scientific mythopoesis in Grant Morrison's *The Invisibles* and from Ytasha Womack on the civic imagination of the Afrofuturist tradition, as well as a recorded response from noted media scholar Henry Jenkins.

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Each of the articles included here explores a different site of entanglement between a technologically-determined imagined future and a theological, or at least extra-natural, dimension of lived human experience that becomes accessible under those particular technological determinations. Michelle Marvin's study of memory-altering technologies in *Westworld* gives a reading of the show's own portrayal of the interrelationship between trauma and the capacity to remember, then puts that reading in dialogue with Miroslav Volf's theological work on memory and reconciliation, to offer both an assessment of the personal and social costs implicit in memory alteration, and a study of the challenges and responsibilities of remembering rightly. Nathan Schradle focuses not on works that self-represent as science fiction, but rather on the near-future imaginaries about artificial intelligence (AI) promulgated by the subject's popularly acclaimed visionaries. Schradle offers both a history of AI and quantum computing and a genealogy of the academic concept of magic to argue that the latter is a necessary framework for understanding the mythmaking that surrounds the former. Zhange Ni offers an analysis of immortality cultivation fiction, an emergent and highly popular genre of fantasy fiction, and demonstrates how this genre takes up the category of transhumanism, with its debts to Western metaphysics, and reconceptualizes it in the sphere of the Daoist alchemical tradition. In so doing, she interrogates both the way in which these novels negotiate the legacy of colonialist conceptions of subjectivity and the way in which they reincorporate beliefs and practices that have been classified as magic, and denigrated or suppressed on those grounds.

It seems worth noting that two of these three articles invoke magic as an analytic category that is necessary for understanding the status of science and technology in their respective studies, particularly in light of the role that science fiction plays in shaping broader cultural understandings of both future and present. First, there is the plain fact that science fiction is often classified in bookstores (both tangible and virtual) and in the minds of culture critics as a close cousin to fantasy, where magic operates alongside (or instead of) technology as the thing that expands and extends the human capacity for action, and while literary scholars are divided on the question of whether the generic differences between science fiction and fantasy are essential to understanding the works that lay claim to these genres, the array of articles here suggests that it is more productive to adopt a big-tent approach, and to include works of magic in our consideration of possible technological futures. Another reason this seems notable is the famous axiom of science fiction author Arthur C. Clarke, cited in Schradle's article, that "any sufficiently advanced technology is indistinguishable from magic," and while the distinction clearly holds power in both their spheres of inquiry, both Schradle and Zhange underscore that a sharply drawn dichotomization of magic and technology is not adequate to the task of rigorous description. The second reason is the role that

magic plays in the civic imagination, which Jenkins defines as "the means by which members of a given culture are able to imagine their own shared futures." In his response, Jenkins cites multiple examples of magic in popular culture—from the wizards of Harry Potter to "black girl magic"—as a vehicle for imagining a path to both individual transformation and social change. It is perhaps because fantasy literature does not appear to lay claim to our own sociotechnical present, even indirectly, that works of fantasy are more readily legible as arguments about different possible civic futures than are works which might plausibly be read as making claims about technological possibility. But as all three of the following articles suggest, each in their own way, exploring the technological determinations of a possible future always creates the conditions for imagining or reimagining human life and its significance under those conditions, thus offering us resources for greater understanding and for transformation.