Science Fictions Imagined Technologies

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IN ALGORITHMS WE TRUST: MAGICAL THINKING, SUPERINTELLIGENT AI AND QUANTUM COMPUTING

by Nathan Schradle

Abstract. This article analyzes current attitudes toward artificial intelligence (AI) and quantum computing and argues that they rep resent a modernday form of magical thinking. It proposes that AI and quantum computing are thus excellent examples of the ways that traditional distinctions between religion, science, and magic fail to account for the vibrancy and energy that surround modern technologies.

Keywords: artificial intelligence; magic; quantum computing; religion and science; technology

The eschatological enthusiasm that surrounds artificial intelligence (AI) in the twentyfirst century is often headline grabbing. Silicon Valley en trepreneur Anthony Lewandoskis Way of the Future Church, officially registered with the IRS as a religious organization, is a prime example. Lewandoski claims to be devoted to, the realization, acceptance, and wor ship of a Godhead based on Artificial Intelligence (AI) developed through computer hardware and software (Harris 2017). Though Lewandoskis church has faded from the headlines since its creation, similar eschatolog ical enthusiasm is invested in AI by other wealthy tech elites like futurist and Google Director of Engineering Ray Kurzweil, who asserts that the relatively imminent arrival of the Singularity, a single global networked consciousness composed of all individual organic and carbonbased in telligences, will be tantamount to the creation of a God and signal the end of human suffering (Kurzweil 1999, 2005, 2012). The undeniably

religious idiom employed by many influential figures at big tech firms is so prevalent that it has long since caught the eye of scholars seeking to demonstrate the affinity between such utopian technological prognosti cations and centuriesold Christian millenarian movements and monastic traditions (Noble 1999; Geraci 2010). Erik Davis, for one, insists on the spiritual significance of such endeavors, writing that regardless of how secular this ultramodern condition appears, the velocity and mutability of the times invokes a certain supernatural quality that must be seen, at least in part, through the lens of religious thought (Davis 2004, 4).

In this essay, I take up Daviss injunction to examine the enthusiasm that surrounds AI and quantum computing through the lens of religious thought, but in a way that I have not encountered in scholarship on the issue. Specifically, I propose that popular scientific thinking about AI and other algorithmically afforded technologies (most recently quantum com puting) represents a modern version of what religious studies scholars have long associated with magic and magical thinking. I am wary that equating AI with magic may seem facile, given that Arthur C. Clarkes famous third law stating that any sufficiently advanced technology is indistinguishable from magic has become a wellknown, almost cliched reference point in this kind of work (Clarke [1962] 2000, 36). Still, the following analysis opens creative pathways for reconsidering what scholars have made of the intersection of magic, religion, and science in modernity, especially as it pertains to the theoretical and conceptual delineations made between the three spheres of thought.

Of course, the boundaries between religion, science, and magic are not

the only ones being blurred in contemporary society. Especially when it comes to prognostications about the future of technology, the easy dis tinctions between fact and fiction start to similarly collapse. This is espe cially true in the contemporary mediasphere, where movies, books, and television shows are constantly discussed and dissected by critics and fans. As one example, a simple Google search for why is everyone so obsessed with Zombies will turn up endless hits for online articles published on be half of entities ranging in seriousness and political leaning from Mashable to NPR and the Federalist analyzing the sheer volume of zombiebased entertainment and tying it to deeply serious concerns about the state of politics, climate change, and other largescale threats that are percolating in the contemporary zeitgeist. The marketing for movies and television shows often plays on this modern development. For example, the creator of the dystopian technology anthology television series Black Mirror ini tially promoted his now popular show as a set of oneoff stories about, the way we live now and the way we might be living in 10 minutes time if were clumsy (Brooker 2011). MIT Technology Review publishes stories about the impending climate disaster by science fiction authors like Paolo Bacigalupi alongside its more straightforward reportage about

technological innovations meant to combat climate change (Bacigalupi 2019). While the idea that art and works of fiction might have some thing to say about the real world is certainly not a new concept or only true of the twentyfirst century, it is undeniable that modern mass me dia entertainment such as television is more available to a broader pub lic and more intensely analyzed by a larger mass of critics and schol ars than ever before. It is also undeniable that AI has currently cap tured the cultural imagination to such an extent that it appears in nearly every form of media constantly, even relentlessly. Focusing on the current cultural enthusiasm for AI opens up a means of examin ing the blurring boundaries between fiction and fact and the produc tion of a collaborative fictive disposition toward AI, quantum com puting, and the many technologies that announce, in the apocryphal words of acclaimed cyberpunk author William Gibson, the future is already here.

This fictive disposition collapses boundaries between fact and fiction,

reason and imagination, procedure and creativity. By exploring the notion of cuttingedge technology as magical, I hope to demonstrate how pub lic perceptions of the brave new world we are creating through AI and other innovations chafe against longstanding conceptions of the relation ship between modernity and rationality in spite of the pseudoscientific vernacular in which they are couched.

MaGic and Modernity: A Brief GenealoGy from ReliGioUs

StUdies

The myth of a disenchanted modernity was based not on banishment of religion from the world but rather of magic. Religion was certainly thought more and more to be a private matter of ones personal belief, but magic and belief in magic were outright expelled from what was supposed to be the modern worldview. Many scholars have pointed out that Max Webers famous statement about the disenchantment of the world is probably more accurately translated from the original German as the demagicing of the world. As Jason JosephsonStorm (2017, 4) writes, if there is one thing weve been taught to take for granted, it is that the contemporary, industrial, capitalist societies of Western Europe and North America have lost their magic, and that it is this absence that makes them modern. JosephsonStorm is not alone in this analysis. Randall Styers has previ ously argued that, one common feature throughout these debates [about modernity] is that magic is an archetypically nonmodern phenomenon. Magic has offered scholars and social theorists a foil for modern notions of religion and science and, more broadly, a foil for modernity itself (Styers 2004, 8).

This line of argument is compelling. In the decades leading up to We bers famous declaration, scholars in the nascent social sciences seeking to delineate between religion and science often saved their most sneering criticism for what they considered to be magic or magical thinking. In the intellectualist tradition, early anthropologists Edward B. Tylor (1871) and James G. Frazer ([1900] 1951) considered magic to be a primitive mode of understanding, one that was superseded by religious belief and ultimately by scientific knowledge as cultures evolved into more and more complex forms. The evolutionist model these thinkers employed has ob viously long since been discredited, but I want to focus on Frazers articu lation for a moment, since we will return to it briefly in the next section. Magic, Frazer argued, was based on the magicians faulty assumption that things act on each other at a distance through a secret sympathy, one that was typically referred to as an invisible ether (Frazer [1900] 1951, 54). Of course, in Fraziers view such talk of secret sympathies gave way to the more sophisticated explanations of theology, and then ultimately to scientific description and explanation.