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By: Andrew Davis

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Abstract

This essay utilizes a social constructivist understanding of technology to critically interrogate dominant futurist and corporate narratives concerning artificial intelligence (AI). Through a consideration of the Singularity as the guiding metaphysical desire behind the technocratic push to general AI, it demonstrates that the development of artificial intelligence operates as a mechanism of corporate sovereignty—the construction and assertion of the legal form of the business corporation as the locus of social authority.

Comprised as it is by the confluence of corporate and popular narratives, public discourse concerning artificial intelligence (AI) tends to express the very binary that characterizes public discourse about technological progress writ large.¹ On the one hand, corporate discourse obsesses over the newness of the technologies themselves, the greater efficiency and freedom they bring to work and home life, and the general positive effects they have on societies. On the other, popular culture abounds with fantasies of future societies in which every aspect of human life is controlled by some form of authoritarian technocracy.² Despite their seeming opposition, both the technological determinism—the belief that technology (as the primary driver of social change) is an autonomous evolutionary force beyond human control.

Nowhere is this perspective more evident than in corporate/futurist narratives concerning the development of general AI, which tend to focus on the liberatory potential of AI technologies. Considerations of the potentially problematic development implications of their remain relatively marginalized to popular culture, certain corners of the academy, or scattered public figures such as Elon Musk and the late Stephen Hawking. While significant, this debate concerning the potential development of AI is also significantly problematic, based as it is on a highly speculative teleological binary in which both sides (with exceptions, of course) generally tend to presume the inevitability of general AI, and

ascribe to it a divine status as evolving independently of political-economic, cultural and ideological human agendas, agents and actions. What I am concerned with here is not the development of artificial intelligence per se, but rather the corporate/futurist narrative that frames an outsized share of public discourse concerning that development.

Instead of engaging in the debate between utopian and dystopian predictions, this essay critically interrogates the dominant futurist/corporate narrative concerning the present and future of AI by utilizing a social constructivist understanding of technological progress. This perspective assumes that technologies are always extensions of human capabilities; they are made exclusively by human activity and their development is always driven by human (i.e., economic, political, personal, and cultural) agendas. Technologies are always 'being looked for and developed with certain purposes and practices already in mind'and must be analyzed within the context of 'known social needs. purposes and practices'(Williams, 2003: 7). As such, I argue that AI technologies must be understood as socio-technical systems inserted into and operating within a larger context of power relations, not simply as innovations in an evolutionary process.

As noted by Günter Ropohl, the concept of the socio-technical system was initially established to account for the reciprocal relationships between humans and their technologies within the context of 'the technical and social conditions of work'in the mid-20th century (1999: 59). Since its emergence in the late 1950s, the concept has been expanded beyond its original concern with the workplace to concerns of technology and society in general. Socio-technical systems represent the convergence of social structure and technological functionthe integration of technological objects, processes and apparatuses into the pre-existing organization of social relations. This integration is achieved 'partly [by substituting] given human functions, and partly [by adding] novel acting functions, not feasible by humans' (Ropohl, 1999: 69). As such, socio-technical systems are active, adaptive, goal-oriented, hierarchical, and institutional-particularly as they enable the goals and agendas of the predominant economic system, and the political and technocratic actors who direct the functioning of that system. In this way, the development of AI as a sociotechnical system serves in part to (re)organize and make more efficient the daily functioning of social relations through the

technological objects that are embedded with forms of AI (e.g., smartphones, web searches, social media platforms). As with other socio-technical systems, however, mere integration into existing social relations for the purposes of efficiency is not the ultimate purpose of general AI; such integration (and the increased reliance of humans on the various forms of narrow AI its development entails) serve to further enmesh social life within the context of power relations most favorable to advanced corporate capital.

These considerations represent the rational (i.e., the 'immediate and pragmatic") functions of AI as a socio-technical system 'built upon the accumulation of [technological] processes in [the] material world'(Rivers, 2005: 551). But the relationship between humans and technology is not purely rational. The choices humans make (especially in regard to technology) are often unconscious and irrational (Mumford, 1934). As I demonstrate in what follows, much of what we take to be rational in the development of general AI is based on certain unacknowledged (and not necessarily rational) assumptions of technocrats concerning the nature of intelligence, the place and scope of human power, and the organization of social relations within corporate capital. The purpose of this critical interrogation is to: 1) bring light to these unacknowledged assumptions; 2) demystify the economic, political and metaphysical agendas that are hidden within the ostensibly objective futurist justification for general AI; and 3) think through the socio-technical implications of these agendas as they relate to technocratic corporate power in contemporary American society.

In this essay I provide support for my central argument that the corporate development of general AI and the corporate/futurist narratives used to justify such development serve as a mechanism for the construction and assertion of the sovereignty of the legal form of the business corporation as ultimate authority over (and arbiter of) the organization of social life. To support such an assertion, my argument is as follows. First, I present a particular interpretation of corporate/futurist discourse concerning the development of AI so as to expose what I consider to be the metaphysical principle of desire (i.e., the Singularity) that actually guides such development. Next, I provide a detailed examination of the Singularity as the irrational foundation of the ostensibly rational political, economic and technological agendas of the

corporate technocracy involved in directing the present and future of AI as a socio-technical system. I then detour through the concept of corporate sovereignty in order to demystify futurist obsession with the Singularity and provide a theoretical basis for my claims concerning AI as a mechanism of such sovereignty. This essay concludes by merging my discussions of AI and corporate sovereignty so as to demonstrate how the Singularity might ultimately serve to reshape the organization of social relations according to a system of corporate power unaccountable to existing methods and processes of democratic governance.

As noted above, I have organized my critique around a central concept-that of 'the Singularity' (i.e., the total merger of human consciousness with various forms of technology in order to ensure that humans remain relevant beyond the point when general AI surpasses human intelligence). A critical examination of the Singularity exposes the metaphysical desire for immortality underlying the corporate obsession with general AI. Too often, the discourse surrounding AI has been dominated by futurists such as Ray Kurzweil, and corporate executives including Sergey Brin and Peter Theil, for whom the Singularity appears to represent an event horizon of salvation from the inevitability of human mortality. This desire obfuscates the personal and political-economic agendas that actually drive the corporate development of AI. Ultimately, futurist obsession with the Singularity obscures the fact that general AI serves as a mechanism of corporate sovereigntythe assertion of the legal form of the business corporation (guided by the secular eschatology of billionaire technocrats) as the ultimate source of political and economic authority, as well as the locus of control for human societies. But before considering this emergent form of power, we must first consider the material and discursive realities of AI that undergird dominant public (mis)understandings of the issue.³

The Search for (a Reasonable Discussion about) Intelligent Life

On a basic level, *general* AI refers to the creation of a 'selfimproving machine that will autonomously find design algorithms for all [human] tasks'(Aleksandar, 2012: 10), or (in layperson's terms) the mirroring in computer systems the capabilities of the human brain to create new abilities from old information. General AI, which (as yet) does not exist, is distinct from current forms of *narrow* AI (i.e., task-specific forms of intelligent machines that display neither general cognitive abilities beyond the data-recall necessary for their programmed tasks, nor language understanding, autonomous forms of self-improvement completely free from human programming and intervention, or anything resembling actual consciousness). While this distinction is of utmost importance to critically interrogating cultural narratives regarding AI, it is almost entirely ignored in the popular, corporate and futurist discourses that dominate these narratives. Ultimately, the conflation of these distinct forms of AI in corporate/futurist discourse plays into techno-determinist obfuscations of the human agendas at work in the social construction of AI as material technology and cultural object.⁴

For companies like DeepMind (now a subsidiary of Alphabet, Inc.—Google's parent corporation), futurists such as Kurzweil, and corporate executives including Brin and Thiel, general AI looms as a Holy Grail of sorts-a fetish object of spiritual devotion that promises to deliver the faithful from the all-toohuman condition of toil-until-death. To be fair, technological advances of the past few decades have made the development of general AI (and, consequently, the ushering in of the Singularity) a viable yet still distant and speculative possibility: a possibility, not a probability. Necessary (though still thoroughly inadequate) strides have been made in algorithmic computing, semantic systems, biomedical technology, automation, information processing, genetic engineering, narrow AI, brain emulation, and networked computing systems. Kurzweil (who, at the time of this writing, is the Director of Engineering at Google) predicted that 'we will have reverse engineered the entire [human] brain and nanobots will be operating our consciousness'by the 2020s or '30s (Baker, 2013: 37). In the vision of corporate futurists, these nanobots will allow us 'to connect to the cloud, allowing us to send emails and photos directly to the brain and to back up our thoughts and memories' (Miles, 2015: 24). This would also involve the rerouting of sensory data in the brain and replacing it with virtual content (Rose, 2005). Facebook is reportedly working on some form of 'tech-mediated telepathy'through the combination of implants and interface (Allan, 2017:11).⁵ Moreover, Kurzweil has expressed on numerous occasions that by 2040, machine intelligence will be at least a billion times

more powerful than the combined intelligence of the entire human species (Rose, 2005).

In addition to these advances in AI, Silicon Valley (with the help of academia) is also working on developing the technologies necessary to suspend and extend biological life in order to facilitate the merger of human intelligence with general AI. Bill Maris (head of Google Ventures, the investment arm of Alphabet) founded the California Life Company (Calico) in 2013 with the expressed corporate mission to 'solve' death (Naughton, 2017). Thiel has been investing heavily in cryonics in recent years through his company Halcyon Molecular (O'Connell, 2017). Dr. Hossein Rahnama of MIT's Media Lab and Ryerson University (Toronto) is working on immortality from another angle, attempting to create an augmented eternity wherein people's digital identities are immortalized, enabling us to communicate with the dead through algorithms (Tynan, 2016).⁶

Part of the problem in understanding the current state of AI is that breakthroughs are often reported (in both news outlets and corporate PR) in a way that prematurely extrapolates advances in a single, limited area of development to their potential function in general AI, with false (or at least hyperbolic) claims as to the autonomy of these technologies. As noted by Elish & Hwang, most of the recent advances in AI that contribute to public discourse have been in machine learning-'a specialized sub-process that can accomplish specific kinds of tasks' (2016: 10). The fact remains that none of the above-mentioned components for actualizing general AI have yet to be developed to the point where they can be said to support the predictions of futurists such as Kurzweil. As far as we know, these technologies are still not capable of performing without human operation and/or intervention, much less of selfreplicating through the automation of their design and manufacture, or of self-organizing into a holistic system (Aleksandar, 2012). Current AI systems are not designed with 'an internal model of their [own] scope of limitations' (i.e., they cannot conceive of the limits of their own abilities and therefore cannot conceive of possibilities beyond their programmed mandates) and are thus not capable of organizing new abilities to the point of being able to automate, much less self-replicate (Bundy, 2017: 41). Moreover, if general AI is supposed to surpass the functions of the human brain, it is still based on those functions, as well as human notions of intelligence. As noted by Mateescu & Elish, 'intelligence is not defined by a stable or specific set of characteristics but is instead defined differently over time and in relation to existing beliefs, attitudes, or technological capabilities' (2019: 15). Intelligence is not an objective, quantifiable phenomenon; it is socially constructed, and historically and culturally variable. Based as they are on these fundamental misassumptions, it is not surprising, then, that futurist predictions concerning general AI and the Singularity keep getting pushed back whenever their rose-tinted perceptions come face-to-face with the limits of contemporary technologies and critical analyses concerning human consciousness.

Indeed, predictions about computers matching human intelligence have been consistently put forth since the 1940s (Bostrom, 2014). The first predicted date of arrival was to be in the 1960s, with futurists reformulating the calculation for such an event within about two decades from the moments when they realized that earlier predictions proved false. At this point, the rosiest of predictions puts the arrival of the Singularity at 'around 2045' (Bundy, 2017: 40). It all seems eerily reminiscent of Harold Camping-the evangelist harbinger of doom-who, when May 21, 2011, passed by and the world had not ended as he predicted, simply reworked his 'calculations' to show that it would actually happen in October of that same year.⁷ Unless we are all suffering from the same collective hallucination, we know how that turned out. Although in different ways, both Camping and corporate futurists suffer from what Igor Aleksandar refers to as 'the "alchemy' error" in futurist logic, a fallacy 'based on the philosophy of an eventual discovery in a domain where no discovery exists' (2012: 10). The connection between futurist and apocalyptic logics indicates a shared metaphysical orientation towards human existence, however different the technological or religious implications of such logics may be. Instead of the Rapture, futurists anticipate a secular salvation that is at once corporate and technocratic. This metaphysical desire at the heart of AI is (for the purposes of my argument) best illustrated through an examination of the Singularity, which is the subject of the following section.

The Singularity

The term *singularity* originated in physics as a designation for the event-horizon of a black hole (Rose, 2005). John von Neumann adapted the term to a technological context in 1958 in order to conceptualize 'the ever-accelerating progress of technology and changes in the mode of human life, which gives the appearance of approaching some essential singularity in the history of the race beyond which human affairs, as we know them, cannot continue' (Frey, 2014: 38). The term was popularized in the early 1980s by science-fiction author Vernor Vinge, who predicted that 'the Singularity will occur when technological progress powered by self-improving artificial intelligence [...] becomes so rapid that it speeds beyond our ability to foresee or control its outcomes' (quoted in Bailey, 2013: 46). Since that time, the notion of the Singularity has been taken up by futurists-most notably Kurzweil (1990; 1999; 2005a; 2005b; 2012)---to refer to the dawning of a technological epoch in which humans transcend the limits of biology by (among other means) merging with digital computer networks. In the current context of the corporate-led development of general AI, the Singularity resonates with a sense of evolutionary inevitability concerning 'the exponential progression of information technology'with which we have been confronted since the onset of the AI paradigm in 1956 at the Dartmouth Summer Project (Liebert, 2011: 568), which brought together 'ten scientists sharing an interest in neural nets, automata theory, and the study of intelligence' (Bostrom, 2014: 5).

Put simply, the Singularity refers to the total merger of human biology and consciousness with computing and robotic technologies in order for humans to remain relevant beyond the point when general AI surpasses human intelligence (Baker, 2013). As predicted by Kurzweil, 'in the aftermath of the Singularity, intelligence, derived from its biological origins in human brains and its technological origins in human ingenuity, will begin to saturate the matter and energy in its midst. It will achieve this by reorganizing matter and energy to provide an optimal level of computation [...] to spread out from its origin on Earth' (2005a: 21). So as to not become (at best) redundant or (at worst) extinct, humans must become immortal through immersion in the Singularity's reorganization of energy and matter. This is supposed to be achieved by a combination of means: 1) the uploading of human consciousness into robots or networked computing systems; 2) the genetic engineering of future generations of humans; and 3) the implantation of nanotechnologies into the human body (Dauphin & Abell, 2010; Kapoor, 2003; Miles, 2015; O'Connell, 2017). These

methods for achieving the Singularity so desired by futurists and corporate tech executives are all intended to overcome the corporeal—to eliminate disease, decay, aging and (eventually) death itself—all while preserving intelligence.⁸ From their perspective, the emergence of the Singularity will serve to make gods of us mere mortals... some of us, anyway.

The desire for immortality is nothing new. Perhaps humankind has always sought some technological cheat when confronted with the very visceral inevitability of death. So it seems fitting to apply an ancient metaphor to the corporate/futurist preoccupation with cheating death through the Singularity. Regarding the current cultural obsession with technological progress, we have not escaped the cave. Indeed, we are so enthralled by the dance of shadows on the wall that we collectively have yet to turn around, to confront the puppeteers and demand of them 'To what purpose? For whose benefit? Who even asked you to put on this show?' Because, of course, who will be allowed to become divine (and by which criteria selected) are matters on which the likes of Kurzweil, Brin and Thiel remain silent. I will return to these questions in brief order. But before that, I would like to add some modern twists to this metaphor. The phantasmagoria on the cave walls are being produced by a billionaire boys' club of ersatz Ubermenschen who take the cave for their own private playground, view the rest of us as servant or nuisance, and mistake their own pet project for the end of history.⁹

All of this is to say that the technologies necessary for actualizing general AI and ushering in the Singularity are necessarily linked, and that is precisely the motivation behind the corporate development of artificial intelligence. For they are not linked by their roles within an evolutionary process, nor by their practical utility in service of humanity (despite the rhetoric of the futurists). They are linked by their sacramental functions in an economic swindle designed to enhance the wealth and power of billionaire technocrats beyond the limits of their corporeal existence. However ridiculous it may seem, the corporate development of general AI is the expression of a technocratic desire to actualize the afterlife in this life... and profit from it. In this way, the Singularity serves as the guiding metaphysical principle of desire that manifests in the corporate development of general AI in the contemporary moment. It underlies the attempt to construct a digital realm of immortality within which corporate executives can perpetuate the

hierarchical inequality of wealth and power particular to corporate capital, ostensibly for eternity (or at least until digital decay and bit-rot set in).

The Singularity is, moreover, the guiding socio-technical principle of desire in the corporate development of the networked digital technologies that increasingly (though not yet completely) overdetermine the conditions of possibility for the organization of labor and social relations. Indeed, the same corporations (led by the same executives and engineers) that are working to solve the problem of general AI are also largely responsible for enmeshing us further in the assemblage of smartphones, online platforms, surveillance apparatuses, data extraction, etc., through which we are increasingly required to interact as a precondition of participating in social, economic, political, and cultural realities. The Singularity is a mechanism of force in the construction and assertion of a particular system of power: that of corporate sovereignty. As a means of transitioning to a discussion of *corporate sovereignty*, I would like to offer an observation on artificial intelligence writ large. Of the four types of AI systems identified by Nick Bostrom (i.e., oracles, genies, sovereigns, and tools), 'a sovereign is a system that has an open-ended mandate to operate in the world in pursuit of broad and possibly very long-range objectives' (2014: 148). The very notion of the sovereign—the very essence of sovereignty as an ultimate mandate to singularly determine the conditions of possibility for human existence—is rhetorically and conceptually constructed into the forms of artificial intelligence even before their material development. Connecting the problem of sovereignty to the corporate development of AI now requires an examination of corporate sovereignty as it relates to the material infrastructure of social relations in the contemporary context, the human and institutional agendas that overdetermine such infrastructure, and the (re)organization of power enabled by the material enactment of such agendas.

Corporate Sovereignty

Concerns over the power of business corporations in relation to the nation-state are by no means new, especially in the American context. Thomas Jefferson expressed grave misgivings about the centralization of power in the federal government because it could potentially give rise to a: [G]overnment of an Aristocracy, founded on banking institutions and monied in corporations under the guise and cloak of their favored branches of manufactures [,] commerce and navigation, riding and ruling over the plundered ploughman and beggared yeomanry. This will be to [the Federalists] a next best blessing to the Monarchy of their first aim, and perhaps the surest stepping stone to it (1825: para. 2).

This fear has been echoed in a variety of ways from the early 19th century through today. The explicit connection of corporate power to the concept of sovereignty, however, is (with a few exceptions) relatively recent, and largely only present in scholarly literature. Although Sigmund Timberg noted in 1946 that the business corporation was at that time a 'newcomer to sovereign power' (1946: 534), the concept of corporate sovereignty is (to the best of my knowledge) a 21st century development, with several authors rightly posing the question of corporate power in relation to the power of the nation-state, even when they do not explicitly refer to sovereignty. For these authors, the legal framework by which the business corporation most effectively constructs and asserts its own practices of authority and governance through, with and against that of the nation-state, defines a new form of sovereign power that is distinct from that of the nation-state (Barkan, 2013; Edwards, 2001; Suarez-Villa 2009; 2012; 2015; Wolin, 2008).

The most advanced conceptualization of corporate sovereignty is found in Joshua Barkan's Corporate Sovereignty: Law & Government under Capitalism. Barkan argues that the very legal foundations of the corporation as an economic, social and political institution (as enabled by the nation-state) are precisely what give corporations the right to undermine political sovereignty, in that they are granted the rights of citizenship without the concurrent responsibilities expected of human citizens. This amounts to an ontological 'doubling'between the nation-state and the corporation 'in which the fate of state sovereignty and corporate power are [and always have been] conjoined and also in conflict' (Barkan, 2013: 4). This doubling operates not only on an ontological level, but in the various techniques by which each institution asserts authority, establishes order, and manages populations, territories and infrastructure-in short, the ways in which each institution commands power. The corporation and the modern nation-state are mutually-constitutive and mutually dependent for their legitimation in that 'modern state sovereignty is founded in and *anchored* to a figure of the corporate political body. Likewise, modern corporate sovereignty *emerges from* and *mobilizes* apparatuses of sovereignty, discipline, and government' (Barkan, 2013: 6).

In order to theorize this relationship, Barkan utilizes the work of Giorgio Agamben who, working from Carl Schmitt, defines sovereignty as the authority to create the ban (i.e., the exception to law) and the authority to abandon its responsibility to a population in order to preserve the security of the political community. Within this perspective, corporate sovereignty is a product of (and operates at the boundaries of) the nation-stateat once legitimated by and imbricated with (yet distinct from and often at odds with) the legal framework of nation-state sovereignty. It derives from the law while also playing a role in establishing the law and operating as exception to the law. Within the limits of Barkan's argument, this understanding of sovereignty is sufficient. However, I would like to take up Barkan's invitation to expand his argument beyond the framework of the law. In order to do so, we need to move beyond Agamben's reading of Schmitt's early, juristic work. In later Schmitt, the question of sovereignty is considered in more philosophical terms, in so far as 'power needs the sovereign visible. perceivable, body to become and at the phenomenological level while having its own raison d'etre from an ontological perspective '(Ragazzoni, 2016: 61). This understanding of the connection between sovereignty and power brings a metaphysical implication to Schmitt's work, which before had been concerned primarily with the constitutional and legal implications of the sovereign.

> While the exercise of power—its phenomenology—is time-bound and biased by the limits of human nature, the essence of power—its ontology—transcends the physical appearance, contingent decisions, and specific actions of the holder of power. At the phenomenological level, power needs the ruler and his [sic] body; at the ontological level, power transcends both. This [...] is the tragic *telos* of modernity—the point where its fragile foundations are unveiled and the façade of human sovereignty is inexorably disfigured. (Ragazzoni, 2016: 67)

There is always, then, a metaphysics to politics because sovereignty is fundamentally a question of who has ultimate transcendent authority (Schmitt, 2008). This combination of legal and metaphysical concerns becomes paramount when considering the notion of nation-state sovereignty. The nationstate—as the modern form of the sovereign—is that which (through recognition of its authority in an international order of nation-states) makes decisions on the balance between obedience and security (Schmitt, 1996). Nation-state sovereignty is usually understood as being the 'final and absolute political authority in the political community'of in a given territory (F. H. Hinsley, quoted in Onuf, 1991: 429). It is a social construction of modernity involving a consideration of territory, population, authority, and recognition (Biersteker & Weber, 1996), with the state-as-sovereign understood 'in terms of authority relations which are worked out in practice'in a global system of sovereign states (Weber, 1995 11). If (as argued by Jens Bartelson) sovereignty is that which dominates the power structure in a particular socio-historical context-that which provides the conditions of possibility for power relations in that context-then state sovereignty functions as the legal and political authority over a particular territory and population (Bartleson, 1995).

But we can also consider sovereignty in relation to another dominant institution of the modern age—the corporation. While the main points of Joshua Barkan's contribution have already been addressed, what remains is to briefly consider two important, interrelated aspects of sovereignty that Barkan identifies. The first is that sovereignty itself is always already fundamentally corporate. The second (from Thomas Hobbes) is that political sovereignty is a secular substitute for the divine sovereign. These two aspects come together in the following perspective:

> Before the corporation had a relation with state power, and long before it had any relation to commerce or capitalism, it was a religious image that defined the relation between particular entities in subordination to a universal totality. [...] The corporate form not only gave states a theological foundation but also provided a means for conceptualizing sovereignty as a superior power over both individuals and rulers that was unified *through time and across space*. (Barkan, 2013: 23)

This argument opens a perspective on the problem of power that the Westphalian model of sovereignty (i.e., the framework that undergirds most contemporary discussions of political and corporate sovereignty) cannot accommodate. By forcing us to reassess sovereignty in older, religious terms of 'the highest, legally independent, underived power' (Schmitt, 1985: 17), it also forces us to confront the limitations of the concept of corporate sovereignty, even the sophisticated and nuanced form provided by Barkan. The problem here is Barkan's reliance on Agamben's definition (by way of Schmitt) of sovereignty.

While I am not suggesting that Agamben misreads Schmitt, I will go so far as to assert that Agamben's uptake of Schmitt (at least as deployed by Barkan) misses the mark; it does not get to the heart of Schmitt's argument. Carl Schmitt does indeed define the sovereign as 'he [sic] who decides the exception' (Schmitt, 1985: 5). However, this definition is based on the only-implicitly acknowledged assumption that deciding on the exception is simply a surface-level manifestation of sovereignty; it is not the exception but the authority to make a final decision that actually defines the sovereign. Because it is (as Schmitt himself asserts) 'unlimited authority'that characterizes an exception (Schmitt, 1985: 12); it is 'the monopoly over the last decision'that constitutes sovereignty, whether that decision be ban or other (Schmitt, 1985: 13). This supports an understanding of sovereignty in terms more metaphysical than legal. Schmitt, Agamben and Barkan are all concerned with the question of sovereignty in regard to the law. In this sense, then, a definition of sovereignty as the authority to decide the exception to the law is perfectly appropriate. If, however, we are to expand our concern beyond the legal form, I suggest a return to an older definition of sovereignty, the definition against which Schmitt was arguing in the first place: 'sovereignty is the highest, legally independent, underived power' (Schmitt, 1985: 17).

Sovereignty is understood in this sense as the network—the very totality—of power within which dominant institutions (e.g., nation-states, corporations, inter- and supra-national organizations) vie for and negotiate over ultimate authority in a variety of overlapping spatio-temporal contexts within a global system of economic production, distribution and consumption, political and social institutions, and cultural practices, as well as legal frameworks. Sovereignty is the authority over the conditions of possibility of the world. In the context of general AI and the Singularity, corporate sovereignty points us to a transformation of sovereignty whereby the corporate form is attempting to construct itself as a contradictory, transcendentyet-immanent, universal, eternal ultimate authority overall. What remains is to demonstrate how artificial intelligence functions in the construction of corporate sovereignty.

Artificial Intelligence as a Mechanism of Corporate Sovereignty

The contradictory fantasy of the corporate form to make human intelligence obsolete through artificial intelligence (while simultaneously making human intelligence eternal through networked digital technologies) represents the emergence of a new-or the rearticulation of an old-desire, both sociotechnical and corporate. Moreover, the proliferation of human activity and engagement through networked communication devices (as enabled by forms of AI) can also be thought of as expressive of a human desire to preserve in the more permanent format of technological infrastructure the ephemera of ourselves and social interactions. But more importantly to a consideration of sovereignty, this socio-technical desire becomes articulated to the corporate desire for immortality. In the (il)logic of the Singularity, the human desire for immortality can only be expressed (in a secular sense, at least) through the immortality of the corporation as enabled by the legal form of corporate personhood, and guided by the will of corporate executives having merged with a networked infrastructure of artificial intelligence.

These relations of force might well coalesce in the government of an aristocracy that Thomas Jefferson saw in its nascenceone enabled by corporate economic, political and technological power. The economic power generated for major tech corporations by the networked digital technologies that gather, aggregate, process, deploy, and control most of the information in the contemporary moment is the very force that propels the development of artificial intelligence towards the apotheosis of virtual interconnectivity (i.e., the Singularity). This eternal virtual interconnectivity espoused by futurists presages an emergent form of sovereignty based on corporate economic and technological dominance—one that requires no legitimation by the international order. Following the work of Sheldon Wolin, I argue that this form of sovereignty was enabled by the globalization of capitalism as a system of decentralized, multiple powers that disrupted the traditional role of the nationstate in the international political order (2008). The

technological innovations that have buttressed the power of global corporations form the dynamic machinery of corporate imperialism that emerges finally as the political co-partner with the marketized nation-state-a social machine wherein each institution exchanges functions and powers in the takeover of popular sovereignty on a global scale. Carried to its (il)logical conclusion, general AI can be thought of in this regard as the abstract totalizing power of political disengagement through eternal interactive distraction—an advanced form of propaganda that demobilizes popular political will by subsuming it to the corporate and futurist drive to networked immortality. The Singularity must be understood in relation to the global projection of corporate power, in so far as the achievement of the Singularity would be the most effective means for universalizing corporate power through both the eternalization of corporate elites and the totalization of their control over the organization of social relations through artificial intelligence and a networked technological infrastructure.

To frame this within the socio-psychological framework of Wilhelm Reich (1949; 1970), the cultural obsession with artificial intelligence can be understood as being intimately connected to a collective desire for reprieve from the chaos, crises and tribulations of corporeal existence. Regardless of the economic, political or social convictions involved in its development, the Singularity is (despite what its proponents may tell us) a production of the repressive, anti-social aspects of the human character that direct the search for ultimate relief from the pain of being human-with-other-humans in this finite and often terrifying reality. Understood in this way, the desire for the Singularity represents the distortion of libidinal and biologic urges, their channeling through the technocratic apparatus of corporate capital, and their transmutation into the production of a fundamentally irrational (yet technologically rational) social system capable of immanentizing the twinned forces of human mysticism and authoritarianism.

But the Singularity is not simply a matter of the human desire for immortality; it is also a matter of the corporation as a legally-recognized human whose existence extends beyond that of its members. If the legal form of the corporation is a social production of the human desire to make property and profit permanent, why would the corporate form (as the displacement of the nation-state as a site of permanence) not also replicate the human desire for immortality beyond its legal legitimation? This problem becomes compounded in that the economic power generated by developments in AI allows corporations to then invest in projects that might ultimately allow them to exist as sovereign entities outside the control of any nation-state. A few years ago, Google unveiled barges capable of existing selfsufficiently in international waters for a couple of years at a time. Thiel is said to be a strong proponent of 'seasteading, which is the concept of creating artificial permanent islands [...] outside the territory claimed by any government' (Taplan, 2017: 24). Larry Page has been funding research on the viability of creating 'privately-owned city-states' (Taplan, 2017: 24). These barges, seasteads and city-states would effectively be corporate nations that could not be regulated, taxed or legislated by any nation-state. Having evolved with the nation-state (and made legitimate in the legal framework of the nation-state), corporations are now poised to establish themselves as states without a nation.

As the metaphysical principle underlying the corporate development of artificial intelligence, the Singularity expresses the desire of technocratic elites to redirect socio-psychological desire into the machinic production of an amoral hypermediated godhead-the singular god of corporate capital made eternal through a technocratic infrastructure. The corporate elite view their corporeal existence as a phase of embryonic development that provides a training ground for reproducing (when they transmigrate into AI) their intelligence, power and wealth in a total system of networked digital eternity as maintained by their corporate nations—a system in which the accumulated control of corporate domination at the hands of technocrats will no longer have to be passed to the next generation, but can be preserved and expanded at will. The potential Sovereign of the Singularity weds technocratic metaphysics with libertarianauthoritarian politics (i.e., libertarian for the oligarchs, authoritarian for the rest of us). Though it need not come to pass (and at present remains a possibility, not a probability), this would be Leviathan's Utopia.¹⁰ Hopefully, a more critically oriented public debate concerning the entwined futures of artificial intelligence, technocratic governance and corporate capital can prevent this futurist fantasy from becoming material reality.

Notes

1. A more comprehensive definition for the term 'artificial intelligence'is provided in the next section of this paper.

2. Evidence for the former is provided in the following pages through the public statements of futurists and corporate executives, as well as a consideration of the projects under development in Silicon Valley as reported in journalistic and other publicly available sources. This perspective further pervades print, digital and broadcast advertising promoting contemporary technologies. The latter is evidenced by a wide array of popular culture artifacts—movies, documentaries and television shows such as the *Terminator* series (1984; 1991; 2003; 2009; 2015; 2019), *Minority Report* (2002), *The Circle* (2017), *The Social Dilemma* (2020), *Mr. Robot* (2015 – 2019), and *Next* (2020), just to name a few.

3. This essay admittedly focuses on the American context at the expense of others. However, such focus is necessary for appropriately limiting the scope of the argument at hand.

4. Examples of narrow AI that often get conflated with general AI in public discourse include IBM's Deep Blue (which defeated reigning world chess champion Gary Kasparov in 1997), IBM's Watson (which defeated two human opponents to become a *Jeopardy*! Champion in 2011), and Google's AlphaGo (which defeated Go grandmaster Lee Sedol in 2016) (Best, 2017; Metz, 2016; Murphey, 2015). Google has made multiple claims that DeepMind has achieved some form of general AI (Sample, 2017); these claims, however, have not yet been supported through publicly-available evidence or demonstrations. As such, they must be regarded skeptically as typical of corporate public relations hyperbole.

5. While the details of these specific projects cannot be entirely verified due to corporate secrecy, their existence has been publicly acknowledged by those involved.

6. For a fictional analogue, refer to Neal Stephenson's novel *Fall: Or, Dodge in Hell* (2019).

7. Camping had also instructed all his followers to give all their money and assets to him before May 21. As far as we know, no one got their money back.

8. Long-standing philosophical debates concerning the relationship between consciousness and materiality (while crucial to understanding some of the basic fallacies in the futurist perspective) are beyond the scope of this particular argument.

9. Apologies to Plato, Hegel and Nietzsche.

10. Apologies to Hobbes and More.

References

Aleksander, I. (2012) "Design and the Singularity: The Philosopher's Stone of AI?", *Journal of Consciousness Studies* 19. No. 7-8: 8-13.

Allan, V. (2017) "The Rise of Homo Technicans... Half Human and Half Machine", *The Sunday Herald* (January 22): 11.

Bailey, R. (2013) "College of the Future: Singularity University Reimagines Education", *Reason* 44. No. 11: 46-7.

Baker, L. (2013) "Technology and the Future of Persons", *The Monist* 96. No. 1: 37-53.

Barkan, J. (2013) Corporate Sovereignty: Law & Government under Capitalism. Minneapolis: University of Minnesota Press.

Bartelson, J. (1995) *A Genealogy of Sovereignty*. Cambridge: Cambridge University Press.

Best, J. (2017) "IBM Watson: The Inside Story of How the Jeopardy-winning Supercomputer Was Born, and What It Wants to Do Next", *TechRepublic*.

techrepublic.com/article/ibm-watson-the-inside-story-of-how-the-jeopardy-winning-supercomputer-was-born-and-what-it-wants-to-do-next/.

Biersteker, T. & Weber, C. (1996) "The Social Construction of State Sovereignty", in *State Sovereignty as a Social Construct*, (eds.) T. Biersteker & C. Weber. Cambridge: Cambridge University Press.

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Bostrom, N. (2014) *Superintelligence: Paths, Dangers, Strategies*. Oxford: Oxford University Press.

Bundy, A. (2017) "Smart Machines Are Not a Threat to Humanity", *Communications of the ACM 60*. No. 2: 40-42.

Dauphin, V. & Abell, S. (2010) "Infinite Adolescence: A Psychoanalytic Exploration of Tantalizing Promises Inherent to the Singularity", *Psychoanalytic Review* 97. No. 4: 579-605.

Edwards, T. (2001) "Corporate Nations: The Emergence of New Sovereignties", in *Worlds of E-Commerce: Economic, Geographical & Social Dimensions*, (eds.) T. R. Leinbach & S. D. Brunn. New York: John Wiley & Sons.

Elish, M. & Hwang, T. (2016) *An AI Pattern Language*. New York: Data & Society.

Frey, T. (2014) "The Singularity and Our Collision Path with the Future", *Journal of Environmental Health* 77. No. 1: 38-39.

Jefferson, T. (1825) "Letter to William Branch Giles, 26 December, 1825", *National Archives*. https://founders.archives.gov/documents/Jefferson/98-01-02-5771.

Kapoor, R. (2003) "When Humans Outsmart Themselves", *Futures* 35: 787-791.

Kurzweil, R. (1990) *The Age of Intelligent Machines*. Cambridge: MIT Press.

Kurzweil, R. (1999) *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*. New York: Viking.

Kurzweil, R. (2005) "The Next Frontier", *Science and Spirit* (November/December): 66-70.

Kurzweil, R. (2005) *The Singularity Is Near: When Humans Transcend Biology*. New York: Viking.

Kurzweil, R. (2012) *How to Create a Mind: The Secret of Human Thought Revealed*. New York: Viking.

Liebert, M. (2011) "Interview with Ray Kurzweil", *Rejuvenation Research* 14. No. 5: 567-72.

Mateescu, A. & Elish, M. (2019) *AI in Context: The Labor of Integrating New Technologies*. New York: Data & Society.

Metz, C. (2016) "Google's AI Takes Historic Match against Go Champ with Third Straight Win", *Wired* (March 12): wired.com/2016/03/third-straight-win-googles-ai-claimsvictory-historic-match-go-champ/.

Miles, K. (2015) "Nanobots in Our Brains Will Make Us Godlike", *The World Post* (Autumn): 24-29.

Mumford, L. (1934) *Technics & Civilization*. Chicago: University of Chicago Press.

Murphey, M. (2015) "Checkmate: An AI Computer Learned How to Beat Almost Anyone at Chess in 72 Hours", *Quartz* (September 16): https://qz.com/502325/an-ai-computerlearned-how-to-beat-almost-anyone-at-chess-in-72-hours/.

Naughton, J. (2017) "Why Silicon Valley Wants to Thwart the Grim Reaper" *The Observer* (April 9): https://www.theguardian.com/commentisfree/2017/apr/09/silic on-valley-wants-to-cheat-grim-reaper-google.

O'Connell, M. (2017) "The Immortality Campaign", *The New York Times* (February 12): 44.

Onuff, N. (1991) "Sovereignty: Outline of a Conceptual History", *Alternatives: Global, Local, Political* 16. No. 4: 425-446.

Ragazzoni, D. (2016) "The Ontology of Power, the Failure of Modernity: Insights from a 1954 Gesprach by Carl Schmitt", *Telos* 175: 57-67.

Reich, W. (1946) *Character Analysis*. New York: The Noonday Press.

Reich, W. (1970) *The Mass Psychology of Fascism*. New York: Farrar, Straus & Giroux.

Rivers, T. (2005) "An Introduction to the Metaphysics of Technology", *Technology in Society* 27: 551-574.

Ropohl, G. (1999) "Philosophy of Socio-Technical Systems", *Philosophy & Technology* 4. No. 3: 59-71.

Rose, C. (2005) "A Discussion about Avian Flu", *The Charlie Rose Show* (November 1).

Sample, I. (2017) "AI Is Getting Brainier", *The Guardian* (March 15).

Schmitt, C. (1985) *Political Theology: Four Chapters on the Concept of Sovereignty*. Chicago: University of Chicago Press.

Schmitt, C. (1996) *The Leviathan in the State Theory of Thomas Hobbes: Meaning and Failure of a Political Symbol.* Westport: Greenwood Press.

Schmitt, C. (2008) *Political Theology II: The Myth of the Closure of Any Political Theology*. Cambridge: Polity.

Suarez-Villa, L. (2009) *Technocapitalism: A Critical Perspective on Technology, Innovation and Corporatism.* Philadelphia: Temple University Press.

Suarez-Villa, L. (2012) Globalization and Technocapitalism: The Political Economy of Corporate Power and Technological Domination. Farnham: Ashgate.

Suarez-Villa, L. (2015) Corporate Power, Oligopolies, and the Crisis of the State. Albany: SUNY Press.

Taplan, J. (2017) Move Fast & Break Things: How Facebook, Google, and Amazon Cornered Culture & Undermined Democracy. New York: Little Brown & Co.

Timberg, S. (1946) "Corporate Fictions: Logical, Social & International Implications", *Columbia Law Review* 46. No. 4: 533-580.

Tynan, D. (2016) "Augmented Eternity', *The Guardian* (June 23).

DAVIS • WHOSE SINGULARITY? • CM • 2021

Weber, C. (1995) *Simulating Sovereignty: Intervention, the State, and Symbolic Exchange.* Cambridge: Cambridge University Press.

Williams, R. (2003) *Television: Technology and Cultural Form.* London: Routledge.

Wolin, S. (2008) *Democracy, Inc.: Managed Democracy & the Specter of Inverted Totalitarianism.* Princeton: Princeton University Press.