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Myth, Power, and Agency: Rethinking Artificial Intelligence, Geopolitics and War

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Abstract

This collection interrogates how Artificial Intelligence (AI) is reshaping war, sovereignty, and human agency by entangling technological experimentation with myth-making and geopolitical power. Drawing on vignettes from the Ukrainian battlefront to Silicon Valley boardrooms, the contributions highlight the paradox that AI-driven innovation is contingent on perpetual risk-taking, distributed agency between humans and machines, and opaque state-corporate alliances. The latter foregrounds discursive and ideological alignments between state and corporate elites that increasingly naturalise apocalyptic and utopian AI futures. Furthermore, the collection examines the emergence of a global war lab, where conflict zones become sites for the rapid prototyping of autonomous systems. Meanwhile, decision-support algorithms in security and defence redistribute responsibility in unforeseen ways, thus challenging the promise of meaningful human control. Such dynamics are increasingly facilitated by the emergence of an AI Empire, in which corporate technological giants and militaries co-produce new forms of sovereignty and power across the global stage. This equally raises essential questions about the risks of automated violence, revealing the enduring role of judgment and emotion in war, and how mythology itself teaches us a great deal about technologically mediated warfare. Together, the collection argues that AI's apparent inevitability is sustained by powerful mythmaking and storytelling that normalise experimentation, accelerate escalation, and mask unequal structures of extraction and domination. Ultimately, this collection offers a critical step towards uncovering these processes and reclaiming space for critical reflection, democratic oversight, and accountable

This Forum Article is the result of a research seminar hosted by EU Cyber Direct – EU Cyber Diplomacy Initiative, in The Hague in May 2024. This seminar brought together a concentrated group of experts, who discussed the topic of *Misunderstandings and Mythmaking: Demystifying Narratives of AI and Conflict*, with some of the presented thoughts being captured in this piece. The inspiration for this research seminar came from an expert panel entitled *The International Techno-Politics of AI: balancing the narratives of Existential Threat, Trustworthiness, Risk Management, to Meaningful Human Control* hosted at EU Cyber Direct's *Closing the Gap* Conference, which also took place in The Hague in December 2023. EU Cyber Direct funded both events.

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design in an era when AI "deities" increasingly govern the politics and practices of conflict today.

Keywords Artificial Intelligence · Geopolitics · Warfare · Mythmaking · Human–Machine Agency

1 Introduction

Raluca Csernatoni, Dennis Broeders and Lise H. Andersen

The accident, in French theorist Paul Virilio's philosophy of technology, is the negative potentiality intrinsic to every technological system: 'To invent the sailing ship or steamer is to invent the shipwreck. To invent the train is to invent the rail accident of derailment. […] To get what is heavier than air to take off in the form of aeroplane or dirigible is to invent the crash, the air disaster' (Virilio, 2007, p. 10). It was indeed Virilio who, in expanding Martin Heidegger's (1977) question of technology to the inherent accidents it might produce, argued that the technological accident is necessary for technological innovation. Virilio's insight acutely resonates with questions surrounding the rise of complex Artificial Intelligence (AI) systems and the unintended consequences they could engender. This Forum Article situates such paradoxes at the core of reflections on AI, power, sovereignty, war, and human agency. They also explore how narratives surrounding military AI technologies, grounded in cultural mythmaking, venture-capital hype, and geopolitical rivalry, shape, normalise, and aestheticise such systems. This, in turn, renders AI-centric warfare routine, abstract, distant, and ethically fraught.

Each included essay brings to life facets of the intersectional themes mentioned above: from the stark realities of Ukrainian battlefront technological experimentation, the illusions of frictionless control and ethics in human–machine teaming, to the AI 'empires' of digital capital that increasingly set the strategic contours for war and peace. Together, they prompt us to reconsider the sites of power and agency and, indeed, the prospects for accountability at a time when AI is rapidly becoming a decisive aspect in contemporary warfare. This Forum Article is the result of a research seminar hosted by EU Cyber Direct - EU Cyber Diplomacy Initiative, in The Hague in May 2024. This seminar brought together a concentrated group of experts, who discussed the topic of *Misunderstandings and Mythmaking: Demystifying Narratives of AI and Conflict*, with some of the presented thoughts being captured in this piece.

No longer relegated to the realm of either utopic or dystopic science fiction, AI models are now profoundly integrated into society, economy, politics and warfare, and in the case of the latter, reconfiguring human–machine interactions, battlefield infrastructures, and the use of force in unforeseen ways. The essays in this Forum Article explore how AI's growing prominence in civil and military affairs challenges established political, ethical, and legal frameworks, reorders global power structures, redefines innovation paradigms, and reframes human agency in war. These contributions examine the puzzling ways AI is mythologised, anthropomorphised, hyped,

deployed, and managed across diverse contexts. The essays collected here illuminate how AI's expanded role in all aspects of war and peace is driven by narratives, imaginaries, and myths of innovation, experimentation, and disruption, all powerful tools of geopolitical competition and Big Tech's corporate dominance. In matters of security and defence, they highlight the self-fulfilling prophecy of inevitable AI-driven militarism. This, in turn, rests on a deeper logic that conjoins global capital, national security paradigms, digital platforms, data extraction, and popular mythologies. In this respect, each contributor grapples with profound questions about what it means to experience and research a world in which AI systems function as something akin to a modern pantheon of capricious deities.

In his well-known critique of modernity, Walter Benjamin (2008) foregrounds how technological reproducibility alters the aura of cultural and political phenomena. By reading the AI-mediated conflict through a Benjaminian lens, his work warns that (social) media, technology, and the mass production of knowledge and cultural works, by aestheticising politics and war, can legitimise and normalise violence. This can obscure the brutality, messiness, and ethical consequences of AI-enabled violence, making it appear normalised, sanitised, and even legitimate. Given that we are witnessing changes in the ways that we experience and re-present war, this concern reverberates in the current landscape of military AI—where sleek swarming drones, omniscient surveillance tools, and sophisticated autonomous weapons or targeting systems abound. They are depicted as either strategic enablers achieving utopian efficiency and speed in the kill chain or facilitating dystopian extinction-level machine-led warfare. Beneath their polished technological veneer lie intricate and ethically fraught developments, namely innovation trends that appear as 'inevitable' yet often hinge on hype, cultural mythmaking, and venture-capital storylines. In this respect, Benjamin's cautionary perspective helps us see how AI-centric warfare can be rendered distant, sanitised, and tragically routine, as well as linked to how narratives of AI-driven power and militarism both shape and emerge from global capital, geopolitical competition, mythmaking, and popular imaginaries about technologies.

In this regard, the Forum Article contributors show how military AI capitalises on and amplifies the pressures of constant human–machine optimisation, demands that fuel endless cycles of experimentation, prototyping, and rapid iteration in conflict zones, such as in the case of the ongoing Russo-Ukrainian war. As this collection of essays reveals, AI's colonisation of warfare complicates ethical and regulatory regimes, generating novel forms of authority, sovereignty and state-corporate entanglements, thus heightening concerns about accountability, accident, and escalation risks. The contributions assembled in this Forum Article interrogate such transformation via a series of interlinked themes. Ultimately, they underline how technologically driven mythologies become strategic frameworks, imparting godlike status to advanced algorithms and normalising the belief in AI's unstoppable force. This vantage point reveals a pantheon of new technological 'deities' consecrated by urgent global security and defence imperatives, embodying both utopian aspirations of progress and efficiency as well as dystopian fears of unchecked power and catastrophic outcomes.

First, the Forum Article scrutinises the proliferation of narratives describing conflict zones as 'living laboratories' or hubs of constant experimentation, where the success

of emerging and disruptive technologies is measured in real-time violence. This orientation can lead to a paradox: the more militaries and high-tech industries push for rapid prototyping and agile adaptation, the more they postpone or displace warfare's moral and political reckoning. In this way, the 'global war lab' becomes an incubator of new markets, ideas, and AI-enabled weapon systems, seemingly a self-perpetuating cycle of disruption. Second, it probes how AI recast notions of human control and autonomy, examining whether the promise of 'meaningful human control and oversight' over lethal autonomous weapons systems and operations remains plausible amid distributed agency among humans and powerful algorithmic systems. While many AI developers promise that humans will remain 'in the loop', the complexities of distributed agency point to a deep transformation of that loop itself. This approach exposes illusions surrounding 'trusted autonomy' and reveals the precariousness of moral and legal responsibility.

Third, linking these themes to broader geopolitical stakes considers how discourses of AI 'disruption' and 'innovation' entrench power structure, entangling militaries and tech corporations in symbiotic yet often opaque partnerships defining a new form of AI Empire—diffuse yet potent, transnational yet deeply intertwined with national sovereignty prerogatives. AI disruption thus becomes a rallying cry, framing AI not just as another advanced weapon but as a transformative power that reorders entire societies and geopolitics. Modern states, confronted with the hype and perceived necessity of 'AI superiority' in warfare, may cede critical infrastructural power to private sector behemoths whose global ambitions are not always transparent or accountable. The language of 'disruption' thus rationalises an intensifying synergy of entrepreneurial capital and martial logic. Fourth, the Forum Article explores the mythopoetic function of AI, wherein humans anthropomorphise and romanticise technology, which in turn normalises the illusions of frictionless warfare. AI's discursive power often veers into the mythological or transcendent, projecting images of unstoppable innovation and near-divine capabilities. Such narratives mystify the underlying material, political, and ethical choices at stake. This runs counter to the realities of the battlefield: entrenched conflict, excessive human cost, and the stubborn persistence of passion, uncertainty, and tragedy. Finally, techno-eschatology intertwines AI technologies with apocalyptic and religious narratives, granting tech elites the power to shape political and moral priorities. Rooted in Judeo-Christian traditions, such narratives oscillate between utopian and dystopian visions, portraying AI as a near-divine force. By blending logical and mythical elements, these narratives obscure power dynamics and elite interests, stifle or curtail the space for open debate, and justify technological advancement as inevitable. This fosters a centralised control while eroding democratic discourse and egalitarian ideals.

2 The Experimental Way of Warfare: Artificial Intelligence in the Global War Lab

Marijn Hoijtink

References to technology and experimentation abound in ongoing public and political debates on the war in Ukraine. International media commonly describe Ukraine as a testing ground or "living laboratory" for the production and use of advanced weapons and technology, including military applications of Artificial Intelligence (AI), such as loitering munitions, automated target recognition systems, and facial recognition technology (Bergengruen, 2024; Fontes & Kamminga, 2023). The reference to Ukraine as a laboratory is also actively embraced and put to work by politicians, the military, and the global hi-tech industry. Ukraine's Minister of Digital Transformation, Mykhailo Fedorov, has said that it is "[his] big mission to make Ukraine the world's tech R&D lab" (Bergengruen, 2024, §5). The US military, for its part, has openly described Ukraine as "their [own] laboratory" for the development and fielding of new weaponry and technology (Sanger, 2024, §9). A relevant example is the US Department of Defense (DoD) Project Maven, which grew from a pilot program to develop computer vision algorithms to automate object detection in 2017 into "an ambitious experiment being tested on the front lines in Ukraine" (Sanger, 2024, §4). Project Maven is now crucial in supporting Ukraine's data-driven operations in the war against Russia (Manson, 2024). Finally, the value of experimentation is also frequently declared by the world's largest technology companies, military start-ups, and venture capitalists, boosting a new defence technology market. Among them is Eric Schmidt, former CEO of Google, who is now leading a think tank that aims to bring Silicon Valley technology and thinking on experimentation to the US military (Special Competitive Studies Project, 2023). One of Schmidt's most recent ventures, White Stork, has already started testing AI-led drone prototypes on the frontlines of the Ukraine war (Emerson & Nieva, 2024).

How should we understand this proliferation of experimentation as a central narrative of contemporary warfare? What are the origins of this narrative, and what role does it play in driving the development and use of new (AI) technology on today's battlefields? Of course, warfare has always been underpinned by experimental activity. As critical scholarship on science, technology, and conflict points out, there is a long history of experimentation with technology 'out in the field' of war and conflict or as part of colonial projects through which new technologies and (medical) interventions were tested on experimental bodies (e.g., Towghi & Vora, 2014). This literature often invokes the term laboratory to understand how conflicts are sites where practices of experimentation and control go hand in hand (Bachmann, 2014; Hönke & Müller, 2016). A key example is the Israeli-Palestinian conflict, which critical scholars have frequently described as a laboratory to address the ongoing occupation of the Palestinian Territories and its profoundly technological and experimental character (Feldman, 2014; Grassiani, 2024; Loewenstein, 2023; Weizman, 2012; for a critial engagement with this frame, see Machold, 2018).

Within Western military debates, the value of experimentation as an essential characteristic of warfare has also long been emphasized, alongside more traditional planning-oriented representations of warfare and military conceptions of discipline and order (Öberg, 2018). Western militaries have attempted to deal with this tension between creativity and planning in recent years by actively promoting and institutionalizing intuitive bottom-up processes of military innovation

focused on 'battlefield learning' and adaptation. Understood as such, the proliferating use of experimentation across Western military discourse and practice does not represent a clear epistemological break with previous military debates on innovation. Instead, the focus on experimentation should be understood as the re-articulation of a solution to the enduring problem of military innovation. This problem has become increasingly pressing in recent years due to a highly rhetorical AI technology race and the shared realization that the most innovative concepts, ideas, and technologies now originate outside of the military setting. In this context, Western militaries have expressed the need to integrate new technology into their organizations quickly, yet they have also frequently lamented their ability to do so due to the military's traditional procedures, hierarchies, and slow-moving bureaucracies. Here, experimentation appears and acquires meaning across military organizations as a force that favours creation, flexible collaboration, and rapid testing and scaling of prototypes. Across the Western world, many militaries are responding to this experimental vision, establishing new pilot projects, institutions, and civil-military collaborations "outside of traditional bureaucratic structures in order to bypass this red tape and unleash innovation" (Gould et al., 2023, p. 56; also Gould et al., 2024).

In this way, experimentation as the military invokes it strongly resonates with the entrepreneurial vision of experimentation that is dominant within Silicon Valley, defined by the ability to act fast, take risks, and accept or adapt to failure (Schwarz, 2021). Indeed, the rise of military experimentation should at least in part be explained as the outcome of a new alignment between the military and the Silicon Valley tech sector (Schwarz, 2024). In the US context, where these relations are most visible and influential, this development can be traced back to the Third Offset Strategy that the US DoD announced under President Obama in 2013 to sustain US military dominance within AI. Under the Third Offset Strategy, the US DoD funded several programs and new offices, including the Defense Innovation Unit Experimental (DIUx, now DIU), with headquarters in Silicon Valley, through which the US tech industry was brought into a closer relationship with the military (Gilbert, 2019). This deepening of the relationship between Silicon Valley and the US military has not been without controversy. Still, and despite a persistent conception among defence and tech analysts that Silicon Valley is hesitant to work for the Pentagon (Luckey & Stephens, 2018), the US tech industry has successfully obtained several large US DoD contracts, "some worth tens of billions of dollars", in recent years (Gonzalez, 2024, p. 2). Elsewhere, we see similar developments, such as in the context of the NATO, which recently established the Defence Innovation Accelerator for the North Atlantic (DIANA), referred to by some as "NATO's DARPA" (Favaro et al., 2023), as well as the NATO Innovation Fund (NIF). Both initiatives were introduced to provide new resources and networks for commercial tech companies to create military-relevant disruptive technologies (NATO, n.d.).

These new alignments have been fundamental in driving the logic—ideology even—of experimentation associated with technological progress, urgency, and fast failure within the military. However, the focus on experimentation predates and goes beyond these relations with Silicon Valley. Various scholars have shown

how technological experimentation has become more widely adopted as an interventional practice that governs sociopolitical problems by experiment, including within humanitarian aid and development (Fejerskov, 2022; Murphy, 2017), health and medicine (Cooper, 2012), migration (Aradau, 2022), and geoengineering (Stilgoe, 2016). What drives experimentation in these varied contexts, these scholars argue, is a highly speculative understanding of the experiments being deployed, rendering experimentation increasingly detached from the traditional scientific practice of replication and controlled testing. The point is no longer to control risk and standardize probabilities but "rather to generate entirely unexpected events—as sources of innovation" (Cooper, 2012, p. 37). This involves a distinct understanding of the world, writes anthropologist Michelle Murphy (2017, p. 81), composed "of potential, of chances, of possibilities for becoming […], if only the right [technology] and technique can be deployed."

Elsewhere, I have coined the term "the experimental way of warfare" to trace how this speculative understanding of experimentation has begun to shape military thinking on innovation and warfare (Hoijtink, 2022, p. 324). In my previous work, my critique focused on how the proliferation of experimentation in warfare is largely immune to failure as it accepts failure as an inherent and necessary condition for future technological progress. I argued that the military is insulated from critique on experimentation as it can always refer to relevant lessons learned or the potential of the next experiments (Hoijtink, 2022, p. 325).

Here, in lieu of a conclusion, I want to highlight two other aspects of the proliferating use of experimentation as a narrative and practice that should give us pause for thought. The first is that experimentation blurs the lines between technology development and use in war. Increasingly, experimentation operates as a means to accelerate the fielding of new and experimental technologies in war, even if they are risky, contested, or their long-term consequences are unknown. As two military commentators put it, Western militaries need to "increase [their] threshold for risk and provide commanders with funds to take chances on commercially available technologies outside of the normal capability development program" (Arnel & Jensen, 2024, §7). This includes testing with technology in an active war, as the examples from the war in Ukraine show, which brings us to a second and related concern: experimentation also increasingly blurs the boundaries between war and peacetime. If technology development is to be iteratively improved through constant experimentation and trial and error, then war becomes reconfigured as an opportunity for experimentation. In this context, war becomes endless and everywhere, as it is only through experimentation in war that technological innovation, progress, or superiority can be sustained.

3 Human–Machine Interaction: Just a Problem to Solve?

Ingvild Bode

The integration of artificial intelligence (AI) algorithms[1] in military decision making processes is spreading. While this development was initially primarily considered in the context of weapon systems, militaries also use various types of decision support systems (DSS) indicating a broader trend towards relying on algorithmic logics in how decisions about the use of force are made. AI algorithms do not replace military personnel. But as practices of human–machine interaction spread, they change how military personnel work by making using different types of AI technologies common parts of their routines. To appreciate the significance of this, I argue that we need to examine fundamental consequences of human–machine interaction—namely, the extent to which this may change the exercise of human agency in warfare, understood as the "socioculturally mediated capacity to act" (Ahearn, 2001, p. 112).

I make this argument in three steps. First, I outline what can be analytically gained from moving beyond the term of human control that has long been dominant in the debate to the more comprehensive human agency. Second, I briefly examine what typifies military thinking around human–machine interaction, finding such accounts to be primarily problem-solving in character. Third, I argue that human–machine interaction introduces forms of distributed agency that features not only novel affordances but also constraints. I conclude with a short reflection on significance of recognising distributed agency in military decision-making.

3.1 From Control to Agency

Initially, when stakeholders in the debate about AI in weapon systems spoke to the role of humans, they did so nearly exclusively using the term human control, often with the additional qualifier "meaningful" (Roff & Moyes, 2016). To start with, human control appeared to mainly focus on the tail-end of the targeting process where kinetic force is released. This has typically been expressed with reference to a decision-making loop[2] and distinguishes between how humans are in-the-loop, on-the-loop, or out-of-the-loop in relation to a particular weapon system that integrates autonomous or AI algorithms in targeting (Sharkey, 2016). When human operators are in- or on-the-loop, they authorise the release of force, consider specific targets before initiating an attack, or choose from a list of targets—typically within a short time frame. By contrast, once activated, off-the-loop systems conduct the process of identifying, tracking, and attacking targets without direct human involvement. In the international debate, these have been characterised as 'fully' autonomous weapons systems. Yet, autonomy and human control need not be dichotomous notions if we understand autonomy as the capability to operate independently: then, an

[1] The term covers how automated, autonomous, and AI technologies function through different types of algorithms "as sets of instructions, such as computer code, that carries out some commands" (Dignum 2019, 3).

[2] In military terms, this is also referred to as the OODA loop. But the "human-in-the-loop" notion extends beyond military thinking. As Crootof et al. demonstrate, it is an underlying principle in many regulatory approaches towards algorithms in decision-making (2023, 434).

autonomous system could still be "deployed under some form of meaningful human control" (Taddeo & Blanchard, 2022, p. 37).

The principle of human-in-the-loop has been criticised as potentially imaginary. Human in-the-loop or on-the-loop systems appear to guarantee a certain quality of human control that may in reality not be qualitatively high or meaningful (Bode, 2023; Bode & Watts, 2021). The in-the-loop principle, problematically, does not account for "the ways in which working in tandem with a machine will channel and influence that human's behaviour" (Crootof et al., 2023, p. 437).

Thinking around human control has broadened beyond its initial focus on specific use of force situations towards extending the sites at and the modes by which it should be exercised. Many stakeholders consider lifecycle approaches to systems integrating AI from development to use and re-use/retirement with various human touchpoints (Blanchard et al., 2024; IEEE Research Group on Issues of AI and Autonomy in Defence Systems, 2024; UNIDIR, 2020). This acknowledges AI-based systems as socio-technical in nature, as shaped by human choices, selections, questions, and conduct (Orlikowski, 1992).

An analytical change from human control to human agency doubles down on this line of thinking in two ways. First, agency offers a holistic, comprehensive perspective on the process of decision-making and the capacity for acting therein. Second, agency troubles the unidirectional assertion inherent to human control as a clear, hierarchical set-up where human behaviour influences machine outputs but there is no reverse, adverse effect on the agency capacities exercised by humans. But integrating AI technologies does not only mean 'delegating' motor skills to system functions, but sharing, on some level, cognitive skills in between humans and technology. By focusing on human agency instead of control, we can consider the consequences that humans encounter while making decisions with AI algorithms.

3.2 Military Approaches to Human Machine-Interaction

Military thinking considers human–machine interaction in the context of human–machine teams or human-system integration. The 'team' concept appears to implicitly recognise human-algorithm systems as potentially novel entities (e.g. UK Ministry of Defence, 2018). But the relationship between humans and machine comes across as clearly hierarchical in nature, allowing humans to benefit unidirectionally from including AI algorithms into decision-making. The primary outcome of human–machine teams/integration is therefore allowing militaries to combine the best of both worlds. The US Army's *Project Convergence*, for example, that centres around human–robot interaction on the battlefield, characterises these as ways of "offloading risk" and offering soldiers "additional information for decision-making" (quoted in Judson, 2024). Potential challenges that arise from instances of human–machine interaction are presented as ultimately *manageable* (UK Ministry of Defence, 2018, p. 45).

This perspective follows a problem-solving approach that often finds solutions to current challenges in further developing the technology itself (Bach et al., 2022). Such an approach does not question the underlying dynamics and consequences of

human–machine interaction for the exercise of human agency in warfare. From a problem-solving perspective, potential risks associated with greater human–machine interaction can be mitigated through being aware of such risks early on and managing them. The notion of and conditions for trust that humans place in machines are, for example, often explored as a potent solution to current problems—and one that typically rests on technical advances away from AI dysfunctionality and improving core technological design characteristics, such as interpretability (Bach et al., 2022). However, we must scrutinise this as a potentially hazardous simplification.

3.3 The Problem of Distributed Agency

Various streams of research across disciplines such as Science and Technology Studies have recognised technology as agent-like in socio-technical systems. This is expressed, for example, in notion of actor-network notion actant as "whoever or whatever takes part in the process" (Asdal & Ween, 2014, p. 6), including humans and non-humans. Agency resides not in the actants themselves, but in relations between them and the practices performed (Barad, 2003, p. 818). Agency is therefore *distributed* and emerges dynamically out of links between technology, technological objects and humans.

Distributed agency indicates that using AI technologies in military decision making generates both affordances or action potentials and constraints for the human groups. AI-based DSS, for instance, provide humans with the opportunity to analyse vast quantities of data, that would otherwise be difficult or near-impossible to access. However, the data examined and the outputs produced by these systems lack the contextual information that is usually essential for comprehending human action, thereby limiting decisions made by humans on the basis of DSS outputs (Nadibaidze et al., 2024, pp. 30–32).

Consequently, human–machine interaction means accepting alterations to the exercise of human agency—and not only in ways that are intentional and augmenting to human decision-makers, but also in ways that may change, delimit, or diminish human agency. Recognising distributed agency can help address these alterations in two ways: First, by drawing attention to long-known, well-documented problems in human-factor analysis such as automation bias, limits of human vigilance, and "skills fade" that continue to find very little purchase in the debate about military applications of AI (Bainbridge, 1983; Bradshaw et al., 2013; Johnson et al., 2014). Second, by encouraging clarifying what main type of roles humans-in-the-loop are expected to perform, e.g. corrective, dignitary, or accountability roles, and determining what needs to be done to ensure that they are enabled to do so (Crootof et al., 2023, pp. 474–83). In-the-loop refers here just as much to the terminal phase of using force as it does to the entire lifecycle of AI systems. If, for example, humans-in-the-loop are expected to ensure accountability, they need to actually have the requisite authority, information, deliberative potential, and time to do so, necessitating particular choices across the lifecycle (Ibid., p. 482).

Acknowledging distributed agency as an outcome of human–machine interaction does not mean that we should abandon the clearly requisite need for the exercise of human agency over use-of-force decision making. A human-centric perspective on the development and use of AI technologies is indeed crucial for securing that need. However, that perspective needs to ensure that humans are genuinely capable of exercising their agency. In constructing governance principles, this requires thinking and balancing beyond only what is afforded to military personnel by interacting with AI-based systems towards what is adversely affected or lost.

4 AI Empire, Disruption, and the New Geopolitical Order

Raluca Csernatoni

The recent upsurge of Artificial Intelligence (AI) heralds a new era of geopolitical dynamics, with the potential to redesign global power structures and challenge traditional notions of power and sovereignty. In this respect, scholarship has focused on how AI de-centres the sovereign role of humans in the use of lethal force and shapes warfare and violence (Bode et al., 2024; Hoijtink, 2022; Shaw, 2017; Wilcox, 2017). If AI might pose an extinction-level existential threat to humankind akin to the atomic bomb, as many experts seem to claim (Center for AI Safety, 2024), this also raises questions concerning states' core sovereign power, whereby their legitimacy lies in their ability to protect against existential threats. Similarly, the fear of such threats has spurred calls for a radical transformation of the global order, confronting challenges beyond national interests and state survival.

Yet, such claims and fears about the imminent emergence of Artificial General Intelligence (AGI) or 'superintelligence' remain speculative in nature, lack robust scientific support, and require more consensus in the scientific community. Such narratives are currently shaped by speculative socio-technical imaginaries and techno-utopian or techno-dystopian rhetoric rather than grounded research. It is thus essential to interrogate these speculative scenarios that oversimplify socio-technical complexities while reinforcing the hegemonic narrative of technological giants in the driving seat of AI innovation. These framings bolster power dynamics by legitimising corporate dominance and obscuring the deeper entanglements of AI with global economic, political, and military systems.

Against this backdrop, AI could be construed as a potent and disruptive force in contemporary geopolitics (Csernatoni, 2023, 2024). An analysis of disruption, geopolitics, and state-corporate power dynamics illuminates the complex interplay between AI technologies and current geopolitical transformations. In this respect, this analysis foregrounds the concept of 'Empire' (Hardt & Negri, 2000, 2004) to examine how AI disruption foreshadows the rise of a new form of AI Empire. It argues that current AI developments all share a common hegemonic imaginary, namely the seeming inevitability of the technology's transformative impact on all aspects of human life. This includes its potential to shape a new geopolitical global order (Csernatoni, 2024), with AI models going as far as transcending human agency (Hoijtink et al., 2019). The key question with such a dominant vision is

whom it exactly serves, what perceptions it structures (Csernatoni, 2022), and which techno-political realities and futures it creates.

In their seminal book *Empire*, Michael Hardt and Antonio Negri (2000, pp. xi–xii) put forward a radical reading of world politics and economy, by which political power and sovereignty are no longer concentrated in nation-states. Their reading of contemporary transformations under the globalising impact of 'primary factors of production and exchange—money, technology, people and goods' (2000, p. xi) is that state sovereignty has given way to imperial sovereignty, namely a 'new form of sovereignty' that they call 'Empire' (2000, p. xii) as the highest stage of capitalism. While Hard and Negri did not anticipate the rise of AI and Big Tech's corporate hegemony as altogether disruptive forces and catalysts reshaping even the highest stage of capitalism, their notion of 'Empire' can help expose how AI technologies intertwine disruptive forces, sovereignty, and geopolitics. Such systems now mediate great power rivalries, state-corporate relations, market hegemony, and high-tech warfare (Wilcox, 2017; Shaw, 2017; Schwarz, 2021; Suchman, 2023).

Hardt and Negri contend that 'Empire emerges from the twilight of modern sovereignty', and in contrast to the imperialism of the modern nation-state system, 'Empire establishes no territorial centre of power and does not rely on fixed boundaries or barriers. It is a decentred and deterritorialising apparatus of rule that progressively incorporates the entire global realm within its open, expanding frontiers. Empire manages hybrid identities, flexible hierarchies, and plural exchanges through modulating networks of command' (2000, p. xii). In their definition, Hardt and Negri (2000: xiv) claim that the new form of Empire they propose 'has no limits', which resonates with imaginaries of AI disruption, omniscience, and all-pervasiveness that currently permeate public and expert imaginaries (Suchman, 2023; Csernatoni & Martins, 2024). AI systems are currently imagined and framed as a disruptive, all-powerful, all-seeing, and 'more-than-human' force operating with mass quantities of data and compute power at an inhuman scale, efficiency, and speed. They seemingly have the power to upend society, economy, security, and knowledge production. Such systems are researched, developed, and deployed by a handful of Big Tech platforms that form the critical infrastructural core of increasingly digitised economies and societies (Van Dijck et al., 2018). This is also showcased by the recent surge in the latest generation of powerful generative AI models controlled by a small number of corporations like OpenAI's ChatGPT. These models are now hyped not merely as incremental technological advances, but as radically disruptive and potentially evolving towards sentience or so-called 'superintelligence.'

However, confusion abounds over what exactly AI-triggered disruption means, and what the power effects are in the cases of dominant state and corporate actors heralding often-hyped AI breakthroughs. Discourses of AI disruption are intimately linked to geopolitical, military, and economic power on the global stage, and they are increasingly captured by corporate interests. These framings have become powerful instruments to cement depictions of speculative futures, either desirable depictions of economic growth, societal progress, and military prowess or dystopian renderings of catastrophic risks of extinction (Jasanoff & Kim, 2015). Furthermore, discourses surrounding AI disruption serve the purpose of consolidating the power of private tech companies to sustain an AI-enabled production of subjectivities,

whereby the AI Empire presents infinite possibilities for human minds and behaviours to become scenes of direct imperial, corporate, and market interventions and modifications (Hardt & Negri, 2000, p. xvii). Indeed, by following Hardt and Negri (2000), it could be argued that the rise of high-tech monopolies should prompt a rethinking of the logic of capitalism, as 'there is really something qualitatively distinct about the forces of production that eat brains, that produce and instrumentalise and control information' (Wark, 2021: 42). Thus, the AI Empire today relies not just on the exploitation of material labour, but also increasingly on new forms of immaterial labour encapsulated in the concept of 'cognitive capitalism' (Hardt & Negri, 2004, pp. 112–123; 2000: p. 29).

Consequently, the real risk of AI disruption is a crisis of biopolitical and knowledge production, namely 'the production of social life itself, in which the economic, the political, and the cultural increasingly overlap and invest one another' (Hard & Negri, 2000, p. xiii; pp. 22–24). In line with Hardt and Negri's claim that in the contemporary Empire there is no 'division between inside and outside' (2000, p. 190), Shoshana Zuboff (2019) offers a compelling account of this new form of oppression, loss of sovereignty, and data extraction via the concept of 'surveillance capitalism.' This interpretation showcases how the threat has shifted from a totalitarian Big Brother state to the ubiquitous digital architecture of Silicon Valley tech giants. In this respect, Big Tech's algorithmic governance (Amoore, 2020; Crawford, 2021) empowers corporate hegemony, biopower, and sovereignty that have previously been the prerogative of sovereign states.

AI Empire, algorithmic governance and mediation deeply reshape relations between states, the military, and tech giants, and ultimately the power structures of international relations. To illustrate, starting with the Russian invasion on February 24, 2022, Big Tech, such as Microsoft, Google, Amazon, and Starlink, have emerged as prominent war-time actors (Schwarz, 2021), while companies like Palantir and Clearview AI have turned Ukraine into a military 'AI War Lab' (Bergengruen, 2024). Hardt and Negri (2000, p.35) also noted the always mutually beneficial relations between neo-liberal economics, the military, and the political imperatives of the Empire, 'the power of Empire exercised through force and all the deployments that guarantee its effectiveness are already very advanced technologically and solidly consolidated politically'. Technology-industry leaders have always been deeply entangled within the US state structures, consequently, the role of Big Tech should be placed at the core of any new conceptualisation of the Empire. This entanglement raises questions about the geopolitical role of US tech companies wielding new forms of imperial power in their own right on the global stage, or whether they are merely an extension of US hegemony, namely a new form of American imperial power projection and military supremacy. Conversely, it could be argued that the global military role of the US, without the support of technological giants, is no longer enough to define the Empire as a form of expansive American imperialism.

Noteworthy is the fact that the relationship between Big Tech and state structures differs, for instance, from traditional defence industrial players, as previously exemplified by the military-industrial complex. Historically, the defence industry and big systems integrators primarily functioned as state proxies, reinforcing national strategic and geopolitical agendas through material resources and military technologies.

By contrast, with their outsized budgets and digital prowess, technological giants wield autonomous geopolitical influence in their own right due to their control over critical digital infrastructures, data flows, compute power, human talent, and algorithmic governance. This enables them to shape global power dynamics independently. Unlike other industries, Big Tech operates transnationally, often beyond state control, embodying Hard and Negri's notion of Empire by consolidating decentralised yet pervasive forms of sovereignty and power manifested globally in the cyber-physical domains.

What is certain is that states and technological giants engage in altogether new, complex, asymmetric, and contentious power dynamics of clear consequence to national security, global affairs, and warfare. That is why emerging state-corporate relations require a more in-depth analysis of how they underpin the 'return' or 'reshaping' of geopolitics in the age of the AI Empire and how geopolitics and warfare are, in turn rewired by AI and Big Tech. It would be misleading to read the recent 'geopolitical turn' in international relations as merely redolent of a returning Cold War-era imaginary of Great Power competition. Certainly, this shift is rooted in a revival of boundaries and competition between regional blocs, great powers, and 'arms races' in AI and other emerging and disruptive technologies that are defining and structuring current world affairs. However, the 'turn' is not just recycling old state-centric geopolitics, but it is rather fuelled by a quest for 'more-than-human' geopolitics (Shaw, 2017, p. 454; p. 460) and AI supremacy. The new AI Empire incorporates both a more traditional re-centric of power and consolidation around Great Powers, regional blocs, and corporate monopolies; *and* a novel dynamic agency of humans and technology played out in new material and immaterial 'spaces', 'temporalities', and practices of extraction and hegemony.

The latter is indeed the case for the global corporate hegemony of technological giants, which now, with their military involvement, also command what Shaw (2017, p. 463) terms as 'lethal time–space compressions' engendered by robots and AI technologies that 'ingests distant surfaces inside a computational ecumene' at hallucinating speeds. Given that corporate tech players now control everything from critical material and immaterial infrastructures to vast amounts of data, from algorithms to compute power and human talent, their private authority in global governance is expansive and exhaustive. Drawing on Hardt and Negri (2000, p. 58), they dominate 'global networks of production and control' and 'the virtual centre of which can be accessed immediately from any point across the surface', in what can be labelled as 'the highest articulations of imperial order.'

Together, all these elements highlight key claims emerging from the proliferation of (military) AI systems by the Big Tech architects of the new AI Empire, as well as their impact on world affairs in terms of '(re)ordering' imaginaries, futures, infrastructures, and geopolitics according to new forms of hegemony. The concept of Empire lends itself to a critical examination of how technological giants both support *and* challenge traditional state approaches to sovereignty, hegemony, and the military. Thus, the AI-powered Empire extends beyond its disruptive effects of global reordering, as well as its digital infrastructural and geopolitical elements, to include a multitude of assemblages of actors, technologies, and logics. Such dynamics enforce hegemonic and oppressive regimes at unprecedented scales through

continuous mass surveillance, algorithmic violence, digital divides, exploitation of material and immaterial labour, extractivism, and datafication.

5 Sing, Goddess, of the Wrath of AI

Jon R. Lindsay

There are many myths about technology, but what can mythology itself teach us about tech? Artificial intelligence (AI) is widely seen as a transformative development in military affairs, determining the winners and losers in the wars of our imagined future. In the imagined past of Homer's *Iliad*, Gods and heroes play a similar role. The Greeks are almost defeated when the demigod Achilles refuses to fight. Then they dominate again when he returns to the battlefield in armour forged by Hephaestus, the god of engineering (Homer, 2023, p. 452, 454). But this begs the question of why Achilles stands aside in the first place, and why he changes his mind. These are matters of judgment, and judgment matters a lot for AI.

I would like to suggest that the *Iliad* has something important that is missing from debates about military AI. This conjecture has two premises. First, AI systems depend on human judgments and institutions. Second, the *Iliad* remains relevant in modern war. Each of these statements is not terribly controversial on its own, but together they have troubling implications. Put simply, the Homeric passions of war are likely to shape the employment of military AI systems.

By now it is well recognized that military automation introduces numerous organizational, doctrinal, strategic, and policy problems (inter alia Payne, 2021; Scharre, 2023; Kissinger et al., 2021; Schraagen, 2024). How will miliary systems take advantage of civilian technologies and commercial surveillance? What technical or institutional interventions will ensure that the goals of AI systems are aligned with human values? How can governments limit the potential for targeting error or unintended civilian casualties? What should military organizations do to ensure meaningful human control over lethal autonomous weapons systems? What happens when adversaries or authoritarians come up with different answers to any of these questions? These important questions are mostly concerned with the rational alignment of AI means with human ends. These ends include respectable goals like security, safety, efficiency, prosperity, and battlefield effectiveness. There are complex trade-offs across these goals, leading to all kinds of wicked implementation problems.

But military history teaches us that strategy is not the only motivation for political violence. Military warriors are human animals who care about status, identity, solidarity, adventure, and meaning. They fear, hate, covet, manipulate, sulk, and rage. They also sacrifice, joke, love, build, and tell stories. Warriors use weapons not only to fight and kill, but also as trophies and decorations. These moral creatures live in social communities that manage, motivate, nurture, control, and frustrate them. Sometimes military organizations are stronger than the sum of their parts, and sometimes they fission into feuding factions. Armies may faithfully obey their political masters, or they may subvert or rebel against them. The *Iliad* holds a mirror up to the fraught moral landscape of war.

The *Iliad* is not just a story about godlike exploits on the battlefield, but also, if not more so, about the passion and suffering of men at war. The very first line of the poem invites the muse to "sing of the cataclysmic wrath of great Achilles," (Homer, 2023, p. 1) using a word typically reserved for divine retribution (*menis*) to describe the anger of a mortal man (Muellner, 1996). Achilles first seethes in resentment toward king Agamemnon, who takes his slave girl Briceas away, much as Troy took Helen away from Sparta. The *Iliad* is thus as much about conflict *within* armies as *between* them. Achilles then goes berserk after Hector kills his best friend, Patroclus, who dies wearing his armor. Achilles rages into battle, executes unarmed Trojans, and desecrates the corpse of Hector. The wrath of Achilles in the first instance is about masculine rivalry and disillusionment with authority, and in the second is about traumatic loss and vengeful atrocity. These dark emotions still cast a shadow over war in the age of AI.

An obvious response is that AI can enable us to titrate out these unpleasant emotions, making warfare more rational, efficient, and controllable. The problem is that AI is not a simple substitute for human decision-making. Improvements in machine learning may be lowering the cost of statistical prediction, but this is increasing demand for the institutional complements of AI—namely data and judgment (Agrawal, et al., 2018; 2019). As I have argued at length elsewhere, greater military reliance on information technologies including AI is making human institutions more important in war, not less (Lindsay, 2020, 2023; Goldfarb & Lindsay, 2022). Even fully automated lethal drones depend on the specification of targeting instructions and human decisions to employ them, and these judgments tend to be highly contextual and pragmatic (Hunter & Bowen, 2023; Roff, 2014).

The basic structural problem is that AI depends on data and judgment, but war with an intelligent adversary is notoriously uncertain and inherently controversial. Military organizations that use AI still must deal with the practical and bureaucratic hassles of data management, develop and interpret their strategic objectives and rules of engagement, and struggle with the fog and friction of war. Technology can indeed accelerate the tactical agility and lethality of military operations, giving modern warriors the abilities of far-shooting Apollo or grey-eyed Athena, but political conflicts are still often protracted and indecisive, as if consumed by the endless bickering of Zeus and Hera. Indeed, the US wars in Iraq and Afghanistan lasted even longer than the Trojan War, as has the Russian war in Ukraine.

The *Iliad* matters for military AI because judgment matters for AI, and Homeric judgment is complicated. Judgment must be understood broadly here to include not only preferences and goals but also whatever makes life meaningful, i.e., intentionality in the full phenomenological sense (Adams et al., 2016; Smith, 2019). Human judgment has arguably not changed much since the Bronze Age, even as technology has dramatically improved our ability to collect data, make predictions, and take actions. The nature of war is unchanging, as strategists like to point out, even as the conduct of war changes constantly. Because the *Iliad* deals with the universal nature of war, its themes continue to resonate strongly today. This is why academies still assign it to cadets, warriors are still inspired by it, and veterans still recognize their trauma in it (Shay, 1994).

Consider this snippet of reporting from Ukraine in *The New York Times*: "'We're losing the electronic warfare fight,' said Ajax, the call sign for the deputy commander of the 92nd Achilles strike drone battalion" (Mozur & Satariano, 2024). This Ukrainian Ajax is worried about Russian jamming of Starlink satellite internet service, which hinders the ability of Achilles drone operators to strike Russian tanks and publicize their exploits. The mythic names of Ajax and Achilles connect the soldiers in Ukraine to an eternal fellowship of warriors—a band of brothers who fight like hell, and whose valour lives on forever while their lives are cut short. It doesn't even matter that the Greeks were the invaders in Homer's war, while the Russians are the invaders in Ukraine. The *Iliad* is largely unconcerned with the ostensible strategy of the Trojan war, focusing instead on the pathos of those who fight it.

Homer shows us that military judgment is complicated, multifarious, and sometimes nefarious. In every era we find Agamemnon the tyrannical commander, Menelaus the mediocre executive, Achilles the temperamental celebrity, Patroclus the fallen buddy, Briceas the civilian victim, Hector the tragic patriot, Andromache the grieving widow, Ajax the good solider, Diomedes the virtuous warrior, Odysseus the cunning strategist, Nestor the old windbag, Helen the love interest, Paris the martial poseur, and so on. The fortunes of war and the remote machinations of politicians can still seem as capricious and cruel as the intervention of gods. AI will not replace and will probably amplify all these ancient archetypes, cultural biases, and fraught emotions, for better and worse.

In sum, much of the debate around military AI is predicated on a mode of rational judgment at odds with the Homeric nature of war. Visionaries of AI warfare assume that precise and efficient weapons can be guided with clear targeting instructions, while skeptics of AI worry that autonomous weapons will not be programmed to adhere to rules of engagement. But the lived experience of human warriors is not captured by either the visionary or the skeptical view. The mythology of the *Iliad* suggests that the real problems associated with military automation will not be found in software engineering or AI policy but rather in the passions, imperfections, and even wrath of men at war. The true horrors of battlefield AI come less from the misalignment of machines and more from the Homeric judgment of the warriors who wield them.

6 The Contemporary Power of Apocalyptic AI

Elke Schwarz

In October 2024, Peter Thiel's venture capital firm, Founders Fund, held the second Hereticon Apocalypse Ball, to which all the luminaries of the current technology elite were beckoned. The ball is a fancy dress event which invites "technologists, entrepreneurs and every manner of creative dissident—to come and share [their] wildest dreams". The online promotional text ends with a provocation: "Maybe if you are not trying to destroy the world, you aren't trying hard enough" (Solana, 2024). The sentiment is *au courant*. In 2024, there have been countless articles, opinion pieces, and podcasts devoted to the possibility of a techno-apocalypse in one form or another, with almost all high-profile corporate executives weighing in on the

matter. And the wider elite discourses on AI are distinctly inflected with a sense of spirituality attached to the promise, or threat, of artificial intelligence—whether that is Schmidt, Mundie and Kissinger's latest publication 'Genesis: Artificial Intelligence, Hope and the Human Spirit', which mediates on the hopes that AI "will solve some of the greatest mysteries of our universe and elevate the human spirit to unimaginable heights" (Kissinger et al., 2024), or AI venture capitalist Marc Andreessen's "Techno-Optimist Manifesto", which lays out a technology-centered belief system of sorts (Andreessen, 2023). Often the discourses oscillate between promises of transcendence with AI or, alternatively, existential risk to all of humanity.

One might be tempted to dismiss these techno-religious narratives as useful distractions. To a certain extent this is exactly what they are; every new talk or text on the matter only serves to further flood the media landscape with yet more coverage of the same few faces and the same few talking points. But these recurrent narratives also exert an effect on the wider semiosphere. The twinning of technological and religious visions carries a potent affective charge which distributes power among recent technology elites in politically salient ways. Those who lay claim to sacred knowledge about salvation or doom are the self-anointed political prophets of our collective future with AI. With this, they are able to determine what we might need in order to fulfill their prophecy, including in the domain of defence and security.

In critical theory of technology and science and technology, it is well established that the technological imagination matters politically. Imagination is a contested field of action. Visions are always speculative constructs that incapsulate interests and with that, a certain power, as they prioritize some ideas and experiences over others. At the risk of stating the obvious, technological visions shape social, political, and moral aspirations; they guide what is foregrounded and where we turn our attention and research funding to. They are never purely technological, but rather, as Sheila Jasanoff (2015, p. 4) stresses, always socio-technical in character, whereby "scientific-technological ideas enter into assemblages of materiality, meaning and morality". By paying attention to these socio-technical arrangements, we can better understand how imaginaries about science and technology connect "the individual's subjective self-understanding to a shared social or moral order" (Jasanoff, 2015, p. 5). Socio-technical arrangements produce the "givens" for any era; that is, they produce the lens through which we perceive and assess relational environments, and in so doing, they hold political power.

What, then, are we to make of the notable reinvigoration of religious expression, and apocalyptic tropes especially, in relation to the technological enterprise in general and Artificial Intelligence (AI) in particular? Extending our analysis beyond the technical aspects of AI and taking seriously these various apocalyptic tropes allows us to better understand the socio-technical assemblage of our time and its mode of power. As Robert J. Lifton (2019, p. 80) reminds us, those able to offer a unification of the "mythical and the logical modes of experience (in psychoanalytic terms, of the *primary* and *secondary* thought processes)", are able to shape what Lifton calls a "totalist milieu"—an environment in which those with specialist knowledge are able to guide perspectives and priorities and exercise a form of centralized control. The presumed dichotomy of the logical and the mythical is, however, "artificial and man-made" (Lifton, 2019, p. 81), a useful fiction. Similarly, technology and religion

are not two diametrically opposed cultural markers, rather, they share an entwined heritage.

6.1 Techno-Eschatology

One could argue that all socio-technological narratives are religious narratives, at least in the sense that Western modernity has been built atop foundations reaching back to thirteenth-century Judeo-Christian ideas. The historian David Noble (1999) details this development with great care in his seminal text *The Religion of Technology*, explaining how technology and eschatology came to be inextricably entwined. Eschatology is concerned with the study of the end of things and our knowledge as it relates to this final ending. Eschatological ideas often reflect the socio-political problems of an era, giving an expression to "the way we understand and experience the shape of the world and our place within it more broadly" (Wolfe, 2020, p. 56). And in times of "overwhelming insecurity, disorientation and anxiety" (Cohn, 1970, p. 136), such ideas happen upon particularly fertile grounds. There is therefore a tight link between the history of technology and the history of eschatology.

From the beginning of the thirteenth century onward, eschatology became infected with ideas of progress. The theoretical innovations of Joachim de Fiore, who suggested that a progressive timeline could be inferred from scripture—from the Father to the Son to the Holy Spirit—ushered in the notion that "that the world and the people in it were destined to radically improve" and that this development could be hastened through "social growth and individual change" (Davis, 1998, p. 305). De Fiore's was first and foremost a quasi-scientific account of eschatology as transformation through different ages. Together with this idea came the notion that a longer historical trajectory could be predicted and the development of history could, ultimately, be forecast (Cohn, 1970, p. 108). With this, the focus of agency and knowledge production about the end was shifted to the human. It was within the human's grasp to study and interpret scripture, through logic and deduction, and by doing so, knowledge about life, death and transcendence came to be the product of human activity, mapped against a progressive teleology. This shift also enabled ""transposition of eschatology from a theological into a philosophical register—including from a revelation-based to a system-based form of legitimation [which] tacitly underlies much of the nineteenth and twentieth century European philosophy." (Wolfe, 2020, p. 55).

This has significant consequences for the politics of technology. When eschatology is understood in historical and progressive terms, as a movement toward salvation or freedom, technology is enshrined as the vessel for this movement. It becomes the means through which future perfection is to be engineered and attained. With discourses on AI as a promise toward transcendence and abundance we see echoes of this teleological aim. Religion, technology, and politics in this way form a constellation that underpins the shifting fortunes of Western modernity.

The technological enterprise of today, then, has always been "suffused with religious belief".

During the 1990s, it manifested as "*mythinformation* … the notion that communication systems, databases, software and complex technical organizations are in themselves avatars of the Good, actively keeping chaos at bay" (Davis, 1998, p. 104, emphasis added). This era of early personal computing and an Internet that would literally connect the globe became invested with a range of "eschatological fantasies", with media commentary rehearsing familiar tropes of a "moral revolution, the global village, the apocalyptic collapse of time and space, even the hygiene of purely virtual contact" (Davis, 1998, pp. 307–308). The sense of rupture produced by commercially available digital tools was, at the time, conceived of as a pathway to transformation for individuals and communities alike.

Two decades on and the techno-eschatological tropes take on a slightly different inflection, oscillating more sharply between utopia and dystopia, between AI as a pathway to "massive prosperity" in a future "so bright that no one can do it justice by trying to write about it now", as OpenAI's Sam Altman (2024) suggests, and a range of darker prognostications. Elon Musk vision of AI as harbinger for "human annihilation", as Elon Musk proclaims (quoted in Hart, 2024); former Google CEO Eric Schmidt's warning that AI may pose an existential risk, "defined as many, many, many, many people killed or harmed" (quoted in Roush, 2023). The sense of rupture through AI is here also foregrounded, but the consequences of this rupture are no longer unequivocally 'good'. Rather, AI, and specifically superintelligent AI, is mythologized as a powerful spiritual agent in its own right, with potentially extraordinary effects on humanity at large. The eschatological fantasies embedded in AI begin evoking apocalyptic notions alongside other more explicitly utopian modes of technological thinking.

But what is almost always obscured in such techno-elite narratives is the fact that elites, of course, have a hand in producing AI technologies and shaping the overall capacities, limits, and direction of the technology and its use. And with this, they have significant financial interest in focusing all attention on AI as an extraordinary, more-than-human, and powerfully opaque phenomenon that requires elucidation and careful handling by those with expert knowledge, by those able to interpret and guide the power of AI and thus create a milieu in which AI becomes both myth and ordering principle for human life.

6.2 The Power of Knowing the End

Eschatological narratives are, ultimately, anchored in claims to privileged knowledge about what, and who, matters, and where attention should be directed in the pursuit of salvation or freedom. With this, as Foucault has so firmly established for the Western modern era, comes power. Apocalyptic stories might therefore serve as a rhetorical device to direct attention and declare ethical priorities.

In the traditional Judeo-Christian context, apocalyptical rhetoric was understood as metaphor, interpreted by theologians as a way to make sense of human life, death, and suffering. In modernity, and especially after 1945, as Günther Anders (2019) explains, this metaphorical foundation has become infused with a literalness that centers on the threat of annihilation and prioritizes ideas of

progress. Apocalyptic narratives have in this way come to fuel a boom in religious cults and "extremist political movements" in which apocalyptic purification, survivalism, and the promise of a "new civilization", a society of harmony and beauty, in a near or distant future is foregrounded (Lifton, 2019, p. 5). As Lifton observes, science and technology are increasingly enlisted in realizing these apocalyptic visions, thereby cementing the political power of those with knowledge of the apocalypse.

Apocalyptic narratives carry political power in two ways. They elevate the status of the expert knowledge holder, in this case the technology elites who lay claim to forecasting the future. But techno-eschatological tropes also "have a remarkable ability to shock-frost debates that should be held in an open manner, with clarity about arguments, knowledge and underlying interests" (Uekötter, n.d.). In other words, they paralyze necessary political debate about the direction of a shared future.

Even more problematically, apocalyptic narratives of this type tend to be tied to violence as a cleansing force, and with that, they tend to serve as a mode of justifying violence. "Apocalyptic world purification", in Lifton's words, through destruction and renewal. It is against this backdrop that the decidedly religious narratives of new military technology companies and their financial backers should give us pause for thought. When Alex Karp, the CEO of military AI technology company Palantir refers to his business and the people within as a cult (Weiss, 2024); when Trae Stephens, co-founder of military AI company Anduril, muses about God's plan for a technological future (Stephens, 2024); when Elon Musk proclaims the risks of population collapse and a zombie apocalypse; when Katherine Boyle, partner at venture capital company Andreesen Horowitz (whose portfolio include Anduril, Space X, Shield AI, and other defence startups) declares that America must "win a war against evil ideologies" and that "technology is the escape hatch for a nihilistic world" (Boyle, 2023); when Palantir's CTO conjures up the Lutherian reformation movement with his "18 Theses of the Defense Reformation" in response to a perceived but "undeclared state of emergency" (Sankar, 2024)—then all this adds up to more than just an annoying distraction.

Religious and especially apocalyptic narratives about contemporary technology are powerful because they shape and direct attention, facilitating or disinhibiting political discourse and debate. In so doing, they tap into a long tradition of harnessing power through eschatological knowledge in connection with technology. This re-sacralization of essentially political knowledge is decidedly anti-democratic, and that is the whole point. It erodes ideas of equality and egalitarianism in favor of an abstract and always future-oriented justice to come—a Parousia, which, inevitably, will disappoint.

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author confirms that all persons who meet the authorship criteria are included and that no qualifying individual has been omitted.

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