Covid-19, Philosophy and the Leap Towards the Posthuman

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Abstract

A discursive canon around transhumanism and posthumanism as beliefs in the efficacy and necessity of technology as the beneficial transformer of human life "for the better" is well-established in the Western philosophical tradition. However, none of the theorists and protagonists of this technological reconfiguration of humanity could ever have predicted that what they envisaged would be propelled into manifestation with as dramatic and phenomenal momentum such as has been ushered in by the mainly technology-driven interventions introduced in various measures globally to curb the SARS-CoV2 virus. The effect of these responses to the pandemic, it is here demonstrated, have set humanity into a technogenesis, a transformative ontological process headed towards a machinistic and de-anthropic life idealised by posthumanists. Apropos, a set of three intertwined tasks are here executed. Firstly, I explicate my foregoing claim, namely, how at the helm of the variety of measures to control Covid-19 is a discernible socio-scientific movement that is directed at inaugurating and regularising a posthumanist consciousness and de-anthropic modes of sociality. Secondly, I venture a critical understanding of "the Covid-19 moment" that exposes the quadripartite alliance of a postmodernist Western philosophy, technoscience, commercial interests, and politics as the systemic drivers of this technocratic philosophical anthropology. Thirdly, or rather concurrently, taking the work of Nick Bostrom as the theoretical heuristic advocating human technological transformation, I normatively alert of the ramifications of this emerging human ontology.

Keywords: Artificial Intelligence (AI); Covid-19; philosophical anthropology; philosophy of technology; technological posthumanism; transhumanism

Introduction

The motif of this article is that the manner in which the array of technological interventions directed at the prevention and control of the severe respiratory syndrome coronavirus 2 (SARS-CoV2) have been deployed, has rendered the Covid-19 pandemic into the proverbial Trojan Horse: the pandemic has been exploited for accelerated innovation in the application of artificial intelligence (AI) technology for the benefit of commercial interests, whilst effecting an unprecedented technologisation of human life. My claim is that the coronavirus crisis has catalysed the implementation of a *pre-pared* agenda for the technogenesis of humanity, our trans-humanisation into the posthuman.

The "preparedness" I allege arises from an observation that historically, Western philosophy has rendered the question of the essence and meaning of human terrestrial life a subject of critical experimental inquiry. This intellection has, in turn, pervaded the broader modern culture. With the advent of postmodernism, from Friedrich Nietzsche (Nietzsche 1974 [1887]) to the later French deconstruction tradition (Foucault 1971), this discursive field of "philosophical anthropology" would spawn a variety of anti-humanisms, transhumanism and posthumanism in which the place of the human being on planet Earth was being radically reviewed.

Into the twenty-first century, contemporary philosophers such as Nick Bostrom (2009), Matthew Gladden (2019), and Francesca Ferrando (2019) are arguing that technological measures that augment and enhance human biological and cognitive capabilities must be encouraged, and that non-human as well as inanimate artefacts, such as robots, must be accorded ontological and social status equal to that of human persons. At the kernel of all notions and modern schools on posthumanism is the subversion of the hermeneutic line that dichotomises organic human life from artificial non-human "objects." In concert with Ferrando's *Philosophical Posthumanism* (2019) this also includes breaching the mental limitation that stops at seeing life only in its terrestrial finitude; it is an extra-cosmic ethic that conjoins its concerns with those of possible life-forms in the infinite universe (Ferrando 2019, 171–177). Distilled from Ferrando's "philosophical posthumanism," our focus here is on *technological posthumanism*, or more lucidly stated, technology-mediated transhumanisation. But as we observe the role and mission of Elon Musk with his SpaceX (Space Exploration Technologies Inc) venture,[1] we will appreciate the profound vistas in the re-engineering of human consciousness that the current technological revolution is mediating. In philosophical terms, this adumbrates "the end of the *human* era," the end of the human being as the fulcrum of the meaning of life on planet Earth. I invite an observation that responses to the threat of Covid-19 by politicians, AI scientists and technology entrepreneurs (tech companies), which are being undertaken within a cultural climate that upholds de-humanistic ethic that is already routinised by a postmodern Western intellectual heritage, are systematically speeding up this end of the human era.

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1   See www.spacex.com. Accessed November 25, 2020.

I referred to an "agenda" in my opening paragraph. This is not to be confused with any of the myriads of conspiracy theories that have mushroomed with the coronavirus crisis. As will become clear, I here refer to a school of thought in philosophy that has postulated and now advocates for a posthuman era, and has in the process fetishised technology into a salvific (soteriological) means for the perfection of human ontology. Since the advent of the computer age, this intellectual movement has found kinship with organised commercial interests and technoscientific research. This convoluted relationship is emblematised by the legendary connection between Stanford University and Silicon Valley on the west coast of the United States (Adams 2005), and the scholarly fraternity between Elon Musk, a physicist corporate billionaire, and Nick Bostrom, a physicist-philosopher. There are even overt organisational structures, such as Bostrom's World Transhumanist Association,[2] and Musk's sponsorship and service in the scientific advisory board of the Future of Life Institute.[3]

Ignoring the factor of China as an established state-controlled technological superpower that betrays the force of the military technological-nationalism axis as the complementary driver in this socio-technological movement, I will proceed to give a nuanced exposition of the breath-taking technologisation that we have experienced since the beginning of the year 2020, and demonstrate how it is linked to the theoretical processes that are directed at the reconfiguration of the meaning of humanness. Also, I will cryptically show how, throughout the progression of the presently hegemonic Western thought system, we have been pre-pared and conditioned by countless decades of a posthumanist episteme for this technocratic moment. For both evidential and heuristic purposes, I will follow Bostrom's philosophy of transhumanism as the grid of my exposition.

On the Covid Moment

On May 8, 2020, with the ravage of the SARS-CoV2 on the city of New York at its height, and televised images of refrigeration trucks supplementing hospital mortuaries beamed throughout the world, State Governor Andrew Cuomo presented his daily CNN televised briefing. For a socially conscious and technologically savvy philosophic eye, this particular daily crisis-briefing turned out to be an ominously revealing one. In contrast to the sombre demeanour that had characterised his state of emergency frequent televised tête-à-tête with New Yorkers, whilst nursing the much-publicised Covid infection of his own CNN reporter brother, on this day Governor Cuomo appeared unusually happy, eyes sparkling with confidence. He was accompanied by Eric Schmidt, current chairman of the US Defence Department's Innovation Advisory Board and former Chief Executive Officer of Google (now renamed Alphabet Inc). Schmidt, a billionaire technologist, was presented to the people of New York and the world to announce the good news of the salvation of technology against the woes of Covid-19. He would be heading a State commission involving a partnership with all major Silicon

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2   See https://www.transhumanist.com. Accessed September 6, 2020.
3   See https://futureoflife.org/team. Accessed September 7, 2020.

Valley technology corporations to reimagine and craft the post-Covid, smart New York life (Klein 2020). As part of this programme, Cuomo added that the Bill and Melinda Gates Foundation would be assisting in the permanent catapulting of the education system throughout the State onto an online delivery platform. Lauding the Microsoft founder, he declared that the coronavirus pandemic has created "a moment in history when we can actually incorporate and advance [Gates's] ideas … you get moments in history where people say, 'Okay, I'm ready. I'm ready for change. I get it.' I think this is one of those moments" (in Strauss 2020).

Cuomo is correct. In less than a year since the Covid pandemic *moment*, under the dread and emotional stress of a deadly pandemic that medical science has not been able to readily provide a coherent scientific leadership on, we are ready to change in line with the so-called behavioural non-pharmaceutical measures as facilitated by the social-engineering tools peddled by technology corporations through government decrees. What is the essence of this particular *moment*? How and by whom are we being made ready for the change? And, what are we exactly being changed into?

In *The Shock Doctrine: The Rise of Disaster Capitalism* (2008), Naomi Klein persuasively demonstrates how throughout modern history, fear and the shock arising out of dreaded diseases, economic collapse, war, civil unrest, and environmental catastrophes have been manipulated for epoch-making political and social change. She has now declared that what we have experienced in the year 2020 is a Pandemic Shock Treatment (Klein 2020). I concur with her theory which corroborates my claim that the Covid pandemic has been usurped or rather exploited as an opportunity to accelerate a technoscientific philosophical movement for the digitisation of human life for a posthuman existence which, in the short and medium-term, is for the benefit of organised commercial interests, and in the long term, could well lead to the extinction of the human race, as has been warned, among others, by Stephen Hawkins (Cellan-Jones 2014) and ironically, Bostrom himself (Bostrom 2002).

I will suggest that the change we are set for at this juncture is a mutation towards the machine. By "the machine" I mean this in both the literal sense of the word, as outlined in *The Second Machine Age* (Brynjolfsson and McAfee 2014), and as philosophically conceived with a phenomenological appreciation of the force of the psychical process that occurs when humans interact with technology. The postmodern human is marshalled into what Ray Kurzweil had predictively declared as the *Age of Spiritual Machines* (Kurzweil 1999). This is a social-culture that idealises the beyond-human-limitations-and-vulnerabilities, the augmented and optimised; that which can perform with the efficiency, resilience and infinite endurance found in machines.[4] It is an intellectual-consciousness ready to accord social ontology to inanimate artificial life-forms. Being part of, or with-machine, be it socially, neurologically or biologically as a cyborg, is venerated as progress. In her lamentation of what she discerned in Governor

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4   See https://www.engineeringnews.co.za/article/robots-can-play-vital-role-in-covid-19-fight-2020-10-15. Accessed October 15, 2020.

Cuomo's symbolic performance as the emergence of what is resembling a Pandemic Shock Doctrine, Klein quotes a technopreneur, Anuja Sonalker, who thoughtfully quipped what has iconically established itself as a key precept of this shock-mediated machine philosophy: "humans are biohazards, machines are not" (Klein 2020).

According to Cameroonian philosopher, Achille Mbembe, our world is changing into a "*technoaltry*" in which traditional human polities are turning into technocratic societies in which we are "*digitzens,*" no longer citizens with free political agency (Mbembe 2017, 21–24). Global humanity is progressively being wooed towards the normalcy of cyborgisation, wherein this human-machine fusion can occur variously as biological augmentation and mental soporification, as demonstrated in *Re-Engineering Humanity* (Frischmann and Selinger 2018). For posthumanists such as Gladden, this technologisation of humanity is a positive step in human evolution (Gladden 2018). In his adulation of the government of Japan's *Fifth Science and Technology Basic Plan* (Government of Japan 2016), he counsels on how human beings will need to change to be worthy inhabitants of the inevitable cyber-physical, the part-real and part-virtual smart world, the new Society 5.0 (Gladden 2019). We are already in Society 4.0 of Industry 4.0, 4G. We are on the cusp of migration into the 5G (fifth generation) technology that would manifest a mutation into this Society 5.0. As the technologically-enhanced human being ceases to be the template for the definition of sociality, Gladden enthuses:

> Society 5.0 will differ from Society 4.0 largely by welcoming into itself a bewildering array of highly sophisticated social and emotional robots, embodied AI, nanorobotic swarms, artificial life, self-organizing and self-directing computer networks, artificial agents manifesting themselves within virtual worlds, and other artificial types of intelligent cyber-physical social actors. (2019, 39).

In a keynote address to a recent conference on artificial intelligence, *AI Dialogue South Africa*, Toshio Fukuda, current president of the internationally prestigious Institute of Electrical and Electronics Engineers (IEEE) asserted that Society 5.0 would be attained in the year 2025.[5] Characterising the latter as "an era of hybrid intelligence," he proffered the idea that the subsequent Society 6.0, the era of machines surpassing human intelligence and no longer requiring human control, will be achieved in 2045.

This technology-generated posthumanism that is being fuelled by advances in and beyond the so-called Fourth Industrial Revolution (4IR), for our purpose, is best illustrated in the work of Nick Bostrom. Bostrom, a Swedish-born Oxford philosopher, and polymath with a background in theoretical physics, computational neuroscience, and artificial intelligence, is the director of the Oxford Future of Humanity Institute. With David Pearce, the co-founder of the World Transhumanist Association (WTA) in 1993, he piloted "The Transhumanist Declaration" of 2009.[6] For him, transhumanism is

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5 Online conference held on August 5, 2020. https://www.aidialogue.org.za. Accessed August 5, 2020.
6 https://humanityplus.org/philosophy/transhumanist-declaration. Accessed August 26, 2020.

essentially about technology-mediated human transformation, and the belief that human evolution is on an inexorable posthumanist trajectory, fuelled by a quest for the perfection of the human species (Bostrom 2005, 5). Notably, the WTA publishes a scholarly journal, named *Journal of Evolution and Technology*.

The conceptual bifurcation of transhumanism from posthumanism, at the fork of which Bostrom's work resides, is material to the claim of this paper. In *Are you a Transhuman*? (1989) Fereidoun M. Esfandiary,[7] who "transhumanised" his name to FM-2030, explained that being transhuman refers to being embedded into a culture of technology usage that sets one into a transitional evolutionary link towards posthumanity (in Bostrom 2005,13). Joel Garreau concurred that "the *transhuman* is a description of those who are in the process of becoming *posthuman*" (in Wolfe 2010, xiii). Accordingly, at this moment in history, ontologically, we are *transhuman*, in the throes of a transhumanist techno-culture that is incipiently changing us (see Hayles 2013; Floridi 2014; Tegmark 2017). With technology thrust at the core of the reframing of being human, we are undergoing a technogenesis (Hayles 2013, 28), being re-made by technology into its forms and patterns of computational thinking and robotic behaviour. Our destiny, in Bostrom's evolutionary framework, is posthuman. A point of concordance between transhumanism and posthumanism is the teleological nexus between them, that is, transhumanisation leads to posthumanity. It is stated in the "Transhumanist Declaration," *inter alia*, that "We advocate the well-being of all sentience, including humans, non-human animals, and any future artificial intellects, modified life forms, or other intelligences to which technological and scientific advance may give rise" (Bostrom 2005, 26). There is a joint action in throwing open the definition of the human person, to multispecies coexistence, and to the merging of the human neurobiological system to artificial intelligent systems.

For Bostrom, posthumanity is one of a few possible futures of humanity (Bostrom 2009). The other possibility is existential extinction. Paradoxically, of all the "existential risks" he has devoted much of his research on, as a physicist-philosopher, he singles out the explosion in artificial intelligence, the phenomenon I reference earlier from Toshio Fukuda, as the most imminent (Bostrom 2002; Bostrom and Cirkovic 2007). In "How long before Superintelligence?" (Bostrom 1998) and later in *Superintelligence, Paths, Dangers, Strategies* (Bostrom 2014) he posited one of the earliest grounds for the later views of techno-futurists—such as Kurzweil—that progress in human life is pointed towards the necessity for humans to augment their biological and cognitive capacities by being connected to AI systems and gadgets that could have a self-replicative superintelligence. Before Fukuda, Kurzweil, who until recently was the director of engineering at Google, famously predicted with aplomb that by the year 2045 humans would be fully integrated into this super-intelligent machine-driven form of life (Kurzweil 1999). Subsequent press interviews of him resulted in the

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7   FM-2030 died in July 2020 and, according to his wishes, he is cryonically preserved at Alcor Life Extension Foundation facility in Arizona, USA. See https://www.bioedge.org/bioethics/fm-2030-a-transhumanist-pioneer/13414. Accessed September 7, 2020.

Time Magazine cover page of February 2011 with the headline "2045 The Year Man Becomes Immortal."[8]

To thinkers in Bostrom and Kurzweil's orbit, this is the unavoidable future of singularity in which self-repairing devices that can be embedded into humans will produce hyper-performing cyborgs that will be able to colonise space, specifically planet Mars. It is not by chance that Elon Musk's *SpaceX* company scored the historical feat of being the first private technoscientific corporation to successfully design and launch a spacecraft for NASA (National Aeronautics and Space Administration of the USA) (Howell 2020). Musk, a billionaire Massachusetts Institute of Technology physicist, is an active posthumanist who fully understands the implications of singularity (see Vance 2015). The idea and vision of singularity were seminally posited by NASA scientist, Vernon Vinge in his 1993 ominously titled paper, "The Coming Technological Singularity: How to Survive the Posthuman Era" (Vinge 1993), in which he predicted that "within thirty years, we will have the technological means to create superhuman intelligence. Shortly thereafter, the human era will be ended" (Vinge 1993, 11).

The Covid Moment and Technogenesis

All available evidence indicates that the outbreak and scale of the global spread and devastation of Covid-19 caught all and sundry by surprise. None of the theorists and advocates of transhumanism and posthumanism ever thought that what they opined would fast-forward the manifestation of their postulations as the pandemic has done. In "A History of Transhumanist Thought," penned in 2005 in the propagation of the transhumanist agenda, Bostrom remonstrated that:

> If either superintelligence, or molecular nanotechnology, or uploading, or some other technology of a similarly revolutionary kind is developed, the human condition could clearly be radically transformed … however, transhumanism does not depend on the feasibility of such radical technologies. (Bostrom 2005, 11)

He immediately proceeded to list several extant, less radical, technologies that would have a direct contribution to a transhumanisation process:

> Virtual reality; preimplantation genetic diagnosis; genetic engineering … prosthetics; anti-aging medicine; closer human-computer interfaces: these technologies are already here or can be expected within the next few decades. The combination of these technological capabilities, as they mature, could profoundly transform the human condition. The transhumanist *agenda*, which is to make such enhancement options safely available to all persons, will become increasingly relevant and practical in the coming years as these and other anticipated technologies come online. (Bostrom 2005, 11, own emphasis)

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8 *Time Magazine*, February 21, 2011, http,//content.time.com/time/covers/0,16641,20110221,00.html. Accessed November 20, 2020.

That was fifteen years ago. The latter set of technologies has certainly matured. But it is after the outbreak of the Novel Coronavirus around December 2019 that these technologies, and their cognate application whose prototypes appear to have been innovated long before—given the speed at which they have been rolled out—were systematically unleashed.

Some technologists, including the cluster of thinkers associated with the World Economic Forum (WEF) who have imposed upon themselves the mantle of champions of "the fourth industrial revolution," have welcomed this confluence of the pandemic and the proliferation of AI as a positive step in the appropriation and assimilation of human societies into the technological ecosystem. As theatrically proclaimed by the authors of a July 2020 advertorial of the University of Johannesburg:

> No-one could have said that whole industries, like aviation, entertainment or hospitality, that were once simply taken for granted, would be threatened with extinction. No-one could have imagined that simply by shaking hands with someone, you could be putting their life, or your own, in danger. That's the bad news. The good news, is that this is not just the era of the pandemic. It's also the era of 4IR.[9]

The advertorial launched into painting the coronavirus crisis as the inauguration of a technological utopia:

> We can use cell-phones to track the movements of infected people, and trace the people they have met. We can use substances that work on the nano-material level to protect us. We can use 5G and other platforms to conduct diagnostics at a distance when speed is of the essence, or when access is difficult. Moreover, it can be done with the aid of artificial intelligence (AI) which can scan millions of cases to automate diagnosis. We can use drones to deliver food and medicines. We can use big data to rapidly understand areas and trends of infection, and predict new ones. We can use 3-D printing to quickly produce protective equipment. And we can use endless iterations of channels like Zoom to stay in touch, work in teams, teach and learn, without exposing ourselves to the threat of personal interactions. Most importantly, perhaps, we can use high-speed computational and molecular capacity to speed up therapeutic interventions that could lead to treatments and vaccines in a fraction of the time it once would have taken.[10]

In their "Governance, Technology and Citizen Behaviour in Pandemic: Lessons from Covid-19 in East Asia," Shaw, Kim, and Hua (2020) catalogue how technological innovation was from the start deployed at the epicentre of the disease in the fight against infections at near-magical speed. They describe in classic terms the compulsory health barcoding of an entire population in China, where surveillance and epidemic mapping algorithms tied to the user's smartphone were rolled-out and enforced with military precision. Versions of this contact tracing application, linked to never-before-

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9   https://www.dailymaverick.co.za/article/2020-07-23-evolution-as-revolution-covid-19-in-the-time-of-the-fourth-industrial-revolution/#gsc.tab=0. Accessed September 7, 2020.

10   https://www.dailymaverick.co.za/article/2020-07-23.

appreciated artificial intelligence-powered navigational technologies, have been adopted in many countries.[11] Singapore added the layer of deploying the Boston Dynamics' robot-dog, SPOT, to patrol a public park to enforce social distancing.

As the daunting reality that there is no prophylactic solution against Covid-19 sank in, the reliance on technology became paramount in managing people's behaviour, and in enabling their life under lock-downs and self-isolation. People were forced to spend money on technology, and to adjust to it being an extension and enabler of their lives. Consequently, as a feature of this socio-historical moment, tandem with the stream of the news on the damage wrought on lives and national economies by the coronavirus, were trenchant announcements of mind-blowing profits that technology companies were "expectantly" making. Zoom Technologies reported a 3,300% jump in profits during the third quarter of 2020 (Unites States House of Representative 2020, 132–375). Apple Inc attained the status of the most valuable publicly traded company in the history of humankind on July 31, 2020, and "Amazon doubled its profit—during a pandemic. Facebook saw a daily user increase of 12 percent year over year to 1.79 billion,"[12] Forbes Magazine announced on August 26, 2020, that Jeff Bezos of Amazon.com became the first richest person on planet Earth to have personal wealth reaching USD 200 billion. (The world's second-richest, Bill Gates was at USD116 billion).[13]

In May 2020, Brian Dumaine published a blockbuster on the life philosophy of Bezos. Indulgently and informatively titled *Bezonomics: How Amazon is Changing our Lives and how Big Companies are Learning from it*, the text stands out as a case study on how a commercial strategy that is founded on the exploitation of the interplay between AI technologies and human social-psychology works. With chapters bearing titles such as "In God we Trust, all others must Bring Data" (Dumaine 2020, 43–60) that lays bare the antics of the commodification of our intractably online life, our *onlife* (see Floridi 2014), and one chapter on "Sexy Alexa" (Dumaine 2020, 107–122) that unabashedly glides over the moral complexities of the genderisation of assistive bots such as Amazon's *Alexa*, and the original Apple's *Siri*. Of particular interest for us, ultimately, is Dumaine's focus on how not only Amazon, but all the major Silicon Valley corporate behemoths, including Musk's *Neuralink,* are practically re-engineering being human.

In their *Re-Engineering Humanity,* Frischmann and Selinger (2018) masterfully took into a further dimension the alert raised by Floridi and others, on how technologies that ostensibly make our life easier, have robbed us of our cognitive vigilance and human agency. Immersed in a data pool that takes our data and uses it to predict and craft our

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11 For a comprehensive summary on the computer engineering global response to Covid-19, "and its preparations for the next pandemic," see the special issue of IEEE Spectrum Oct 2010. https://spectrum.ieee.org/Blast/Oct20/10_Spectrum_2020.pdf. Accessed October 12, 2020.

12 https://www.theverge.com/2020/7/31/21350154/apple-worlds-most-valuable-company-saudi-aramco. Accessed September 7, 2020.

13 https://www.forbes.com/sites/jonathanponciano/2020/08/26/worlds-richest-billionaire-jeff-bezos-first-200-billion/#684e63d9. Accessed October 10, 2020.

living environment, our lives are not only undergoing a process of datafication: due to the ubiquitous machinic rationality of the computer programs that we use, we are also rapidly evolving into unthinking beings, with our natural decision-making capacity being blunted by predictive and suggestive algorithms. They describe how we somnambulistically just click-sign consent for software upgrade agreements that empower commercial elites to have extended access into and control of our lives. We are helplessly caught-up into a wave of psychological and socio-technological engineering.

Published two years before Governor Cuomo's Covid momentous speech, *Re-Engineering Humanity* (Frischmann and Selinger 2018) harks back to the theme of the dystopia painted in Aldous Huxley's 1932 influential science fiction *Brave New World*. Huxley (1932) conjured a society of people who are biotechnologically engineered through a eugenics programme, psychologically conditioned through subliminal telecommunicated messages, and literally drugged into *not* wanting to think for themselves. Frischmann and Selinger subliminally leave it to their readers to recall the totalitarian utopianism staged in George Orwell's *Nineteen Eighty Four* (1949) with its "Big Brother" who could see everything, including predicting the thoughts of citizens, in the name of saving them.

A recent (April 2019) internet news article on Bostrom carried the headline: "An Oxford philosopher who inspired Elon Musk thinks mass surveillance might be the only way to save humanity from doom." It reported that:

> Under Bostrom's vision of mass surveillance, humans would be monitored at all times via artificial intelligence, which would send information to "freedom centers" that work to save us from doom. To make this possible, he said, all humans would have to wear necklaces, or "freedom tags," with multi-directional cameras.[14]

In "The Future of Human Evolution" Bostrom does argue for "the development of a 'singleton,' a world order in which at the highest level of organization there is only one independent decision-making power (which may be, but need not be, a world government)" (Bostrom 2004, 339).

Who is Re-engineering Humanity?

We can now wrap up a part of a question we raised earlier, namely, "by whom are we being changed?" In *The Age of Surveillance Capitalism,* Shoshana Zuboff (2019) amply outlines how the commodification of data and the concomitant reduction of routine human behaviour into an infinite data production portal have created an economic system that is premised on surveillance and datamining for profit and inescapable control of populations. Zuboff may have detected this as the rise of "neo-imperialism of

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14 https://www.businessinsider.co.za/nick-bostrom-mass-surveillance-could-save-humanity-2019-4. Accessed October 17, 2020.

tech-corporatism" (Zuboff 2019, 8), but she is not a Marxist rooting for the overthrow of digital capitalism (Morozov 2019). Marxian theorists, such a Michael Peters, have previously isolated the current phase of industrialisation as "cybernetic capitalism," bemoaning its mind-bending ideological dynamics, as well the perils of non-state actors wielding the power to exert profound changes on the foundations of society (see Peters, Britez, and Bulut 2009). At the core of all these critical social reviews is concern around how technological development is ineluctably driven by commercial interests which, *a priori*, are not about the common good, but private and parochial interests.

The evidence presenting itself points that we are witnessing an unprecedented trend in which overt political power is overtaken by powerful commercial interests in shaping the nature of our future societies. Corporates such as Facebook wield such immense power over the global human psyche that gleeful governments and politicians are forced into working in alliance with them, as their attempts to scramble and cobble regulations to control them prove ineffective (see United States House of Representatives 2020). On the unveiling of its new G5 iPhone model on October 13, 2020 Apple Inc. revealed that there are more than 950 million iPhone users globally. The antics of data mining means that Apple's corporate executives have access to, and a database of information on more people than many institutions in the world. Facebook Inc. is the custodian of personal and behavioural information of 1.6 billion of the active users of its family of products, i.e., Facebook, Instagram, Messenger, and WhatsApp. Indeed, as observed by Akun Tripathi "engineers and technical professionals are the unacknowledged legislators of our technological age" (Tripathi 2017, 141).

For the immediate focus of our discussion, however, the role of Elon Musk, the founder of, inter alia, Neuralink, is pertinent as he symbolises the fusion of technological intellect and commercial resources that are specifically deployed to achieve anthropogenetic goals (Vance 2015, *Elon Musk: How the Billionaire CEO of Tesla is Shaping our Future*). Musk has profiled himself as the iconic practitioner of a theory of technological posthumanism that involves full-scale neuroprostethisation of humans for our seamless connectivity into a cyber-social network with non-human artificial agents and systems, which is what his Neuralink Inc. is all about.

In an intellectual climate that is awed by the promises of the salvation of artificial intelligence, and a culture that acquiesces to technogenetic controls, the news in September 2020 that Musk's Neuralink company has achieved a significant milestone of its *raison d 'etre*, of prostethising and cyborgising the human brain by successfully inserting a nanotic electronic device into the brain of a pig that can be remotely controlled, were received with widespread acclamation.[15] In the environment concerned with disease and optimal health, he announced that this innovation could be a breakthrough in curing Alzheimer's disease. Forgotten were his statements such as:

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15 https://www.independent.co.uk/life-style/gadgets-and-tech/news/neuralink-elon-musk-event-watch-online-live-updates-a9694996.html. Accessed October 20, 2020.

> If we can effectively merge with AI by improving the neural link between the cortex and your digital extension of yourself—which already exists, it is just a bandwidth issue—then effectively you become an AI human symbiote. And if that then is widespread, anyone who wants it can have it, then we solve the control problem as well. We don't have to worry about some evil dictator AI because we are the AI collectively. (in Woronko 2019)

Besides the short-term profit focus of the likes of Amazon and Facebook, the tech space has overtly sophisticated visionaries such as Musk. Besides Neuralink, Musk's other investee company is what is now Google DeepMind, a specialised AI research outfit based in England that seized with research on the possibility of super-intelligent machines that can match and surpass human natural intelligence.[16] Ominously, the mission of DeepMind is encapsulated in this original definition by I. J. Good:

> Let an ultra-intelligent machine be defined as a machine that can far surpass all the intellectual activities of any man however clever. Since the design of machines is one of these intellectual activities, an ultra-intelligent machine could design even better machines; there would then unquestionably be an "intelligence explosion," and the intelligence of man would be left far behind. Thus, the first ultra-intelligent machine is the last invention that man need ever make. (Quoted in Bostrom 2005, 9)

However, on our way to this future of posthuman singularity, an era of rivalry and copulation with machines, we are already in a transhumanising Covid *future*, which Klein quixotically characterises thus:

> This is a future in which, for the privileged, almost everything is home delivered, either virtually via streaming and cloud technology, or physically via driverless vehicle or drone … [a future that] accepts no cash or credit cards (under the guise of virus control) … It's a future in which our every move, our every word, our every relationship is trackable, traceable, and data-mineable by unprecedented collaborations between government and tech giants. (Klein 2020)

The Complicity of Western Philosophical Posthumanism

French Marxist philosopher, Louis Althusser, argued that a critical student of the history of philosophy should discern that all major revolutions in Western philosophical thought were preceded by major scientific discoveries. He proffered an example of how Platonism was preceded by discoveries in mathematics, and how Cartesian Philosophy was preceded by discoveries in physics (Althusser 1972, 167). This begs the question of what would be the revolution in philosophy that would be induced by the discoveries in artificial intelligence and the unprecedented ubiquitous intrusions of informational technologies into human life. Will it, at last, be the canonisation of the redefinition of "the human"? An establishment of posthumanism as the rapturously new

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16   https://www.cnbc.com/2020/07/29/elon-musk-deepmind-ai.html. Accessed October 20, 2020.

epistemological ground for all discourses on humanity? Is it the revolution in philosophical anthropology which we are currently observing?

An intellectualised agony on the nature of the human being and the meaning of human terrestrial life has dogged Western philosophy throughout the ages (see Tandy 2004). This started in earnest during the Early Renaissance period at the germinal stage of Western science and technology as triggered by the works of Galileo Galilei and Francis Bacon. This problematisation of the nature of humanity assumed historical poignancy during the First Industrial Revolution in England, creating an intellectual milieu for Charles Darwin's *Origin of Species*, and Karl Marx's research that identified and named capitalism with enduring originality. This culturo-intellectual European-monologue, which in the process indulged in dehumanisitic classification and ill-treatment of non-European persons in its obsession with the eugenics of perfecting and preserving the Caucasian racial stock, assumed a novel and systemic urgency in the tumultuous period that followed the Second World War and the Jewish holocaust. The subsequent Cold War accelerated scientific and technological innovations and research as the Soviet east and the Anglo-American west competed for hegemony over global populations and resources. It is not accidental that Martin Heidegger, who fathered existential phenomenology amidst the Nazification of Nietzsche's notion of *das Ubermench*, had to conclude his *oeuvre* on "the question of Being" (*das Seinfragge*), with "The Question Concerning Technology" (Heidegger 1977 [1954]). This existentialist and, later, French "deconstruction" inquiry around the meaning and place of the human spawned a variety of notions of antihumanism, transhumanisation and a plethora of versions of posthumanisms, as summatively outlined, inter alia, by Ferrando in her dramatically titled paper "Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms, Differences and Relations" (Ferrando 2013).

The technological posthumanism we have discussed thus far, is a symptom of a Western postmodernity that is in a state of epistemological crisis. It can further be asserted that philosophy—in its uncloaked essence as a cultural practice—is the sum of all the presuppositions, assumptions, and rationalisation of the subjective interests that are behind the design, production, and deployment of even our technologies of the twenty-first century. The exuberance in AI innovation must be dealt with as a techno-scientific intellectual enterprise. The intellectual forces behind it all, which include philosophy in its various manifestations as an episteme, present the advent of the 4IR as a classical historical techno-scientific movement, a *Zeitgeist* of digitisation.

Advancement in the technologisation of artificial intelligence, quantum computing, nanotechnology, and telecommunications, and how this gradually and incipiently impinges onto traditional experiences of life and modes of social being, has narrowed the wide-ranging historical debate about the ideal future state of humanity into a directed critical consideration of technological posthumanism. Technology, as a force of production, is the material-cultural infrastructure upon which the theoretical superstructure of a mechanistic philosophical anthropology has sprouted. Cyclically, the

same philosophy-culture in turn feeds, justifies, and advocates for further scientific experimentations on the status of humanity. As testified by Bostrom, transhumanist philosophers "emphasize the enormous potential for genuine improvements in human well-being and human flourishing that are attainable *only* via technological transformation" (Bostrom 2005, 27 own emphasis). The technoscientific movement (or scientific ideology?) emanating from this symbiotic cross-pollination between philosophy and technoscience has a nadir point, an *eschaton*[17]—the technologisation of humanity, the dream of so-called singularity, as the ultimate material technological reality.

For later thinkers influenced by the work of Bostrom, posthumanisation is essentially about deposing the human being from her/his self-elevated position of the meaning-giver and paragon of terrestrial life. The monopoly of meaning-giving is opened up to grant equal participation of "subjective" perspectives of other non-human animate species. Robots and other automata bearing artificial life are welcome as equal social partners in a cyber-physical social system, as we noted. The carbon and the silicon can and should be hybridised, Musk would argue. The human and the organic principles are de-centred, life is de-anthropocised. It is "the end of the human era," in the words of Vinge (1993). It could ultimately, literally be an anthropocide as the unknown reality of singularity unfolds.

In the path towards this, "the defining characteristics [of posthumanism] involve the construction of subjectivity" (Hayles 2013, 4). Human consciousness, approached more from the psychological (behaviour manipulation) than the phenomenological angle, is attuned to a computerese, a self-consciousness that acquiesces to data mining, surveillance, and control. This, which is the status quo routinised by the Covid moment, I have suggested, is preparation for fusion with actual machines or artificial nanotechnological gadgets similar to Musk's pig. For Bostrom and other protagonists of the eventuality of the posthuman, these developments, requiring biologically invasive surveillance of populations, are necessary for the augmentation and perfection of human biology (see Parens 1998). This machining will make us resistant to viruses, prolong human earthly life, enable us to inhabit other planets or even deliver the historically elusive scientific and theological dream of immortality.

Conclusion

I have endeavoured to outline how behind the power of the commercial interests which, under the hegemonic capitalist economic paradigm, are the key drivers of technological innovation, is the intellectual heritage of Western philosophic thought that has historically problematised the value of human existence. I have emblematised this intellectual tradition around Nick Bostrom, and collaterally, Elon Musk.

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17 That is, the "Promise," given our working understanding of posthumanism as being a belief system, a philosophical rationalisation at the service of the technologized humans, and a de-anthropocentric "society."

Acknowledging that even before the Covid-19 pandemic, AI-based technological ventures have been marshalling humanity into a computer age that has profoundly been disrupting generic human social values, I have posited an expository argument that is hinged around New York Governor Cuomo's declaration of the Covid crisis as a historical "moment" that has readied us for technological transformation, to prove that this moment of crisis was opportunistically exploited by an alliance of scientific-intellectual and commercial interests to introduce socio-engineering technologies that were in turn procured and enforced by politicians as a beneficial intervention against the dread of a disease. The ultimate goals of the philosophically articulated agenda of the posthumisation of humanity, which is the kernel of the scientific-intellectual aspect of the alliance, has largely remained cloaked. The hope is that this is a worthy step in what should continue as research into exposing the end-goal of postmodern Western philosophical anthropology, the phantasmal propagation of the end of the human era.

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