Fiction Writes Back: "Limitless Profit", Artificial Intelligence, and the Immortality Industry

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Abstract: Investing in fictions rebranded as science, billionaires dream of limitless profit, artificial intelligence, and immortality while the earth teeters on the brink of an irreversible death spiral. Don DeLillo's novel *Zero K* and the *Black Mirror* episode "Be Right Back" restore the fictions to these technologies and draw links between the immortality industry and the fate of humans. The article concludes with some reflections on the oldest story in the world, about a king who, much like the modern-day tech titans, wants to dominate the cosmos as he travels to the ends of the earth in search of immortality. In *The Epic of Gilgamesh*, however, the king finds his biggest challenges are not battles and conquests but learning how to live as an ethical human being as he comes to appreciate the relationship between responsibility and death.

Key words: immortality, artificial intelligence, capitalism, mass extinction, Avatar 2045, Dmitry Itskov, Silicon Valley, Gilgamesh, Jacques Derrida's *The Gift of Death*, Don DeLillo's *Zero K*, *Black Mirror*'s "Be Right Back".

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> Within a few decades, machine intelligence will surpass human intelligence, leading to The Singularity — technological change so rapid and profound it represents a rupture in the fabric of human history. The implications include the merger of biological and nonbiological intelligence, immortal software-based humans, and ultra-high levels of intelligence that expand outward in the universe at the speed of light.
>
> *Ray Kurzweil*

> In a sense, the cyborg has no origin story in the Western sense — a "final" irony since the cyborg is also the awful apocalyptic telos of the "West's" escalating domination of abstract individualism, an ultimate self united at last from all dependency, a man in space.
>
> *Donna Haraway*

"This is the whole point of technology. It creates an appetite for immortality on the one hand. It threatens universal extinction on the other. Technology is lust removed from nature", observes Murray, a character in Don DeLillo's *White Noise* (1986, p. 285). Long the realm of fiction, myth, and religion, the quest for immortality is now a thriving business in Silicon Valley among tech billionaires. Seemingly unfazed by deforestation, oil spills, acidifying oceans, melting permafrost, the disappearance of birds, fish, and animals, the plummet in insect life, and all the early stages of human-induced mass extinction; these titans charge ahead with their unwavering faith in technological progress and an autonomous mechanistic brain. Disavowing their giant-sized carbon footprint and inspired by overly literal readings of fiction, they build rockets, dream of magical elixirs, fantasize about expanding the reach of their empires, and long to conquer nature and the cosmos.

This essay begins with an investigation of the far reaches of the multi-billion-dollar immortality/AI industry and the money and power behind the scenes that fuels fantasy science as the earth teeters on the brink of collapse. The next section of this essay considers two contemporary fictions — the *Black Mirror* episode "Be Right Back" (2013) and Don DeLillo's *Zero K* (2016) — that have, in turn, challenged the tech industry and its use of fiction to market this science, exposing its ideological underpinnings and its paradoxical escalation of the end of all life even as it hankers after immortality. While the tech industry is relentlessly focused on a future that is always "future" and never part of a past, the next section of this essay turns to consider its archeology by unearthing the future's archaic longings: one of the

oldest and longest surviving stories in the world, *The Epic of Gilgamesh,* is also about a tyrannical king who wants immortality. In failing in his quest, however, Gilgamesh learns what it means to live as an ethical human being. Drawing on the lesson in this ancient epic, the essay concludes with a reflection on the connection between mortality, responsibility, and freedom by way of Jacques Derrida's *The Gift of Death*, which argues that the "I" — as singular and unique — can only be guaranteed by death as one's death can never be owned or transferred or borrowed. Exposing the branding of fiction as science by the AI/immortality industry, reclaiming the potential of fiction to cultivate the ethical imagination, and restoring the importance of death to life are important steps, this essay argues, in halting the catastrophic decline of the planet.

The Immortality Industry

One of the organizers of this charge into the future to end the future is the soft-spoken, boyish Russian billionaire Dmitry Itskov, who believes in open-source technology and is a self-declared "humanitarian" and inter-faith advocate. His Avatar 2045 project involves four stages: by 2020, he wants to develop a humanoid robot that can be controlled by a computer-brain interface; by 2025, he plans to build an autonomous life-support system for the brain; by 2035, he proposes to reverse engineer the brain, create an artificial brain, and transfer personality and consciousness to it; and by 2045, he promises to put a "conscious" artificial brain in a hologram that can traverse the universe. The operating ideology of this grand venture is according to the website: "the creation and realization of a new strategy for the development of humanity which meets global civilization challenges; the creation of optimal conditions promoting the spiritual enlightenment of humanity; and the realization of a new futuristic reality based on 5 principles: high spirituality, high culture, high ethics, high science and high technologies" (http://2045.com/).

The project seems to be running a little behind schedule on a number of fronts. In 2013, at the Global Future 2045 Congress in NYC, the audience was promised the unveiling of the Dmitry Avatar-A head, a robotic replica of Itskov's head. This head was to be built by David Hanson and Ben Goertzel — the engineer funded by Jeffrey Epstein, the convicted pedophile (speaking of high ethics); Hanson and Goertzel are also behind the robot Sophia that has been called out as a fraud and an "animatronic puppet" in the AI world. The unveiling of Itskov's

head never happened and there has been no talk of it since. Nor has the 2045 website been very active in the last couple of years and there have been no updates on the "progress" of the project.

In 2002, at the age of 22, Itskov graduated with a degree in corporate management from the Plekhanov University of Economics. He made his money building the web-based media company, New Media Stars, with his infamous business partner, Konstantin Rykov, whom he met at the university. In the 90s Rykov started a porn/entertainment website with a swear-word for a name, operated an online prostitution delivery service, and mastered the internet subculture of mixing crass jokes with sports, entertainment, games, and nihilistic humor. New Media Stars graduated to mainstream media in 2005 with a pro-Vladimir Putin online newspaper called "Vzglyad" that became part of the company's platform. At the time of his inauguration in 2000, Putin largely controlled the media but the online world was beyond his reach or understanding. Rykov was hired as the internet advisor to the Kremlin to help the President master it. Rewarded for unleashing bots and trolls, spreading misinformation, and flooding the internet with Putin propaganda, Rykov was elected as a deputy of the Duma in the United Russia party in 2007. He was also active at spreading disinformation campaigns when Russia annexed Crimea in 2014, and he started a pro-Trump website boasting he was responsible for the 45th's victory in the 2016 American election.

Itskov resigned from his position as CEO of New Media Stars in the spring of 2012 to work full-time on immortality and published a piece in "Vzglyad" about the Russia 2045 project that listed eleven objectives, including flying cars, robot slaves, and climate-controlled domes. He promised that everyone would have young beautiful avatars and be immortal, everything would be free, and there would be giant cities on the Moon and Mars and a dramatic increase in the Russian population due to the "state children" program. The first man to be granted immortality, under this grand project, would be Putin, wrote Itskov.

He also appealed to the 1126 people on the Forbes's billionaire list to donate to his cause, promising them cybernetic immortality and artificial bodies, and a world without disease, aging and death. Offering to oversee the donor's personal immortality plan free of charge, Itskov added: "You also have the ability to finance the extension of your own life up to immortality". In this letter, all the assurances of "high spirituality", "high ethics" and "high culture" give way to the

main thrust of the appeal, the business of immortality that, he insists, offers "limitless" profit: "Contributing to cutting-edge innovations in the fields of neuroscience, nanotechnology and android robotics is *more than building a brighter future for human civilization, but also a wise and profitable business strategy that will create a new and vibrant industry of immortality — limitless in its importance and scale*. This kind of investment will change every aspect of business as we know it" (emphasis mine, Itskov 2012). Envisioning endless business opportunities, despite promises of everything being free, Itskov's immortality project seems to take to heart the oft-quoted phrase: "it has become easier to imagine the end of the world than the end of capitalism". For those not on the *Forbes'*s billionaire list, Itskov also founded The Electronic Immortality Corporation, a social network that operates under the rules of a commercial company. The website, which boasts over 47,000 members, invites people to donate money or volunteer their time to his project (http://www.immortal.me/).

Given this questionable legacy, why have news outlets like the *New York Times*, *The Independent*, and the *BBC*, which produced a documentary on this project in 2016, lent it legitimacy, given it attention and written about it with excitement? A *New York Times* article concluded: "If he succeeds, history will remember Mr. Itskov as a daring visionary whose money and energy redefined life in ways that solved some of the world's most intransigent problems" (Segal 2013). Joichi Ito, the venture capitalist with no science degrees and the disgraced former head of the MIT Media Lab, was elected to the board of directors of the *New York Times Company* in 2012 for his "digital expertise", so perhaps he was encouraging articles hyping fantasy technologies. Why have professors from such elite institutions as Harvard, MIT, and Oxford lent support to this endeavor? Marvin Minsky and George Church — both implicated in the Epstein/MIT scandal —were two of the "experts" at the NYC conference. James Martin — tech evangelist, IT consultant, founder of the Oxford Martin School (the largest donation in Oxford's history), and owner of a private island — was also one of the speakers. The tech industry "futurist" and Google engineer, Ray Kurzweil, was also a featured guest. And celebrities from Steven Segal (a friend of Putin's) to the Dali Lama also signed onto the project.

Why is a Russian oligarch with a shady track record and an undergraduate degree in commerce casting himself as "the intellectual elite of the future" and the director of science, technology and the future of

humanity and, more importantly, why have people taken him seriously? In a destructive cycle that both distracts and contributes to the problems the world is facing, billionaires, the tech industry, and venture capitalists fund "celebrity" science, elite institutes back them, and media outlets grant credibility to head-line grabbing fantasy projects. In supporting Itskov, they all seem to turn a blind eye to the actual legacy of his business ventures: the porn industry, the theft of data, misinformation campaigns, the attack on democracy, and the amassing of immense wealth and power.

Russians were early investors in Silicon Valley and Itskov is joined by other white male multi-billionaires, a hub of transhumanism: Peter Thiel, PayPal; Larry Ellison, Oracle; Larry Page, Google co-founder and founder of Calico (in 2013, Google invested $1.5bn in this company to "treat" aging and "solve" death); Sean Parker, co-founder of Napster; Sergey Brin, co-founder of Google; Mark Zuckerberg, Facebook; Pierre Omidyar founder of eBay; Paul F. Glenn, venture capitalist and investor; and Jeff Bezos, Amazon — all tout life-extension and immortality. After amassing fortunes in comparatively lowbrow schemes: selling ads, data theft, venture capital, stock investments, futures trading, data-base software and management systems, social media websites — these entrepreneurs, many preaching a drop-out-of-school mantra, are now ready to take on death as if with enough can-do confidence and money they can master it.

The Ayn Randian hero, beloved of Silicon Valley, trumpets free-market fundamentalism and imagines himself as a genius standing above the mediocre crowd, ready to steer it into the future. Yet this story of tech giants with their record wealth, libertarian politics, and mastery of offshoring, obscures their dependence not only on a tax-funded infrastructure (and global planetary resources), but also on the massive transference of public funds and military backing to private industry that built and continues to build Silicon Valley and other tech hubs. Given the cut backs in public funding to universities and non-industry sponsored science, academics are jumping on the life-extension/AI band-wagon — shaping their research agendas to meet the demands as they chase dollars. The list of "experts" on Itskov's website includes neuro-engineers and computer scientists.

However, one does not have to dig very deep to find scientists outside of the immortality industry who suggest, along with Illah Nourbakhsh (2017), a professor at the Robotics Institute at Carnegie Mellon University, that Itskov's project is "hogwash". The research of Miguel

Nicolelis (2016), which connects paralyzed patients to machines to rewire their brains to help them move again, is often cited as evidence of the possibilities of projects like Avatar 2045. Nicolelis himself, a professor of Neuroscience at Duke University, insists that "what people don't realize is that we are not talking about, not even in the distant future, of downloading someone's thoughts, emotions, memories, and passing that to another subject, that in my opinion is very unlikely to happen ever" (Nicolelis 2016). P. Z. Myers (2017), a professor of evolutionary biology at the University of Minnesota at the Morris campus, concurs and has dismissed Kurzweil's faith in reverse-engineering the brain within a decade as profoundly ignorant as the brain is still largely a mystery and Kurzweil's claim that humans will live forever by 2029 as "laughable". A professor of gerontology at USC, Valter Longo exposes the fantasy science hyped by the tech industry executives "there are lots of people talking about immortality. It's not about living to 110 or 120. It's about living to 1,000…. you hear some really delusional talk from some really famous people" (Lazarus 2019).

If the science is dubious so too is the use of fiction in this field. Tech companies hire fiction writers to "design the future", blurring the line between discovering the world and imagining it; and between fact and fiction. Itskov and others who invest in AI and VR pepper their comments with references to fiction as if it were predictive and on the verge of being realized. They mine fiction for inspiration and innovation while ignoring its formal structure, historical situatedness, and cultural context. For instance, Asimov and his three laws of robotics are frequently brought up in discussions about designing protective protocols and fail safes for autonomous machines. Yet these discussions often fail to mention that whatever laws are installed in robots, things go wrong in Asimov's fiction because the messiness and unpredictability of the world forever clashes with the algorithmic logic of the technology imposed on it. Asimov's three laws are plot devices that serve dramatic tension not instructions for building robots.

At a talk at a VR industry conference in Toronto (2017), one of the industry/academic presenters invited the audience to take the "red pill" over the "blue" pill and follow him down the rabbit hole, a reference to the film *The Matrix*. The red pill in the movie leads to the catastrophic "desert of the real"; in this post-nuclear world humans have been imprisoned in pods and supply the energy for the virtual world. Taking the blue pill and staying put in "the matrix" — if less revolutionary in the film's terms — would have been more apt for his talk

as he was marketing software designed for the glossy seamless world of VR.

Itskov, himself, lists Surrogates as a favorite film because it features a geminoid — a tele-operated robot that looks like its owner — designed by the Japanese roboticist, Hiroshi Ishiguro (one of the experts listed on the Avatar 2045 website). In the film, however, these machines prove addictive and suck the life out of humans, which could well be read as an allegory for the well-documented strategies of social media websites that learned from the gambling industry how to keep eyeballs glued to screens to increase profit. Fiction writers are hired by tech firms and fiction is corralled into doing the marketing work for technology for its "cool" factor while overly literal readings of fiction forcefully shut down the ethical questions it raises.

Fiction Writes Back to the Tech Industry-I

If fiction, stripped of any context, has been dressed up and branded as science by industry, several contemporary fictions have in turn exposed this science as fiction.

"Be Right Back" (2013), the first episode in the second season of *Black Mirror*, explores an Itskov-like plan to transfer personalities into avatars. The episode begins with a young happy couple, Martha and Ash, who move into a house in the country. As they are conversing in a car, Ash, absorbed by his cell phone, keeps "vanishing down that thing", complains his partner. The next day, he literally vanishes from her life when he dies in a car crash. Devastated and overwhelmed by grief, Martha also discovers she is pregnant. She is advised by a friend to connect with "Ash" via a business that harvests on-line profiles and sells them back to grieving family members. "But it is not him", she protests while her friend tells her "no, but it helps".

Soon Martha is completely absorbed by these electronic remnants as she converses with her digital lover on the phone — though he doesn't have a "mouth" — and she too vanishes down the internet, disconnecting from her friends and family. Offered the "next level" of service with its accompanying costs, Martha hesitatingly agrees. Within days formless synthetic muscle arrives at her door and once activated a replica of Ash, constructed from data harvested from on-line sites and flattering internet photos, emerges from the chemical bath. The avatar's skin is perfect and disturbingly smooth, with no fingerprints and no distinguishing details. The avatar does not breathe and has no need for food or sleep; it does not bleed and it cannot move

beyond 25 meters of its activation point. It cannot parse difficult sentences, it performs without thinking, and it has no history outside Ash's limited and curated social media profile that has been mined for profit. For instance, there is no on-line record of Ash's sexual performance (though the replica can turn its penis on and off and has downloaded routines lifted from porn videos), and it does not recognize Martha's sister.

This liminal figure perfectly encapsulates the fate of humans under surveillance capitalism. As Shoshana Zuboff writes humans are not the product but rather the discarded husks under this regime. The human is cast side while their on-line data lives on as a lucrative resource for corporations. Increasingly irritated with this commodity, a hollow simulation, Martha tells it to jump off a cliff, which it is willing to do till she protests that the real Ash would have objected. Readily adaptable, it dutifully complies and refuses to jump as it does whatever she wants. It has no interiority, no singular life force, and no desire; it obeys its owner. Martha finally puts it in the attic where the kid, now seven, visits the only father she has ever known on weekends and birthdays while her mother weeps below.

Itskov believes he can extract a little homunculus — an "I inside of us" — which he can separate from his body and transfer to artificial bodies. Yet like Ash whose data is stolen and sold, this "I" will inevitably completely vanish in the process. As thinking, will, and desire cannot be translated into code, Itskov's "limitless" and "vibrant industry of immortality" will produce nothing more than information that is commodifiable, reproduceable, and manipulatable, an ironic fate for tech fans of the autonomous, freedom-loving, individualistic Randian hero.

Fiction Writes Back to the Tech Industry-II

Don DeLillo's *Zero K* (2016) is another fiction that offers a critical take on the immortality industry. The novel follows a billionaire, Ross Lockhart, and his quest for eternal life. Mid-sixties, "shaped by money", Lockhart made his fortune speculating on and profiting from natural disasters, which he has invested in a center called the Convergence that promises its members an afterlife. Believers in "faith-based" technology, he and his second younger wife Artis, who is suffering from several disabling diseases including multiple sclerosis, have signed up for cryogenic freezing. The couple are convinced they will be resurrected when science finds a way to use nanobots, en-

zymes, embryonic stem cells, proteins, and nucleotides to repair organs and regenerate frozen bodies. A special unit called Zero K invites its faithful flock to a premature death with the promise that technology will allow them to be reborn as new and improved beings. While waiting in their pods, they are told they can "download" memories, texts, cultural artifacts, and languages — anything from selected versions of family life to languages to philosophical writings to Proust to Russian novels to the films of Bergman, Kubrick, Kurosawa, and Tarkovsky — all reduced to information bytes.

In the heavily-secured claustrophobic desert compound, somewhere vaguely near Kazakhstan, the stored bodies of the global elite await future re-assemblage, some headless and brainless, with brains fed separately, and some waiting for their heads to be grafted on to new nanobodies. With its featureless mannequins, nameless escorts, generic rooms, lack of windows, indecipherable "food units", simulated doors, and empty hallways, the Convergence is a gated community, built to resist the hungry and homeless, economic crises, warring nations, wild weather, terrorism, cyberattacks, the ravages of time — and "whatever eventual calamity may strike the planet" (DeLillo 2016, p. 66).

The Convergence, however, is about more than just a retreat or escape from world disasters. Like Ross who makes his money investing in catastrophe, the Convergence profits from end-of-the-world fantasies. The screens in the compound play a continual stream of scenes depicting the collapse of civilization as an aesthetic spectacle. Enhanced, designed, and edited, these "visual fictions" mixed in with real events revel in "the decimated future" (DeLillo 2016, p. 152). Jeff refers to this simulation of an end as "a kind of psychological pandemic", a "fearful perception that tends towards wishfulness". Even the murals that surround the frozen bodies are of "ravaged landscapes, on and on, scenes *meant* to be prophetic, a doubled landscape, each wall repeating the facing wall—disfigured hills, valleys and meadows" (emphasis mine, DeLillo 2016, p. 257). This lust for the end of time has always infected those that imagine themselves as part of the select few who will transcend it. In this latest version of the apocalypse, it is the venture capitalists and tech titans who believe they will be sorted from the damned on the day of reckoning.

Nathan Ashman (2019) argues that the novel "presents us with an amplified industrial and scientific landscape where these fantasies of prolongation can be legitimately realized via radical advances in cryonic technologies" (Ashman 2019, p. 301). However, these "radical

advances" are exposed as fiction from the outset. Rather than science fiction coming "true", *Zero K* suggests that this science is "awash in irrepressible fantasy" (DeLillo 2016, 257). The whole compound, Jeff comes to understand, from its muted colored walls to its design to its mannequins to its movie screens to its artificial garden to the cryogenic dead in their capsules to his frozen stepmother Artis (from the Latin for art) — "this was art in itself".

This hyperrealist science of the Convergence simulates a reality that bears no relationship to reality, a simulation of something which never existed. The Convergence is funded by a "self-made" man with a "fake" name, changed from Nicholas Satterswaite to Ross Lockhart, and inspired by a purely theoretical and impossible-to-reach "zero kelvin", a freezing that would result in the perfect stasis of all atoms: "the term, then, was pure drama" (DeLillo 2016, p. 143). Robert Ettinger, who founded the real Cryonics Institute and was frozen in 2011, was himself inspired by fiction he had read as a child, Neil Ronald Jones's 1931 "The Jameson Satellite". If the tech world plunders fiction and claims it as "real", *Zero K* returns this technology to its proper realm: artifice.

Ross, still healthy, has decided to join the Zero K unit and accompany Artis. He tells his skeptical son that the process is "real, it's true, it delivers", assuring Jeff that Artis is "completely ready. There's no trace of hesitation or second thoughts" (DeLillo 2016, pp. 9, 7). However, Ross, at the final hour, changes his mind and Artis descends to her pod alone. In the middle section of the novel, entitled Artis Martineau, Jeff imagines the frozen body of Artis as "forever" trapped and alone, "no one but herself" in a pod. Like the digital version of Ash, she is reduced to a receptacle of inert information, the "residue" of an identity "made of words", "a voice in its barest sheddings" (DeLillo 2016, p. 162). In this limbo, she sees the "same words all the time" — endlessly repeating, static, extemporal. No possibility of becoming, no-one to witness her, no one to narrate her, she becomes both the third and first person. Like Itskov's extractable "I inside of us", she is now the "pure" self she sought below the surface, the self "without others" — the logical end of the liberal self that imagines itself as autonomous.

Two years later, Ross having lost all interest in life and afflicted with something that causes his hands to tremble, returns to the compound, accompanied by his son, to undergo the process. Ross's body is prepared for freezing — hairless, naked, and "stripped of everything

that might mark it as an individual life" (DeLillo 2016, p. 251). The self-made man who abandons "his generational history" unmakes himself (DeLillo 2016, p. 145). Early in the novel, Ross invites Jeff to think about his life in seconds, measured against geological eras and galaxies (DeLillo 2016, p. 34). Seeking this immortality treatment in order to escape the smallness of their lives measured in cosmic time — a mere flash — Artis and Ross, ironically, disappear even more completely from the world as they join the other anonymous bodies regulated by a "centralized command" in the compound (DeLillo 2016, p. 146).

In the post-apocalyptic themed garden, Jeff discusses the Zero K patients with the "crackpot sage", Ben-Ezra, who sounds very much like the futurist Kurzweil (2005, p. 40–41), who insists that:

> By the time of the Singularity, there won't be a distinction between humans and technology. This is not because humans will have become what we think of as machines today, but rather machines will have progressed to be like humans and beyond. Technology will be the metaphorical opposable thumb that enables our next step in evolution.

Jeff questions the logic of the Convergence/Singularity, which assumes evolution is linear and that we know what it is to be human and thus can make machines/avatars that replicate humans: "It's only human to want to know more, and then more, and then more… But it's also true that what we don't know is what makes us human. And there's no end to not knowing" (DeLillo 2016, p. 131). Like religious fundamentalists, the congregation of the Convergence wants to colonize the future and force an end to this "not knowing".

The institute is working on a new language that they hope to download into the frozen bodies. Unlike any other language, it aspires to be something closer to "pure mathematics"; it will eliminate similes, metaphors, analogies, promising "new levels of perception" (DeLillo 2016, p. 130). The language hopes to capture the essence, the core, pure objectivity as it transcends history, culture and time. The quest for ordered abstraction, for truth that eliminates all doubt, for a life reduced to a mathematical equation, for timelessness, is incommensurable with Jeff's first-person narrative. Jeff wants to assign names, lineages, histories, "real life, body functions" to the inhabitants of the Convergence. As a child, he overhears his father jokingly call his mother a "fishwife" — it sends him to a dictionary where he finds the word shrew that leads him to shrewmouse that leads him to insectivorous

that leads him to the Latin vorous — one word leading to the next, one language opening to another, words opening up to new worlds expanding, changing, dynamic, subtle, particular, and historical. In marked contrast to the new language proposed by the Convergence, humans are born into a language which is not their own, limiting their access to that unmediated purely objective world that the Convergence longs for.

Jeff understands the appeal of abstraction as a response to loss and trauma. As a thirteen-year old boy, his father walks out on him and his mother, and he retreats into the comfort of *sin cose tan*. Emma's adopted son, Stak, another abandoned child, also retreats into abstraction as a self-defense strategy in the Ukrainian orphanage, "unlearning" the unique specificities of a face, turning them all into "one big blurry thing" (DeLillo 2016, p. 213). Yet, punctuating the sweepingly reductive abstracted world of the Convergence are the unique particulars of Jeff's life: the memory of his mother, Madeline, using a lint cleaner on her coat; the luxury of clean sheets and fresh towels; watching storms on the roof with his lover, Emma; the shock of Stak's death, which he witnesses on a screen at the Convergence while the camera scans the ruins of war, offering close-ups of men's faces; Emma's attention to the children she teaches with their various disabilities. As Emma says of the kids: "some days are better than others" — there is no straight-ahead path to the future, technological or otherwise.

Jeff's father fails to remember his first wife's name, but Jeff's mother continues to haunt the narrative and her ghost returns to Jeff the night before his father's freezing. The mother has birthed him and cared for him, raising him to believe "ordinary moments make the life" (DeLillo 2016, p. 107); while the father has abandoned them for fortunes, abstractions, and immortality. Like the global financial world that is only concerned with numbers and profit, the Convergence wants to be relieved of the "burden" of "reasonableness" and "responsible thinking". All the problematic questions this quest for immortality raises about over population, who gets to live forever and who must die, the environment, the death wish of technology, the truth, art and human culture — all these and many more are swiftly rejected by its investors as beside the point (DeLillo 2016, pp. 69–70).

If the members of the Convergence profit from human-made catastrophe, disavowing responsibility for the destruction it leaves in its wake and imagining they will transcend the devastation, the novel restores context and "responsibility" to their calculations. Chelyabinsk,

which is the title of the first section of the novel, is where a meteor fell to the earth in 2013. The Convergence is born as an anxious response to this meteor, yet it killed no one. In contrast, Kostiantynivka, the title of the final section, is a city in the Ukraine, where war broke out in 2014 over the Moscow-backed illegal referendum. Thousands, like the young Stak, have died there. So too, Alexandra K. Glavanakova notes that the Convergence is close to Semipalatinsk, home of "the Soviet Union's top-secret nuclear test facility, also known as 'The Polygon'". It was the primary testing place for nuclear weapons from 1949 until 1989 "even though the place was inhabited — a fact conveniently forgotten by the Soviet administration"; the local population was poisoned with radiation for decades (Glavanakova 2017, p. 95).

Jeff rejects his father's expolitive fortune hunting, refuses to turn away from the broken bodies on the streets of NYC, takes a job as a "compliance and ethics" officer at a school, appreciates daily rituals, and loses Emma, who reunites with her husband after the loss of their son. When his mother is dying, Jeff feels "most human", not because he is rendered frail by grief but because he is "expanded" by it (DeLillo 2016, p. 248). As Laura Barrett writes: "The shared limits of embodiment, like the limits of language and mortality, are what make us human" (Barrett 2018, p. 118). The end of the novel returns full circle to its opening with Jeff remembering his father telling him "everyone wants to own the end of the world" (DeLillo 2016, p. 274). Yet as this memory comes to him he watches a boy who appears captivated by "the intimate touch of the earth and the sun" through the rear window of a bus as the "flaring sun" (DeLillo 2016, p. 274) aligns with the local street grid in Manhattan. His cries are outside the control of money, executives, corporations, and futurists who welcome the "sky collapsing", intent as they are on escaping from the infinite complexities of nature in their obsession with a calculable model that sucks all the awe out of the world. Unlike his father, loss does not lead Jeff to seek transcendence — "heaven's light" — all he needs are "the boy's cries of wonder" (DeLillo 2016, p. 274).

On his final visit to the institute, Jeff visits Artis's preserved body and decides she belongs there, but his father does not as his father's investment in the end of the world runs counter to the idea of preservation. Like the tech futurists focused on immortality, he never imagines a past he will inevitability belong to. Artis, however, the archeologist who studies historical remnants herself, fittingly, will be uncovered by some future civilization that resituates her in a history she

thought she had escaped as she becomes part of an "archeology for a future age" (DeLillo 2016, p. 256).

Fredric Jameson, in *Archaeologies of the Future: The Desire Called Utopia and Other Science Fiction* (2007), argues that science fiction expresses "the most archaic longings of the human race" (Jameson 2007, p. 295), while Adam Roberts (2016) contends that science fiction itself dates back to ancient Greece. The next section of the paper returns to a text that is still older but that is in keeping with the genre as it is about technology, extraordinary travels, civilization, the cosmos, "archaic longings", and the quest for immorality.

The Secret of Longevity

David Hume (2008), the eighteenth-century philosopher, sought the secret of longevity and found it to exist not in formulas and "pure objectivity" — but in fiction. "In the Standard of Taste", he (Hume 2008, p. 138) wrote:

> Many of the beauties of poetry and even of eloquence are founded on falsehood and fiction, on hyperboles, metaphors, and an abuse or perversion of terms from their natural meaning. To check the sallies of the imagination, and to reduce every expression to geometrical truth and exactness, would be the most contrary to the laws of criticism; because it would produce a work, which, by universal experience, has been found the most insipid and disagreeable <…> The same HOMER, who pleased at ATHENS and ROME two thousand years ago, is still admired at PARIS and at LONDON. All the changes of climate, government, religion, and language, have not been able to obscure his glory.

Contrary to the language of the Convergence, which wants to eliminate metaphors and similes, what "lasts," according to Hume, is precisely that which refuses the straightjacket of the digital and the "pure mathematics" that drives the immortality/AI industry.

Incomplete, porous, ambiguous, the oldest long poem in the world and the oldest written story anywhere; *The Epic of Gilgamesh* (2003) follows a King's quest for immortality. Most likely based on a real king who lived during the first half of the third millennium and the poems that were written about him for at least a thousand years after his death, the epic was first collected and edited in about 1200 BCE from the clay tablets that circulated during the Sumerian, Akkadian, Babylonian, and Neo-Assyrian Empires. It was copied by students right up to the Roman Wars and then disappeared entirely until clay tablets

were discovered in the mid-nineteenth century. Scholars worked for decades deciphering the cuneiform script, and clay tablets are still being discovered in the ancient cities of the Levant, Mesopotamia, and Anatolia though the twenty-first century wars in the Middle East have interfered with these archeological digs.

At the outset of the story, Gilgamesh, a king and demigod, mistreats his subjects: he picks fights with the young men and claims the right to bed brides on the day of their marriage. The people are fed up with their irresponsible tyrannical king, and so they appeal to the gods for help. The gods create Enkidu out of clay. He lives peacefully with the animals: "his heart delighting with the wild beasts" (George 2003, p. 5) until a hunter complains that Enkidu is destroying his traps and releasing animals from them. A temple prostitute is sent to seduce Enkidu, and, after they couple, the animals reject him as no longer pure; but as compensation for his loss of physical strength and innocence, he gains language, cognition, "reason and wide understanding" (George 2003, p. 8). This tension between civilization and nature runs through the epic.

Angered by the King's "unnatural" claim to brides on their wedding night, Enkidu, still motivated by the same sense of justice that led him to free the animals, comes to the defense of the women and challenges Gilgamesh to a fight. Gilgamesh is happy to have met his equal in strength and the two become fast friends. Despite the warnings of both Enkidu and the elders, the King continues with his "unnatural" conquests and insists on fighting Humbaba, the guardian of the cedar forest, so he can cut down the majestic cedars and "establish for ever a name eternal" (George 2003, p. 20). Fearing that the god Enil will hear of their deed, Enkidu and Gilgamesh slay Humbaba, even as the guardian of the forest begs for his life. Humbaba, in turn, curses them, threatening that the pair of them will not grow old together. The desire for mastery over nature drives Gilgamesh, and he ignores the curse and continues to upset the cosmic order when he ridicules the goddess Ishtar and further insults her by slaughtering the Bull of Heaven. Gilgamesh, full of pride and thinking himself without limits, declares himself "the most glorious of fellows" (George 2003, p. 54).

Humbaba's curse, however, comes to pass as the gods decide Enkidu must die for these transgressive acts. When Enkidu learns of his fate, he curses Shamhat, the harlot, for "defiling" him and dragging him into civilization and consciousness. Although he yearns for his

days of delight with the animals, he is finally persuaded that civilization has its gifts and retracts the curse before he dies. Driven mad with grief over the death of his friend whom he mourns for days, till a maggot falls from one of Enkidu's nostrils, Gilgamesh is finally both humbled and terrified as he reflects on his own mortality: "Shall I not be like him" (George 2003, p. 70), he thinks. Casting off his trappings as King, he heads off to the ends of the earth in search of the immortal Uta-napishti, who has survived the Great Flood and saved life from destruction.

After many trials, Gilgamesh crosses the Waters of Death and finds Uta-napishti, whom he hopes will teach him the secret of immortality. Gilgamesh is given the challenge of going without sleep for six days and seven nights but falls fast asleep almost immediately, causing Uta-napishti to comment to his wife: "See the fellow who so desired life!" (George 2003, p. 96) Gilgamesh and his selfish pursuit of immortality and personal greatness pales against Uta-napishti, who saved all living beings and is rewarded by the gods. The immortal asks Gilgamesh, given he lacks the fortitude for immortality, why he is spending his fleeting life chasing sorrow, reminding him of the responsibilities of being a King. As Gilgamesh prepares to return to his people, Uta-napishti orders that he be bathed and dressed in robes that will stay fresh and new till his arrival back to his city-state. On arrival in Uruk, the King puts in place "for the people the rites of the cosmos" (George 2003, p. 2).

At the heart of this epic is the transformation of Gilgamesh from a selfish tyrant to a wise King, who comes to care for his people. Rather than heroic feats and battles, Gilgamesh biggest challenge is to learn how to live as an ethical human and that requires he accept his mortality. It is the death of his friend whom he considers an equal that opens Gilgamesh to an ethical stance and a sense of fellowship. As longs as he imagines himself invincible and apart from the cosmos, greatness eludes him. Only when he understands that he is connected to all mortals and shares their fate is he able to do great things. Like Jeff in *Zero K*, grief expands Gilgamesh, turning him from an abusive, egocentric ruler who is despised by his subjects to a responsible human. He dies, but the end of the epic returns full circle to the opening verses that recount Gilgamesh's legacy and the continuity of the human race — the great wall he builds with its foundations laid by seven sages and the temple he dedicates to Ishtar. "Surpassing all other

Kings", he records his tale — about nature, civilization, consciousness, transformation and mortality — that has lasted through the centuries.

"**The Gift of Death**"

Grief and loss trigger the desire for immortality in these stories — Ash perishes in a car accident and the market exploits his partner's desire to have him back. Ross's second wife falls sick, and he invests in the Convergence. Enkidu dies and Gilgamesh confronts his own mortality. Amongst transhumanists, the sudden death of his father motivates Kurzweil's desire for the "singularity", the merging of man and machine, convinced as he says that there is nothing good about death. Alan Turing, the force behind theoretical computer science, artificial intelligence, and the Universal Turing Machine, was devastated by the loss of his classmate Christopher Morcom, with whom he had fallen deeply in love. Morcom died suddenly in 1930, triggering Turing's obsession with information that would survive the body. The thought of death and erasure terrifies Itskov, and others in Silicon Valley, who sees death as "pointless".

In *The Gift of Death* (2008), Derrida, following Heidegger, writes of death as guaranteeing the singularity of the human. In other words, your death can only be your own. No one can die for you and you cannot take another's death. One death cannot be exchanged for another death.

> Everyone must assume his own death, that is to say the one thing in the world that no one else can either give or take: therein resides freedom and responsibility <…> Even if one gives me death to the extent that it means killing me, that death will still have been mine and as long as it is irreducibly mine I will not have received it from anyone else. Thus dying can never be taken, borrowed, transferred, delivered, promised, or transmitted. And just as it can't be given to me, so it can't be taken away from me (Derrida 2008, p. 45).

Remove death from the equation and what is left, according to Derrida, is infinitely exchangeable, but the very thing that is longed for — the continuation of the singular "I", the thing that cannot be substituted for another — vanishes completely. The digital Ash in "Be Right Back" and the anonymous bodies trapped in their capsules in *Zero K* are "stripped of everything that might mark [them] as an individual life" (DeLillo 2016, p. 251). The quest for immortality in order not to

be replaced by the next generation paradoxically concludes with the endlessly replaceable.

Not only is identity — as singular and unique — granted in death, argues Derrida, but also that "therein resides freedom and responsibility" (Derrida 2008, p. 45). The digital Ash under the command of its owner and the bodies locked in pods controlled by a central command at the Convergence have no freedom, while Gilgamesh only becomes responsible when he accepts his mortality. Ross never takes responsibility, not for his son and not for others on the planet. Itskov and his fellow tech billionaires, who dream of evading death and colonizing the cosmos, refuse responsibility for the destruction of democracy, obscene wealth disparity, and the exploitation of the planet. If Derrida argues responsibility to any particular individual or group or act is only possible by being irresponsible to other people and the other possibilities that haunt that choice, that responsibility is necessarily partial or incomplete, that responsibility can never reconcile the particular with the universal; the quest for immortality evades responsibility and "responsible thinking" entirely as it both yearns for and disavows the irreplaceable "I" secured by death.

Tech billionaires hunger for immortality, AI, and limitless profit while imagining themselves as autonomous beings and masters of the cosmos. Shutting down the ethical potential of fiction, the industry renders it literal and repackages and sells its as science even as the earth teeters on the brink of an irreversible death spiral. Restoring the fiction to the "science" that is fueling this technology, exposing the myth of the autonomous self, and restoring death to life are important first steps in halting this irresponsible march forward over the cliff.

References

Ashman, N. (2019). 'Death Itself Shall Be Deathless': Transrationalism and Eternal Death in Don DeLillo's *Zero K*. *Critique: Studies in Contemporary Fiction*, 60 (3), 300–310.

Barrett, L. (2018). '[R]adiance in dailiness': The uncanny ordinary in Don DeLillo's *Zero K*. *Journal of Modern Literature*, 42 (1), 106–123.

Brooker, C. (2013). Be right back. *Black Mirror*. Channel 4.

DeLillo, D. (1986). *White Noise*. New York: Penguin.

DeLillo, D. (2016). *Zero K*. New York: Scribner.

Derrida, J. (2008). *The Gift of Death*. D. Willis. (Trans.). The University of Chicago.

George, A. (2003). *The Epic of Gilgamesh*. Penguin.

Glavanakova, A. K. (2017). The Age of Humans Meets Posthumanism: Reflections on Don DeLillo's *Zero K*. *Studies in the Literary Imagination*, 50 (1), 91–109.

Hume, D. (2008). *Selected Essays*. Oxford: Paperbacks.

Itskov, D. (2012). *Make a Mark in History. Address to Members of Forbes Richest List*. Retrieved from http://2045.com/articles/30158.html

Jameson, F. (2007). *Archaeologies of the Future: The Desire Called Utopia and Other Science Fiction*. New York: Verso.

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

Lazarus, D. (2019, February 20). Column: As age-obsessed billionaires turn to 'vampire' therapies, the FDA takes a stand. *Los Angeles Times*.

Myers, P. Z. (2017, May 6). The Kurzweil Delusion. *Pharyngula*.

Nicolelis, M. (2016, September 27). How brain-machine connections can help paraplegics move again. *The Current*. CBC.

Nourbakhsh, I. (2017, March 31). On the collision of robot ethics and robot futures. *Cyborg Futures Workshop*. Saint Mary's University, Halifax, NS.

Roberts, A. (2016). *The History of Science Fiction*. Palgrave MacMillan.

Segal, D. (2013, June 1). This man is not a cyborg yet. *The New York Times*.

Shoshana, Z. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.