

THE BRIGHT AND THE DARK SIDE OF TESCREAL IDEOLOGY

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ABSTRACT

The paper is dedicated to a package of seven successive ideologies that have emerged in the last 35 years, united under the circulating on the Web neologistic acronym TESCREAL. Over the past two years, this label has been used to designate the ideas of some of the richest, smartest and most prominent technological leaders to improve human life through technologies inspired by several overlapping futuristic philosophies related to Transhumanism and Longtermism. Proponents of a techno-utopian TESCREALism vision of the future of humanity believe that building super-intelligent Artificial General Intelligence Systems will lead to the creation of radically improved and even immortal humans colonizing the Universe, while TESCREALists sceptics bring to the fore the existential danger of Artificial General Intelligence Systems turning and destroying against their creators.

KEYWORDS: TESCREAL, Artificial General Intelligence Systems

INTRODUCTION

The rapid development of large language models (GPT-4, Gemini, Llama, Claude, Mistral, Grock, etc.) and generative Artificial Intelligence applications (ChatGPT, Gemini, Copilot, Ernie, DALL-E, Midjourney, Stable Diffusion, Sora, and many others) over the past two years have given a new impetus to the aspirations of many researchers and manufacturers of AI products with a narrow purpose to pursue the modern big goal of the scientific field of Artificial Intelligence - the creation of Artificial General Intelligence Systems. The applied goal of Artificial General Intelligence – creating systems with flexibility and adaptability equivalent to human intelligence (Littman, et al., 2021, p. 27) – has motivated a number of scientists and technology leaders to seek theoretical concepts and practical solutions to improve human life through a variety of intelligent and experimental technologies.

The acronym TESCREAL refers to a package of several futuristic philosophies related to transhumanism and longevity that overlap in certain aspects (Troy, 2023). The authors of this neologistic acronym, denoting a package of seven ideologies that have appeared in succession over the past 35 years - former co-head of AI ethics at Google Timnit Gebru and PhD student in philosophy at Leibniz University Émile Torres - believe that they are the main reason why leading technology companies such as OpenAI, Microsoft, DeepMind, Neuralink, FTX, and others invest in researches to create Artificial General Intelligence Systems and in non-profit organizations such as the Future of Humanity Institute and the Future of Life Institute (Torres, 2023).

1. THE IDEOLOGIES IN THE TESCREAL LABEL

The abbreviation TESCREAL shifts the focus from the current social injustices in the functioning of today's Artificial Intelligence Systems (algorithmic bias, spreading disinformation, putting thousands of jobs at risk, etc.) in the direction of drastically increasing economic productivity, insightfully increasing human intelligence, and preventing a possible techno-apocalypse (Ahuja, 2023). The acronym is made up of the first letter of the following ideologies: transhumanism, Extropianism, singularitarianism, cosmism, Rationalism, Effective Altruism, and longtermism.

Transhumanism

The key ideology in the TESCREAL package is transhumanism, which propagandize the possibility of technologically and biologically achieving longer, healthier and more fulfilling lives through the means of Genetic Engineering, Cybernetics, and Artificial Intelligence. According to this intellectual and cultural movement and teaching, such a re-engineering of the human species will create a superior new race of post-humans with superhuman abilities – higher morality, immortality, very high IQ, total control over their emotions, extreme "rationality", and new sensory modalities – echolocation, telepathy, clear vision, clear hearing, etc. (Bostrom, et al., 1999). Transhumanists believe that the symbiotic connection of humans and machines will allow the recording of human memories and the recreation of biological beings on digital and/or biological media. If it is impossible to achieve physical immortality within the current life, a procedure of body cryogenization and subsequent resuscitation can be chosen in the presence of appropriate technological know-how.

Extropianism

Contrary to the concept of Entropy in Thermodynamics and Information Theory, Extropianism is a philosophy according to which all of humanity can live in harmony and cooperation. Extropians believe that advances in science and technology will someday make it possible for people to exist indefinitely in a happier, more prosperous, and freer world, where individuals connect with each other and with community through virtual reality. The term "extropia" was first used in 1983 by science fiction author Diane Duane (Witchers, 2023). In 1988, Max More and Tom Morrow founded the Extropy Institute, which for almost two decades brought together different groups of people with futuristic ideas, held a series of conferences and maintained an online discussion forum to share and discuss new transhumanist principles such as "perpetual progress", "self-transformation", "practical optimism", "intelligent technology", "self-direction", "rational thinking", and "spontaneous order" (More, 2003).

Singularitarianism

Singularitarianism is an idea suggesting that one day computer technology will advance to a point where it will begin to self-aware, self-design, and improve exponentially, leading to an explosion of intelligence, technological advancements, and the emergence of artificial super-intelligence surpassing human intelligence (Yudkowsky, 2007). Singularitarianistic techno-utopian concerns about the medium-term future imply the creation of an Earth-ruling supercomputer and the displacement of humans in second place (Harrison, 2023). In order to achieve a post-singular state of radical abundance and colonization of the Universe by post-human digital descendants with extremely sublime forms of intelligence, action must be taken in the direction of harnessing the moment of singularity for the benefit of all humanity (Kurzweil, 2005). The theory that digital life is the natural and desirable next step in the cosmic evolution of the earth's population and giving free rein to digital minds instead of stopping or enslaving them will bring a positive result has been called by Max Tegmark a "digital utopianism" (Tegmark, 2017, p. 32).

Cosmism

Cosmism is a set of ideologies promoted by Russian scientists and philosophers such as Nikolai Fyodorov, Konstantin Tsiolkovsky (who developed key formulas in rocketry and had a profound influence on Elon Musk), and Vladimir Vernadsky (according to which the Earth will develop a "global brain" called the "noosphere"). At the heart of this manifesto for the "cure" of death and a philosophical state of being combining the energy fields of the Universe and humanity is the idea of

exploring and colonizing the cosmos by virtually "resurrected" minds through means of space-time engineering (Goertzel, 2010, p. 10).

Rationalism

Rationalism is an established philosophical idea for optimizing human rationality, according to which the source and foundation of knowledge about the real world should be a common mind, combining the energy and thoughts of the entire earthly population. According to this supreme guiding principle, only in this way each individual can become smarter and more rational in his actions and worldview. The rationalist movement gave rise to the emergence of hierarchical communities (the first one was organized on the website Lesswrong.com, founded in 2009 by Yudkowsky), attracting mostly young men with a desire to "improve" ways of understanding and using the human mind.

Effective Altruism

Effective Altruism is a philosophical and social movement to optimize human morality that proclaims "the use of evidence and reason to understand how to benefit others as much as possible and take action on that basis" (MacAskill, 2017). Effective altruists (Peter Singer, Toby Ord, William MacAskill, Sam Bankman-Fried, and others) aim to reframe philanthropy in terms of both efficiency and outcomes. They believe that through tools and methods, such as the "theory of expected value"¹ it can be calculated how to maximize the benefit of others, so that the work of individuals together improves the lives of the entire population.

Longtermism

Longtermism is a radical form of utilitarianism² that argues that current generations have moral responsibilities to future ones to ensure that human civilization will recover from an eventual collapse (MacAskill, 2022). This concept deals with the issues of maximizing the intelligence of future biological and machine beings on planet Earth, promoting the exploration of the Universe, and colonizing distant inhospitable planetary surfaces on which it is possible to build giant computronium³ server farms accommodating huge groups of digital highly intelligent organisms.

According to proponents of the longtermism perspective (William MacAskill, Elon Musk, Nick Bostrom, Sam Altman, Jaan Tallinn, Vitalik Buterin, etc.), the humanity spread out in space could theoretically continue to exist for 1040 years, and the creation of safe advanced technologies (including Artificial General Intelligence Systems) will significantly increase the probability of the existence of a future population of 1058 happy virtual people [Bostrom, *Superintelligence: Paths, dangers, strategies*, 2014; Bostrom, *Astronomical waste: The opportunity of cost of delayed technological development*, 2003]. In their long-term framework, the scenario of neglecting or losing today's eight billion people because of a natural or intentionally caused global deadly event (e.g., total thermonuclear war) would be more acceptable than the non-birth of the trillions of future people that would eventually exist.

¹ The expected value of an action is the sum of the value of each of its possible outcomes multiplied by the probability that they will occur.

² A philosophical doctrine according to which only actions that maximize the happiness and well-being of all affected individuals are correct.

³ Computronium is a hypothetical material that can be used as "programmable matter", a substrate for computer modeling of practically any real object.

2. THE HOPES BEHIND AND THE DARK SIDES OF THE TESCREAL IDEOLOGY

Staunch supporters of the techno-utopian TESCREAListic vision of the future of humanity believe that building super-intelligent Artificial General Intelligence Systems will allow the creation of radically improved and even immortal humans colonizing the Universe through a post-human civilization of trillions of people with real or digital identities spreading across the Galaxies (Bostrom, 2008). Some researchers express medium positions, recognizing the dangers of creating Artificial General Intelligence Systems as real but not insurmountable, and call on leading technology figures to responsibly and ethically research and development of such (Tegmark, 2023). TESCREAL ideas are undoubtedly popular among Silicon Valley tech luminaries who invest huge sums of money in transhumanist projects and consider Artificial General Intelligence Systems to be a natural catalyst for their implementation. For example:

- The mission of Elon Musk's company Neuralink (who also wants to colonize Mars and expresses sympathy for longtermism) is to fuse the human brain with artificial intelligence to launch the next stage of human evolution.
- Peter Thiel, the co-founder of PayPal, financed a competitor to Neuralink.
- Both Musk and Thiel have invested in OpenAI – the creator of ChatGPT.
- OpenAI CEO Sam Altman is registered with Nectome (a company that preserves human brains for possible future "uploads" to a computer) and invests in Retro Biosciences (a start-up aimed at extending human life through innovations for bodily rejuvenation).
- Like Thiel, Google's engineering director, Raymond Kurzweil, wants to be cryogenically frozen and revived in a science-advanced future.
- Longtermism philosopher Nick Bostrom, who heads the Future of Humanity Institute at the University of Oxford, working closely with the charity Centre for Effective Altruism, is a client of the Californian transhumanist company Alcor.

Contrary to the high expectations of the proponents of the ideology, sceptical TESCREALists bring to the fore the existential danger⁴ that Artificial General Intelligence Systems will turn against their creators, destroying humanity and its dream utopian future (Yudkowsky, 2023). According to Neşe Devenot (Devenot, 2023, p. 2), the utopian TESCREAL visions of global technological elites promoting the use of psychedelic drugs to treat mental health are not driven by altruistic but by financial motives to build a world with increasing material inequality.

Big Tech companies trying to build Artificial General Intelligence compete to create advanced Artificial Narrow Intelligence Systems capable of performing almost any task in any circumstance – an omniscient and omnipotent machine similar to "God". In their quest to achieve the cherished goal of a future utopian paradise, they justify the use of any advanced technologies, even if they are destructive and exploited without any or no regulation. Moreover, their leaders often see themselves as the "saviours of the world" from debt, climate and social crises, and believe that only heeding their urgent appeals would prevent the destruction of billions of future intelligent beings.

The aspiration to impose the TESCREAL views of a number of privileged and wealthy Silicon Valley leaders on the rest of humanity can be seen as an attempt to shift the focus away from the current non-existential risks facing humanity, the most serious of which are social discrimination and algorithmic bias demonstrated by today's narrow-purposed Artificial Intelligence Systems, rather than

⁴ The idea that the development of machine superintelligence can destroy less intelligent human beings has not yet been supported by empirical evidence. These fears are supposed to reflect certain views of discredited movements such as the Science of race and eugenics.

as an altruistic initiative for its rescue. This is evidenced by the opinions of some supporters of TESCREAL ideas, according to which the desire to mitigate the existential risks for the human race justifies the slightest effort to reduce the likelihood of such a catastrophe. According to Nick Bostrom, for example, if there is only a 1% chance of 10^{52} digital lives existing in the future, then "the expected value of reducing existential risk by a mere one billionth of one billionth of one percentage point is worth a hundred billion times as much as a billion human lives" (Bostrom, 2013).

Perhaps the darkest side of TESCREAL ideology is its direct links to eugenics and eugenic principles – transhumanism is a form of eugenics called "liberal eugenics", and some of the leading eugenicists of the 20th century (most notably Julian Huxley, president of the British Eugenics Society from 1959 to 1962) are transhumanists. Gebru and Torres believe that the current push to create Artificial General Intelligence (AGI) is driven by a set of ideologies called the "second wave" of eugenics, and "the leaders of the AGI movement subscribe to this set of ideologies, which directly emerged from the modern eugenics movement, and therefore have inherited similar ideals" (Gebru & Torres, 2024).

CONCLUSION

Summarize the results of the research/paper and write the conclusion with a few sentences here.

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