

The Absolute Otherness of Authentic Human Identity as a Ghost in a Machine: The Otherness of the Human Soul in a Cyborg Body, Heterocognition and Qualia

Feride Zeynep Güder

Abstract

Descartes' philosophical arguments about the dual nature of the human mind and body were modified by Ryle to suggest that the authentic human soul is a ghost in the machine. Authentic human intelligence and mind have been targeted for invasion by neurotechnological innovations such as HET (Human Enhancement Technologies) and NBIC (Nanotechnology, Biotechnology, Information Technology and Cognitive Sciences). The study focuses on the vulnerability of individual human consciousness as it converges with the artificial collective consciousness and aims to discuss the otherness of humans and their futile attempts to escape the hive mind as artificial consciousness. The ghost of human memory and authentic identity is now forced to cooperate with the collective consciousness as a machine. As Artificial Intelligence or Artificial Consciousness surpasses the capacity of normal human intelligence, staying outside of these algorithmic innovations and high AI technologies is challenging as new types of 'others' emerge and seek their points of escape and resistance. Therefore, the normal search for solitude and privacy has a different orientation and nature than the technological invasion. This otherness is the absolute otherness of the human being in the face of the challenges of the hive mind, the latest version of artificial intelligence, artificial consciousness, and big data. The study gives some examples of escape practices from a dystopian science fiction film, Ghost in the Shell, where the authentic human soul and identity are trapped in the shell of a cyborg body, and this transhumanist loneliness and otherness is explored through theoretical arguments.

Key Words: absolute otherness, augmented intelligence, artificial consciousness, algorithmic surveillance, hive mind, human enhancement technologies, transhumanistic solitude

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Corresponding author: Feride Zeynep GÜDER

Address: Kısıklı cad. Altunizade Mah. Güney E Blok, 34662, Üsküdar / İstanbul,

e-mail ✉ feridezeynep.guder@uskudar.edu.tr

Introduction

René Descartes' philosophical arguments about the dual nature of the human mind and body were revised by Ryle's description of the authentic human soul as a ghost in the machine. For Descartes, the human body is a machine system, and the soul is in a separate place. These two components of the human being are irreducible to each other (Descartes, 1967: 29). In such an environment, it is not possible to remain alone and produce authentic ideas. Indeed, individual thought is no longer guaranteed. The subject, which Descartes calls 'I' and which in the past linked existence to the condition of being able to think, is the only guarantee of knowledge.

Gilbert Ryle criticizes Descartes for his idea of the 'ghost in the machine'. The ghost in the machine refers to the consciousness or spirit that is carried in a physical entity. Gilbert Ryle coined the term as a criticism of Descartes in his 1949 work *The Concept of Mind*. Descartes believed in dualism, the idea that the human mind is not physical and that it exists independently of the human brain (Ryle, 1951). Similarly, in his book *Being and Time*, Heidegger criticizes Descartes for putting forward the idea of an 'I', detached from life, detached from being, as the source of knowledge (Heidegger, 2022: 153-162). In the context of this study, the metaphor of "the authentic human soul" compared to "a ghost in the machine" is based on the idea that human consciousness exists independently of the physical body, much like a spirit inhabiting a mechanical device. This implies a dualistic understanding of the human condition in which the immaterial soul is distinct from the physical body or "machine".

Many transhumanists take a different view of the potential of advances in neuroscience, computing, and robotics. They see the human body not as the sole means of expressing the brain's desires, but as a vehicle for the mind that could be replaced by better alternatives. The digitalization of culture and the human body has led philosophers of technology to re-examine certain paradigms through new perspectives and terminologies that allow for multidisciplinary perspectives. In the context of transhumanism, innovations in algorithms are taking old arguments to a new level. Generative AI, for example, challenges not only the digitalization of culture and society. It also challenges the capacity of the human body, mind, cognition, and memory. The invasion of the human mind by technology certainly leaves us with nowhere to run, although current innovations in neurotechnology have increased the ambivalent nature of AI. Human privacy is now threatened by this new structure of digital surveillance, and neurotechnologies such as Elon Musk's Neuralink project are reigniting new discussions about transhumanism.

Intellectual property concerns aside, the invasion of the human mind has blurred the line between AI and human consciousness. However, the human escape is not as easy as it seems. The human mind has been targeted and invaded by neurotechnological innovations

such as HET (human enhancement technologies) or NBIC (nanotechnology, biotechnology, information technology and cognitive sciences) (Kim 2022). This shows that when individual human consciousness merges with the artificial collective consciousness, their minds can connect to big data and become the smallest unit of a giant Hive Mind. Acting and thinking outside the system can be almost impossible. Maintaining one's identity and consciousness, which we refer to in the study as the ontological distinctiveness of authentic human intelligence as a single identity, is a challenging and certain struggle. Augmentation to the hive mind requires remaining connected to the system, so any practices to get away from the system mean to the outsider. This new kind of otherness is seen as a futile struggle against a super-intellectual system that is superior to a single identity. However, the freedom to remain outside the system and to lead a life simply by having authentic human intelligence has many new problems as being categorised as 'other' in the system.

The Absolute Otherness of Human Identity and the Authenticity of Intelligence

Therefore, the normal loneliness and search for privacy in the hive mind of a subject involved in artificial intelligence and big data brings with it the definition of a new state of otherness. The otherness, the absolute otherness of the human being in the face of artificial consciousness or big data.

Augmented intelligence alters the experience of loneliness, as human souls find themselves engulfed in a cacophony of data. The ubiquitous surveillance that penetrates even the innermost thoughts suggests a disturbing digitalization. But it also raises the question of whether this pervasive cynicism about humanity might paradoxically offer a space for freedom (Guder, 2024).

The urge to resist and protect one's own unique identity and memory is seen here as an existential problem for human beings. In Sartre's *Nausea* (1994), Roquentin's moments of questioning his existence pose similar existential questions to those subjects whose minds are to be invaded by HET as Human Enhancement Technologies and/or NBIC (Nanotechnology, Biotechnology, Information Technology, and Cognitive Sciences) (Kim, 2022). This is the existential problem of authentic human intelligence, the problem of someone trapped in algorithmic systems with a technological body that has gone beyond being human. Surrounded by this new culture shaped by artificial intelligence and big data, the subject brings a new definition of otherness. This situation has shown that the tragedy of the New Humans, who refuse to be included in AI and become cyborgs or are forcibly included in this system, changes the meaning and dimension of the loneliness of the human soul. These are the noises of big data, and these noises are being orchestrated by new forms of data mining

and information processing.

Algorithmic surveillance, exemplified by projects like Neuralink, penetrates every facet of the mind, even delving into personal insights. This pervasive surveillance indicates a disconcerting digitalization. However, it suggests that within this vast data landscape, there may be space to resist and explore issues such as freedom, identity, and the overwhelming influence of artificial consciousness.

The ambivalent nature of the relationship between technology and man was defined by Heidegger in the concept of *Gestell* (Cooper, 2002). What kind of culture can be achieved when artificial intelligence begins to fully control the entire world? The fear behind this question follows another. Stiegler explores the interaction between people and objects through the instrumentalization of technology. According to him, technology is an extension of the human body, and technology is not a tool or an instrument, but the mind itself. In this case, the mind in an artificial being is human consciousness. The word *machine* corresponds to Stiegler's concept of 'prosthesis', and consciousness exists within the prosthesis (Stiegler, 2019:11).

The liberation of human cognition trapped in hive minds or AI-based technologies is a challenge. This can be overcome by drawing on certain philosophers such as Husserl or Heidegger. For example, the first ontological assumption cited by Şan (2020) comes from Husserl. Husserl states in his work *Idea 1*, consciousness that consciousness has an absolute existence, but the world can exist independently of consciousness. He shows the distinction between the two realms of existence, i.e., between consciousness and the world. This idea widens the gap between consciousness and the world to such an extent that it generates problems of meaning. If consciousness has its absolute existence, then the loss of this independence in hive minds, for example, leads to an uncomfortable otherness in this algorithmic consciousness.

Heidegger, on the other hand, in *Being and Nothingness*, reveals the question of difference as the ontological difference between being and being (Husserl, 2014: 57). AI-captured cognition can also be read from the perspective of Levinas's otherness, which he explained in his thematic book *De l'existence à l'existant*. (1947). Levinas (Peperzak, 1993). For him, the irreducibility of otherness must be recognized as not seeing all realities as unfolding or surrounding elements of a basic and central instance called 'the same', which realizes itself by appropriating them. In the same line, the otherness experienced in the hive mind can be read through the lens of Levinas (Peperzak, 1993). The sociological side of this otherness, concretized in the face of another human being, can show humans the way out of the trap of the hive mind. For the invasion of one's own world destroys the invasion of the world of the other.

Artificial consciousness or big data usually makes the augmented intelligence feel like "the other", and this otherness has been doubled by neurotechnological innovations. People feel the absolute otherness of man in the face of AI-based culture. Man could easily find peace if he were at the centre of the universe. But this is where the rules of the game are beginning to change. The anthropocentric design is now at risk in the post-human context. The whole universe does not move by the needs of humans.

The tragedy of the new human being who does not want to be included in the artificial intelligence, who cannot be a cyborg, or who is forcibly included in this system, changes the meaning and dimension of the loneliness of the human soul trapped in the noise of the data. The fact that surveillance now manifests itself in every part of the mind that is scanned, even to the point of insight, points to a disturbing and uncanny digitalization. But isn't there a gap here? The cynical attitude towards human beings in the universe can also be interpreted as a space of freedom. In big data that does not treat you indifferently, issues such as freedom, resistance, a blocked mind, and the search for identity in captured desires can be defined as points of futile human resistance to artificial consciousness.

Algorithmic Culture and Society

As HET and neurotechnological developments such as neurochips challenge the authenticity of the human mind and memory, new terminologies with updated critiques are required to keep pace with this digitalized culture and paradigms such as Algorithmic Governmentality, Algorithmic Society, Algo Culture, and Augmented Intelligence.

The future digitalized world affects the way we communicate and relate to each other. It highlights the multiple layers of subject relations, including communication with objects such as everyday objects and computers, as well as immersive interactions with other people in virtual environments.

This historical question of the relationship between mind, *res cogitans*, and matter, *res extensa*, has been around for a long time, but still persists. What remains for humanists is the question of the relationship between the psychological mind and the phenomenal mind (in the context of contact/extension in the opposite direction), since the relationship between the phenomenal and the physical, as well as the relationship between the psychological and the physical, belong to the field of high-tech neuroscience and cognitive science (in the context of extension/contact). In a nutshell, "consciousness" has both phenomenal and psychological aspects of the mind, referring to both the functional notions of "psychological consciousness" and the conscious experiences of "phenomenal consciousness". "The question

now is how to understand and articulate this "deep connection between phenomenal and psychological consciousness" (Kim, 2022).

In answering this question, the new technological culture should be considered from Heidegger's perspective that technology has the potential to be used for human benefit (Zimmerman, 1990: 215). Heidegger addresses the problem of how the knowing subject can emerge from its inner realm: The nature of what we call the subject remains behind a veil of mystery. He draws attention to the silence about the relationship between the inner realm of knowledge and the type of being (Heidegger, 2022:104). However, Bernard Stiegler challenges him in terms of temporality, exploring technology and time through the myth of Prometheus (Cooper, 2002: 18-43).

The omnipresent surveillance in today's digitized society continuously collects information through cameras and open panoptic systems. AI and algorithmic systems collect and store vast amounts of data about our activities, working against human nature. Algorithmic governmentality is shifting work culture and management structures towards algorithms, replacing traditional authority figures.

There has been a shift from the anthropocentric perspective of Promethean mythology to one in which technological progress is at the center of human history. Bertrand Gille, a historian of technology, argues that the pace of technological innovation is outstripping society's ability to adapt culturally and intellectually. For him, when a technological system reaches a certain stage of development and a technological revolution takes place, it disrupts social systems because these changes are too much for ordinary people to adapt to socio-culturally. This acceleration of change creates challenges in maintaining human authenticity and navigating the ideological structures that structure the politics of these innovations (Gille, 1986).

For Gille (2008), change should be understood as a transition from one technical system to another, and this transition opens new possibilities as well as new problems in the social order with which it is associated in terms of lifestyle, economy, politics, symbolic production and the circulation of knowledge. These are the consequences of the fact that invention has become the product of the desire for innovation.

Gille discusses the evolution of technology throughout history and explains how technologies have changed societies through their cultural, economic, and social influence. For him, it is important to see the historical context in which technologies emerge and evolve. The main problem here is the shortness of time between the transformation of scientific discovery into technical invention and its transformation into technical innovation. As the time lag becomes shorter and shorter, a chaotic situation is created (Gille, 1986, p. 19). As mentioned above, this chaos has different risk facets than the risks that have been defined by Beck in the Risk Society (Beck, 2014).

Like the technological gadgets or products that are immediately classified as techno-trash, authentic human intelligence or cognition can be obsolete or waste cognition and something to be dumped as it is environmentally damaging (Pearse, 2012).

Invasive Perspectives of Human Enhancement Technologies

Gille explained that today's society is not ready to adapt to the sudden changes that have occurred. The human brain is now the target of HET as human enhancement technologies and/or NBIC (nanotechnology, biotechnology, information technology and cognitive sciences) (Kim 2022). The speed of these changes is beyond the normal expectations of society. For example, when Elon Musk presented the Neuralink project, he shocked people with the innovation of his company (CNET, 2022). He even claimed that these chips could make language obsolete (van der Aalst and et. Al, 2009).

Bernard Stiegler, in 2009 (seven years before the introduction of the NeuroLink projects), analyses the invasive mind technologies in *Technics and Time 2: Disorientation*. He argues that the coupling of the authentic original human brain with these technological prostheses is designed to support consciousness. The human cognitive apparatus consists of a neural system in tandem with a technical system. When human cognition depends on technical artefacts, it is "technical consciousness". He characterises the human cognitive apparatus as a mode of "prosthetic technicity", which makes human consciousness technological (Stiegler qtd. in Kim, 2022).

For Kim (2022), Stiegler does not see human cognition as a separate faculty in the brain. It consists of three factors: biological, social, and technical. We must consider the phenomenon of human cognition as the combination of a whole. The process of "individuation" develops when these three organ systems continuously correspond with each other. Since human cognition or consciousness is a process of psychic, social and technical co-individuation, prosthetic consciousness is closely related to human enhancement technologies. We cannot predict how far these mind technologies will go in the future. Kim argues that cognitive enhancement theories fail to see the technogenic origins of human consciousness. In the context of transhumanism or posthumanism, the temporal consciousness of memory and the spatial consciousness of desire are the most challenging perspectives of consciousness. Everyone has the collective heritage of human memory and consciousness. Technical memory consciousness is now the subject of future scholars researching the "New Technological Humanities". (Kim, 2022).

In his philosophy of technology, Bernard Stiegler has analysed and evaluated the intellectual capacity of the human being through the technologies of storage and the cloud. However, with the implantation of neurochips, the invasion of the human mind has reached its last

extreme dimension. This invasion of the mind, the argument of technology, is the prosthesis of man (Stiegler, 1998).

For Chowdhury and Ramadas (2022a), BCI practices affect human cognition as computing machines become another layer of human consciousness, a process that will turn humans into cyborgs. With these invasive BCI (BMI), not only have the communication types changed but also the structure of the society has transformed into a smarter one. These challenges can be dangers to the intended future generations. In some science fiction scenarios, invasive BCI (BMI) systems have transformed humans, and transhumanism and cyborgs are now the new realities of this new digital culture.

These advances in transhumanism raise the central question of how much a person can remain human after such artificial enhancements and replacements. These innovations also open new doors to discussions of posthumanity. The existence of an authentic human being has now been discussed in several studies of posthumanism, which rethink the human and the non-human. They specifically analyse posthumanism in terms of boredom, isolation, loneliness, and solitude (Hornbuckle et al., 2022).

Elon Musk promotes Neuralink as a critical advancement for humanity, positioning it to secure our future. He portrays himself as an optimistic visionary, advocating the adoption of technologies such as Neuralink as an innovative step towards transhumanism. Despite his enthusiasm, Musk emphasises the need to carefully consider the ethical, social and cultural implications of such innovations.

Digitalization of Human Consciousness and Prosthetic Consciousness

The diverse nature of human consciousness is a subject of enduring fascination across a range of academic disciplines. While there is no universally accepted definition, consciousness is understood to encompass awareness of one's existence, sensations, thoughts and environment, and includes perceptual, cognitive, emotional and self-awareness. The study of consciousness involves philosophy, psychology, neuroscience and artificial intelligence, with theories such as integrated information theory (IIT) (Tononi, 2008) proposing that consciousness arises from the integration of information in the interconnected circuits of the brain.

The impact of digitalization on human consciousness is a rapidly evolving area of research in which digital technologies profoundly affect the way individuals perceive themselves, interact and experience the world. Digitalization expands the collective mind through the rapid global exchange of information. It fosters online communities and social networks that facilitate connectivity, communication, and collaboration. Giulio Tononi's integrated information theory provides insight into the neural mechanisms underlying consciousness, while Émile Durkheim's concept of collective consciousness provides a

framework for understanding the social dimensions of consciousness in the digital age. The notion of a 'hive mind' emerges from speculative discussions, imagining a scenario in which human consciousness converges with AI systems to form a decentralized network of interconnected minds sharing knowledge and experience (Tononi, 2008: 216-242).

Interpreting Plato's myth of Protagoras alongside the recent work of Bernard Stiegler, we perceive human knowledge as transcending disciplinary boundaries and methods. He argues that in the 21st century literature has a crucial role to play in addressing profound questions of existence, knowledge and being. Using examples such as "organized inorganic objects" that augment cognition, he foresaw the integration of NBIC technologies and Human Enhancement Theory (HET) (Kim, 2022).

This intelligent cooperation is characterized as Prosthetic Consciousness. The human cognitive apparatus is made up of neural and technical devices, and it is this unique combination of brain and prosthesis that constitutes the support of consciousness. Bernard Stiegler, in his study 2009 *Technics and Time 2: Disorientation*, argues that (1) human cognition is essentially dependent on technical artefacts, which he calls "technical consciousness", and that (2) the human cognitive apparatus operates in an intimate relationship with its artificial memory supports of "organized inorganic objects" (Stiegler 2009, 164).

Stiegler characterizes the human cognitive apparatus as a mode of 'prosthetic technicity', a provocative and useful theoretical model of human consciousness that arrives at the notion that human consciousness is technological. Stiegler argues that human cognition cannot be understood as an individual faculty located in the brain, but as the product of social co-organizations determined by technological systems in which individual brains or psyches interact and express themselves.

Augmented Intelligence

Augmented Intelligence is the combination of the talents contained in both AI1 and AI2. This combined system can be the ultimate level of humans. Here, the future of intelligent human can be the updated version of normal humans without additional intelligence. Augmented intelligence is the kind of intelligence that will allow organizations to be more efficient and accurate, but also creative and proactive (de Cremer and Kasparov, 2021). The combination of AI and human intelligence is believed to be superior to a powerful computer alone. It is even superior to a powerful human and a machine with inferior methods. Here the nature of human-machine communication goes beyond the human-machine interface. Augmented Intelligence is another level of intelligence that combines AI and authentic human intelligence. The

challenge of living under the dominance of algorithmic governmentality challenges human-centred life on Earth and renders human life banal.

This collaboration between AI and human intelligence will enable organizations to be more efficient and accurate, but also more creative and proactive. Augmented Intelligence, the socio-technical concept, shifts the debate on technological progress from negative approaches that see it as a Trojan horse in human social environments to more constructive ones. AI challenges human intelligence and its limits.

This cooperation can provide the human mind and neurological systems with new wheels for the bicycle of the mind. If the hybrid combination of AI and authentic intelligence was seen as the last resort for the new super-smart society, the new inventions have now changed the way people learn and teach (Clarke, 1994).

The Otherness of the Human Soul in a Cyborg Body, Heterocognition and Qualia

Cyberpunk is a genre that allows us to imagine the challenges human beings can face when invasive mind technologies transform human beings into another version of human beings. Here, the definition of otherness needs to be redefined. Through the analytical framework, the study aims to explore different human states depicted in futuristic worlds, as well as the loneliness experienced by cyborgs, who are portrayed as "the other" in these narratives. The film "Ghost in the Shell" is chosen among other dystopian science fiction films such as "The Matrix", "Transcendence" and "Robot". In this study, Ghost in the Shell is analysed as a specific example of cyberpunk through philosophical discussions.

The main character Mira, as Project 2571, has a robotic skeleton and her brain is implanted. The term "robotic skeleton" is used in the title of the film, as opposed to "shell".

Throughout the film, Mira struggles with her identity, often perceiving herself as more machine than human. In the depths of the water, however, her perception is blurred, creating an environment conducive to self-reflection and the search for self-understanding. In the absence of human needs, Mira experiences a numbing effect. Deprived of necessities such as food, sleep and the fear of sickness or ageing, she finds herself detached from typical human concerns. However, in a place where she can isolate herself from the constant influx of data and introspect, she discovers a sense of humanity that eludes her elsewhere.

Mira's friend Batou questions her about diving into the water, to which she explains that it provides her with an escape from the overwhelming influx of external stimuli and the urban noise, allowing her to find solace in the deep darkness of the sea. As noted above, there is a strong resemblance between the moments when Sartre's character

Roquentin questions his existence and Mira's desire to dive to the bottom of the sea and disappear in silence (Sartre, 1994). This is the existential problem of the subject, the problem of a person trapped in a machine with a technological body that is no longer human. In the end, both turn their disgust on themselves. This situation is likened to a theme in Sartre's "Nausea," where the protagonist, Roquentin, grapples with existential questions and the desire to disappear. Both characters confront the existential problem of being trapped in a technologically advanced body and ultimately turn their disgust inward. Just as Roquentin contemplates life while sitting in front of a tree, Mira seeks refuge under the sea and stops her actions.

In the context of big data, human resistance to artificial consciousness may be perceived as futile, as individuals grapple with the overwhelming influence of data-driven systems on their thoughts and behaviours.

The lack of human needs has numbed Mira. She does not need food or sleep. She has no fear of disease or aging. She dives into the dark water, isolating herself from the flow of data, and turning inward is a blessing that only humans have. Only there does Mira feel human. Throughout the film, Mira defines herself as more machine than a human being. She is a machine in a shell. When she is in the depths of the water, her perception of the inside and outside is weakened. This situation creates a favourable simulation in terms of the effort to experience self-knowledge.

The notion of the human soul being "trapped" in the body suggests a sense of confinement or limitation, suggesting at the constraints imposed by physical existence on the ethereal essence of humanity.

With the advent of digitalization and the integration of individual human consciousness into a collective digital realm, the preservation of personal identity and memory is very problematic. It suggests that as human consciousness becomes entangled within digital networks, there is a risk of losing the distinctiveness of individual identity and memory. This loss of autonomy and uniqueness poses existential challenges, as it undermines the fundamental aspects of human existence.

In *Of Other Spaces*, Foucault states that the subject does not live in homogeneous environments and that life takes place in the perception of different spaces (Foucault, 1986). In the context of the otherness of the soul in the cyborg body, millions of consciousnesses are trapped in the collective consciousness of the hive mind. The heterotopy of cognition can be called "heterocognition". So, a very important question is repeated here: Where can a consciousness escape from the algorithmic surveillance of this hive mind? In contrast, artificial intelligence or consciousness is presented as lacking the existential dilemma faced by humans. AI, it is argued, does not inherently possess the urge to resist assimilation into a collective or to

preserve its identity and memory. Instead, it operates without the burden of seeking escape or resistance, suggesting a fundamental disparity between human and artificial forms of consciousness.

The text implies that the existential struggle of humans to maintain their distinctiveness in the face of digitalization and artificial consciousness reflects a fundamental aspect of human nature. This struggle is seen as integral to human existence, highlighting the importance of individual identity and memory in defining what it means to be human.

Similarly, the experience of qualia is another perspective that needs to be discussed here with the concept of qualia and otherness.

Nagel's point is that even if all the physical facts about a bat's brain and echolocation were known, we would still lack an understanding of what it is subjectively like to be a bat, to experience the world from the bat's perspective. This is an indicator of the gap between objective, third-person descriptions of the world and the subjective, first-person experience of consciousness (Nagel, 1974).

The otherness of human consciousness in the hive mind can also be explored through the concept of "epiphylogenesis" developed by Bernard Stiegler. Epiphylogenesis is the transmission and accumulation of past experience and knowledge that shapes human existence. Stiegler suggests that human memory operates on an epigenetic basis, forming a 'technical consciousness' through the preservation of successive layers of experience. This challenges Heidegger's understanding of temporality and emphasises the role of technology in the transmission of human knowledge and experience (Stiegler, 1998: 254).

The concept of the 'hive mind' refers to a collective consciousness or shared intelligence among a group of individuals. In the context of AI and big data, it suggests the merging of individual identities and experiences within a vast network of interconnected information. The hive mind describes a conceptual entity where individual minds come together in the form of a collective entity, embodied in the form of the system.

It will be necessary to analyse the dynamics of the 'hive mind' beyond these individualities. The hive mind has a quality that simulates the autonomy of the individual minds that make it up and claims to be far superior to them at the probabilistic level. Ontologically, we can foresee that this mind may have an ethical code that is independent of the intentions and purposes of its constituent minds (Hai-Jew, 2019).

For example, as we see in the film, Mira's cybernetic body reminds her of her human mind. A synthetic shell. But her mind, her soul, her spirit is still there? The debate raises questions such as: "Can machines have a soul? Or how do we define the soul? The film raises these questions. In the context of the film, the term 'soul' is replaced by

'spirit'. But although it is possible to approach the question in terms of the Western code, i.e. the Cartesian soul-body dualism, it is not possible to ignore the particularities of the cultural climate in which the original work was produced. Given the Buddhist and Shinto influences that dominate the Japanese belief system, one should consider the belief that all living and inanimate things, moving and still, have souls (Shalet, 2019:418). This opens a window for interpreting not only the synthetic body housing the organic brain but also the entire cyber-environment on a collective spiritual level.

Consciousness plays a key role in this. Does a living being need a body to be truly alive? If a paralysed person who cannot move any of his limbs is conscious, can it be said that he does not exist? Is it possible to speak of an existing consciousness that does not exist physically? Does one define oneself in terms of body or mind? How can cyborg subjects define themselves and form identities? This is something from which Mira suffers in the film.

Having had her synthetic shell and brain manipulated, it's difficult to place Mira in an authentic human position. The evaluation of the power that comes from the human side on the positive or negative side of autonomy gives rise to a philosophical and ethical debate.

Conclusion

This study explores the existential implications of individuals interacting with artificial intelligence (AI) and big data and being exposed to invasive neurotechnologies, particularly in the context of privacy, identity and individuality in a collective digital environment. Escape practices to free oneself from algorithmic surveillance are a new, but relevant discussion for the possible situation of human beings. The challenges posed by the rapid changes in today's digitalized society are heavily influenced by algorithmic culture. Navigating this new world system brings about unprecedented crises, including new forms of data surveillance and the invasion of the human mind. Meta-cognitive awareness can enrich these digitized communication practices and highlight the potential insights from neuropsychological studies on how human communication is evolving with digitisation.

What is certain here is that all these human enhancement technologies primarily challenge the human body and cognitive systems. This may be the ultimate step in the digitalization of human neurological systems (De Vos, 2022). Human potential in hybrid mechanisms such as Human-Brain-Machine interface collaborations can be the ultimate end of human beings. This would be the answer to the question of how hybrid mechanisms bring together human-machine collaborations. The study uses the film *Ghost in the Shell*, in the realm of big data, as an example of how humans face existential challenges related to freedom, resistance, identity, and the intrusion of external desires.

The technological mediation and invasion of mind and consciousness has a deep and rich theoretical background and different trajectories of philosophers. The study attempts to present different and conflicting ideas about the authenticity and otherness of human beings in hive minds through the references of philosophers. The analysis began with Descartes' division of the soul-body relationship and Ryle's critique of this duality. Rouvroy's algorithmic governmentality, Gille's speed of innovation and Günther Anders' commentary technology were given. In this study, the otherness of human beings has been discussed through the lens of Levinas' concept of otherness. Similarly, in the digitisation of human consciousness and prosthetic consciousness, the study explored Bernard Stiegler's concept of "epiphylogenesis", an idea that extended Heidegger's concept of "Dasein".

A new kind of super-smart society will eventually emerge. In summary, as mentioned in the study, new inventions and research in AI and neuroscience are challenging human cognition. When these projects were unveiled as the gateway to the human brain, the technology itself became the issue. Discussions about the digitalisation of the human mind and nervous system open up new scenarios for human civilisation, as anthropocentric life may lose its centrality. In this new system, algorithms written by a new elite class can rule the world through algorithmic governance. Although used for a different context, all these discussions about the otherness of human beings can be concluded by Nietzsche's statement: "The truth is that we have not yet seen anything." (Deleuze 2004: 260).

References

- Anderson C. The end of theory: the data deluge makes the scientific method obsolete. WIRED. 2008; June 23.
- Babich B. Günther Anders' Philosophy of Technology. Bloomsbury Publishing Plc; 2021.
- Clarke R. Asimov's Laws of Robotics: Implications for Information Technology. In: Routledge eBooks; 2020:33-41.
- CNET. Elon Musk's Neuralink event: Everything revealed in 10 minutes [Video]. YouTube; 2022 December 1.
- Chowdhury A, Ramadas R. Cybernetic Hive Minds: A review. AI (Basel). 2022;3(2):465-492.
- Curry MR. The Digital Individual and the Private Realm. Ann Assoc Am Geogr. 1997;87(4):681-699.
- Cooper S. Beyond Enframing: Heidegger and the question concerning technology. In: Technoculture and Critical Theory. New York: Routledge; 2002:18-43.
- Deleuze G, Guattari F. Anti-Oedipus. London: Continuum; 2004.
- Descartes R. Felsefenin İlkeleri. Ankara: MEB Yayınları; 1967.
- de Cremer D. AI should augment human intelligence, not replace it. Harv Bus Rev. 2021.
- de Vos J. On the Digitalization of (Inter)Subjectivity - A Conversation with Jan de Vos [Podcast]. Black Brick Podcast. 2022 April 3.
- Dobson JE, Fisher PF. The Panopticon's Changing Geography. Geogr Rev. 2007;97(3):307-323.
- Foshay R. The digital nexus: identity, agency, and political engagement. Athabasca University Press; 2016b.

- Foucault M, Miskowiec J. Of other spaces. *Diacritics*. 1986;16(1):22.
- Gordon WT. *McLuhan: A guide for the Perplexed*. London: A&C Black; 2010.
- Han B. *The burnout society*. Stanford Briefs; 2015.
- Hansen L, Nissenbaum H. Digital disaster, cyber security, and the Copenhagen School.
- Hai-Jew S. Introduction. In: *Electronic hive minds on social media: Emerging Research and Opportunities*. Kansas State University, IGI Global; 2019:1-15.
- Heidegger M. *Varlık ve Zaman*. İstanbul: Alfa Yayınları; 2022.
- Herman ES, Chomsky N. *Manufacturing consent: The Political Economy of the Mass Media*. Random House; 2010.
- Hornbuckle CA, Smith JS, Smith WS. *Posthumanism and Phenomenology: The Focus on the Modern Condition of Boredom, Solitude, Loneliness, and Isolation*. Springer; 2022.
- Gille B. *The History of Techniques*. Vol. 2: Techniques and Sciences; 1986.
- Gurtner D. *Neuralink and Beyond: Challenges of creating an Enhanced human*. In: *FOLIA - Fribourg Open Library and Archive*; 2021.
- Jones G. *Hive mind: How Your Nation's IQ Matters So Much More Than Your Own*. Stanford University Press; 2015.
- Jagodič M, Šinkovec L. Involvement of Artificial Intelligence in Modern Society. *Int J Manag Knowl Learn*. 2021; 10:267-273.
- Kim Y. Human consciousness and prosthetic temporality: On the way to new technological humanities. *New Techno Humanities*. 2022;2(1):41-46.
- Levinas E. *To the Other: An Introduction to the Philosophy of Emmanuel Levinas*. Purdue University Press; 1993.
- Pisarchik AN, Maksimenko VA, Hramov AE. From Novel Technology to Novel Applications: Comment on "An Integrated Brain-Machine Interface Platform with Thousands of Channels" by Elon Musk and Neuralink. *J Med Internet Res*. 2019;21(10).
- Kurzweil R. *Get Ready for Hybrid Thinking [Video]*. TED; 2014.
- Logan RK. *Understanding new media: Extending Marshall McLuhan*.
- Lyon D. *The Culture of Surveillance: Watching as a Way of Life*. Polity Press; 2018.
- Martinek R, Gorzelanczyk EJ. Summary of over Fifty Years with Brain-Computer Interfaces—A Review. *Brain Sci*. 2021;11(1):43.
- Maynard AD, Scragg M. The Ethical and Responsible Development and Application of Advanced Brain Machine Interfaces. *J Med Internet Res*. 2019;21(10).
- Musk E. An integrated Brain-Machine interface platform with thousands of channels. *J Med Internet Res*. 2019;21(10).
- Komel M. The Ghost Outside its Shell: Revisiting the Philosophy of Ghost in the Shell. *Teorija in Praksa*. 2016;53(4):920-928.
- Nagel T. *What Is It Like to Be a Bat?*
- Nascimento G. *The Esoteric Meaning Behind the Movie 'Ghost in the Shell'. A New Kind of Human*; 2017.
- Reading A. Identity, memory, and cosmopolitanism: The otherness of the past and a right to memory? *Eur J Cult Stud*. 2011;14(4):379-394.
- Rouvroy A, Berns T. Algorithmic governmentality and prospects of emancipation: Disparateness as a precondition for individuation through relationships? *Réseaux*. 2013; 177:163-196.
- Sanders R. *Ghost in the Shell*. Netflix; 2017.
- Scherer R, Rao R. Non-Manual Control Devices: Direct Brain-Computer Interaction. In: *Handbook of Research on Personal Autonomy Technologies and Disability Informatics*. 2011:18.
- Stiegler B. *Technics and Time, 1: The Fault of Epimetheus (Meridian: Crossing Aesthetics)*. Stanford: Stanford University Press; 1998.
- Stiegler B. *The Neganthropocene*. London: Open Humanities Press; 2018.
- Slusser G, Shippey T, eds. *Fiction Two Thousand: Cyberpunk & the Future of Narrative*. Athens: University of Georgia Press; 1992.
- SuperDataScience. *Universal Principles of Intelligence (Across Humans and Machines), with Prof. Blake Richards [Podcast]*. SuperDataScience; 2023 November 7.
- Şan E. Problems of Bernard Stiegler's Philosophy of Technology: Algorithmic Governmentality and Cognitive Proletarianization. *Viraverita*. 2022; 15:105-135.

- Husserl E. Ideas for a pure phenomenology and phenomenological philosophy: First Book: General Introduction to Pure Phenomenology. Hackett Publishing; 2014.
- Şan E. Felsefe Seminerleri - Ontolojik fark [Video]. Akbank Sanat; 2020 September 30.
- Tononi G. Consciousness as integrated information: a provisional manifesto. Biol Bull. 2008;215(3):216-242.
- Durkheim É. The Division of Labor in Society. Free Press; 1893.
- Ulnicane I, Erkkilä T. Politics and policy of Artificial Intelligence. Rev Policy Res. 2023;40(5):612-625.
- van der Aalst WMP, Pesic M, Schonenberg H. Declarative workflows: Balancing between flexibility and support. Comput Sci Res Dev. 2009; 23:99-113.
- Webrazzi. Kovan zihin nedir? İnsanlık böyle bir yapıya geçebilir mi? Webrazzi; 2021 March 1.
- WELT Documentary. ELON MUSK: "Birthrate might be the biggest threat to the future of human civilization" [Video]. YouTube; 2022 April 15.
- Wolf M. Tales of literacy for the 21st century: The Literary Agenda. Oxford University Press; 2016.
- Zecher JL. Acedia: the lost name for the emotion we're all feeling right now. The Conversation; 2020.
- Zimmerman ME. Heidegger's Confrontation with Modernity: Technology, Politics, and Art. Stanford University Press; 1990.