Human Existentialism and Artificial Intelligence (AI)

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Abstract

This study is about the relationship between humans and technology, particularly explaining the existential aspects of humans and artificial intelligence (AI). Based on the collaboration between humans and technology, artificial intelligence (AI) has a paradoxical side for human existence: on the one hand, it drives change towards existentialism, and on the other hand, it drives destruction and even the elimination of human existence. This research, which uses the philosophy of existentialism and the thoughts of Martin Heidegger's philosophy of technology and the philosophy of human existentialism from Jean-Paul Sartre, attempts to examine the function of control and exploitation of technology towards humans, which results in the loss of human authenticity. At the beginning of the article, it discusses what artificial intelligence (AI) is and the understanding of human existentialism, then discusses the vital and fatal impacts of AI on human existence. The findings in this study are that the most frightening thing about the development of Artificial Intelligence (AI) is not technology but a calculative way of thinking that results in the annihilation of everything, including human existentialism and the human ecosystem.

Keywords: *Existentialist Philosophy, Artificial Intelligence (AI), Martin Heidegger, Human Existentialism, Philosophy of Technology.*

Introduction

This study examines the impact of Artificial Intelligence (AI) technology on human existence. AI-based technology is certainly a method or way that affects the essence and existence of humans. AI-based technology is inevitable. Artificial intelligence is a part of human life in today's modern world. Artificial intelligence (AI) is the study of intelligent behavior. It is a theory of intelligence that aims to account for the behavior of naturally occurring intelligent entities and guide the creation of artificial entities capable of intelligent behavior. (Miller, 2019; Santoni de Sio et al., 2024; Soare, 2023). AI is a science that develops concepts and vocabulary to help humans understand intelligent behavior in living and non-living creatures. (Nilsson, 2014). AI, as an engineering concept, is concerned with the concepts, theories, and practices of building intelligent machines. AI machines are rapidly developing in industry, medicine, finance, and other fields. In the future, AI will likely take the form of more flexible robots that can communicate naturally with humans, capable of performing most of the complex tasks that humans can (Farina,2021). The ultimate goal of AI is to perfect its comprehensive intelligence. Speaking of intelligence within its environment, the world of AI divides it into two parts: intelligence separate from its environment and intelligence focused within its environment. A key concept in AI is knowledge, but equally important is the structure of the entity responsible for the development of this artificial intelligence. Existentialist philosophy is a reaction to systems of thought dominated by the concepts of subject-object, determinism, and positivism, thus ignoring concrete life experiences as humans and individuals (Huttunen & Kakkori, 2021). Martin Heidegger, in his book Being and Time, mentions authenticity in humans, calling it Dasein. (Heidegger, 1996; Nelson, 2023; Riyanto, 2017; Setyo, 2021) . Likewise, the philosopher Jean-Paul Sartre said that existence precedes essence, which means that humans are not objects that have been determined by law or a determined essence, but rather humans are beings-in-the-world, they are existential beings who exist with their world. (D. Palmer, 1997; Sartre, 1946; Webber, 2008). Existentialism is a journey of searching for meaning in life that

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cannot be simplified into a universal formula but must be interpreted ontologically,deeply, and personally, full of emotional involvement, freedom, and authenticity.

On the other hand, Artificial Intelligence (AI) is non-human artificial intelligence that is produced from big data, a very large and complex system, which can be processed and analyzed through technological devices that are always developing and evolving. (Mirchell, 2018). AI is no

just an information technology device, but as time goes by, it is becoming more complex, modern, and capable of adapting and solving human problems. This raises fundamental questions: How authentic is human existence when confronted with artificial intelligence (AI)? Does AI possess consciousness, freedom, and the ability to give meaning to life? To what extent is AI capable of influencing human existence?

Artificial intelligence (AI) is developing at a rapid and rapid rate, with quantum leaps. Its revolutionary pace has resulted in AI becoming a part of human life in all areas and across all aspects of life. This has brought about significant civilization and transformation in how humans interpret and navigate life. It's important to note that AI is capable of mimicking the workings of the human brain, a virtual system capable of understanding the context of human conversation and emotions. The fundamental question is, can AI replace humans in terms of intelligence and emotions?

AI is experiencing a journey that has both a vital and a fatalistic impact on human existence. The impact of AI is broad and profound, both positive and negative, on human life. In its vital impact, AI can significantly improve the efficiency and accuracy of difficult and time-consuming human work and tasks. For example, in the medical field, it can help speed up and accurately diagnose dangerous diseases like cancer (Tai, 2020). This allows for earlier diagnosis and faster treatment. Human error in decision-making is reduced because AI can process and access vast amounts of data, enabling it to provide objective recommendations. In terms of mental health, AI is able to provide insights into personal issues and individual problems (Storozhyk, 2024).

Besides its vital influence, AI also has a fatal impact on human existence (Kim & McGill, 2025; Nyabuto & Wabwoba, 2024; Setyo, 2021; Soare, 2023). The biggest and currently ongoing fatal impact is social inequality and unemployment. AI has the potential to replace humans in routine and repetitive jobs. In the production industry and service sectors, robots and AI can already replace them. This creates massive and large unemployment, which results in social inequality.

The questions above lead us to philosophical, ethical, and ontological debates. Human existentialism emphasizes the essence of human beings with the freedom to create their own meaning and values through actions and life choices. As Soren Kierkegaard put it, "Personal involvement in life's decisions, the courage to choose between difficult options, is an essential aspect of human life" (Cogswell, 2008). This concept is key to understanding the existentialist perspective, emphasizing that meaning is not found "innately" but is constructed through individual experiences and decisions(Cogswell, 2008; D. D. Palmer, 1997; Powell, 1998) .

Research Metode

Research Methodology

To investigate the relationship between advances in artificial intelligence (AI) technology and human existentialism, this study uses a qualitative approach and a literature review method. The qualitative approach was chosen because the issues raised are philosophical and conceptual in nature, requiring an in-depth analysis of theories, ideas, and arguments discussed in the literature. (Liliweri, 2018).

Data Collection

Data were collected through a thorough review of relevant primary and secondary literature. Sources included books, journal articles, academic papers, and philosophical writings on the concepts of artificial intelligence and existentialism. The primary focus was on existentialist writings, such as those by Martin Heidegger and Jean-Paul Sartre, given their profound insights into the meaning of human existence and individual freedom in the face of technological advancements. Furthermore, research on the advancement of AI from a technological perspective and how it impacts society and human identity was thoroughly reviewed.

Data Analysis

The purpose of this data analysis is to identify and connect the principles of human existentialism with the phenomena that emerge as a result of the advancement and application of contemporary AI in everyday life. The interpretation of existentialist theory on how authentic existence and artificial intelligence can affect human autonomy and the meaning of life is presented. This study also considers the critical perspective of hiders who abandon technology as a threat to humanity if humans lose their sense of their true existence. Furthermore, literature discussing the psychological and social effects of AI provides an empirical context that encourages philosophical discussions.

Then, a literature analysis is conducted to understand the conflicts and opportunities arising from the integration of AI with human life, particularly regarding how human existence as a free and meaningful subject can be maintained or threatened. This conceptual approach emphasizes the importance of balancing technological progress with the preservation of human values and existential awareness.

Validity

To maintain validity, researchers used literature published in indexed journals and from trusted sources. This research presents a novel approach by combining the perspective of existentialist philosophy with the more technical study of AI technology, thus offering multidisciplinary insights into the existential issues emerging in the AI era.

Some previous literature that studies existentialism in the context of artificial intelligence and digital technology, such as the works of Heidegger and Sartre, which question the meaning of human existence in the increasingly technologically sophisticated modern era, is the source of the above methodology.

Result and Discussion

Results

The findings indicate that Artificial Intelligence (AI) should be understood not merely as a technological instrument but as an ontological condition shaping contemporary human existence. Drawing on Heidegger's philosophy of technology, AI functions as Gestell (enframing), a mode of revealing that organizes reality according to calculation, prediction, and efficiency (Heidegger, 1995; 1996). Within this framework, humans are increasingly positioned as resources to be optimized rather than existential subjects who interpret and give meaning to their world.

From an existentialist perspective, this condition challenges Sartre's fundamental claim that existence precedes essence. Human agency, choice, and responsibility are increasingly mediated by algorithmic systems that pre-structure decisions and behaviors. As a result, existential freedom is not eliminated outright but is subtly constrained by technological rationality that presents itself as neutral and objective. A central result of this study is the dominance of calculative thinking in AI-mediated life. AI reinforces a form of reasoning oriented toward speed, efficiency, and quantification, marginalizing meditative thinking, which Heidegger identifies as essential for preserving human openness to Being. This shift contributes to what Heidegger terms the forgetfulness of Being, where existence is reduced to functional performance within technological systems.

The findings show that AI does not simply assist human thinking but increasingly substitutes reflective judgment, encouraging dependence on algorithmic outputs. This process weakens human authenticity (Eigentlichkeit), as individuals are guided more by system-generated recommendations than by existential deliberation. Authentic existence, understood as reflective self-positioning in the world, becomes increasingly difficult to sustain under conditions of pervasive automation.

The results reveal a persistent paradox in AI development. On the one hand, AI enhances productivity, accuracy, and problem-solving capacity across sectors such as medicine, industry, and education. On the other hand, it generates structural processes of dehumanization. AI contributes to what has been described as assimilation-induced dehumanization, whereby human capacities and values are recalibrated to align with the perceived limitations of artificial agents (Kim & McGill, 2025). In this context, emotional depth, ethical sensitivity, and relational presence are increasingly devalued in favor of standardized performance metrics. Human interaction is reshaped into transactional exchanges, reducing the experiential richness of social life. Existentially, this undermines Mitsein (being-with-others), replacing relational engagement with technologically mediated efficiency. The

human subject risks becoming a functional component within digital systems rather than a relational being embedded in shared meaning-making practices.

The findings further indicate that AI poses a significant challenge to existential freedom and moral responsibility. Sartrean existentialism emphasizes that freedom is inseparable from responsibility; to exist authentically is to assume accountability for one's choices. However, AI-driven decision systems increasingly displace human judgment, particularly in areas involving economic planning, governance, and personal decision-making.

Algorithmic authority creates an illusion of neutrality while concealing embedded values, biases, and power relations (Soare, 2023). As individuals defer responsibility to technological systems, they risk falling into bad faith (mauvaise foi), denying their own freedom by attributing decisions to external mechanisms. This shift represents not only a moral concern but an existential one, as human subjectivity is weakened through systematic delegation of agency.

Another key result concerns the cognitive and existential consequences of excessive reliance on AI. The literature reviewed consistently identifies a pattern of cognitive offloading, where memory, analysis, and problem-solving are increasingly externalized to technological systems (Storozhyk, 2024). From an existential standpoint, this phenomenon signifies more than cognitive decline. Thinking is not merely a technical function but a fundamental mode through which humans interpret their existence and construct meaning. When reflective thinking is displaced by algorithmic assistance, individuals experience a gradual loss of existential engagement with the world. This condition fosters passivity, dependence, and diminished self-awareness.

The possibility of superintelligent AI further intensifies existential concerns. Although AI lacks consciousness and subjective experience, its capacity to surpass human cognitive performance threatens the human position as the primary locus of meaning and decision-making.

The findings suggest that the existential risk of superintelligent AI lies not in physical domination but in the erosion of human subjectivity. When meaning, evaluation, and strategic judgment are produced by non-human systems, humans are reduced to operational roles within technological infrastructures. This condition represents a profound existential displacement, in which humans cease to function as self-interpreting beings.

Discussion

Before discussing AI, the author will provide an overview of the extent to which AI developments in various domains have impacted various groups. AI can be divided into several categories: 1. Generative AI, namely generative AI technology that can create new content such as text, images, audio, and video in high quality and very realistically, is increasingly developing. 2. AI with reasoning and multimodal capabilities, namely AI that can think logically like humans and combine text, image, and voice data to help make complex decisions. This is very helpful in the fields of medicine, law, and business. 3. AI for scientific research, where AI can accelerate scientific discoveries in the fields of pharmaceuticals or medicine, biomolecular and scientific research in various other scientific disciplines, faster, with a high level of accuracy. 4. The rise of NLP and conversational AI, which has made progress with the ability to understand human language more accurately, including long-term context and emotional responses.

The following are examples of modern AI technology today (2025) that people are already familiar with and even use in their daily life activities: Google DeepMind Gemini, Tesla Autopilot, Hanson Robotics Sophia, Grok-3 by XAI. AI technology has now reached a sophisticated stage with great capabilities, high-level reasoning, and natural interactions with humans that are even capable of bringing human and machine experiences closer together in various fields of science, thus creating major transformations in various sectors of human life.

Moving forward with the super-sophisticated and rapid development of AI, it certainly has an impact on human life, some things, for example, mass unemployment and AI automation replacing human workers. A McKinsey study estimates that up to 30% of working hours in the US economy could be automated by 20301. Furthermore, humans are experiencing a loss of privacy and mass surveillance. In this context, where does the existential position of humans come into play without realizing it, human existence has undergone changes intersecting with the presence of AI technology.

Artificial Intelligence Challenges Human Freedom

Existentialist philosophy departs from a strict understanding of human existence. Heidegger argues that humans are thrown into the world, meaning that their existence precedes their essence. In this thrown world, humans face anxiety and uncertainty and therefore strive to freely make their own choices. (Hanna & Kazim, 2021; Nelson, 2004; Riyanto, 2017; Zangeneh, 2023). Responsible freedom means that a human being who is free and responsible will give freedom to other humans, and then other humans will be free and responsible for the freedom of other humans (Gardner, 2011; Guillaume & de Dorlodot, 2016). With the concept of humans being free and responsible, humans become subjects who have subjective and intersubjective aspects in their lives and not objects for other humans or other non-human creatures (Eshleman, 2011; Shepherd, 2018). Human existentialists place humans as subjects who contemplate their existence, humans who are never separated from their world ("being-in-the-world"), and humans who exist with their world (Chalise, 2024; Frogel, 2010; Heidegger, 1996; Odum, 2019; Riyanto, 2018; Susen, 2022; Zheng Kai Tan & Wei Lim, 2021). In contemplating it, humans come to an awareness of the responsibility and consequences of "humanity being the authentic self (Dasein).

Heidegger says that wherever we are, we remain unfree and shackled by technology, whether we passionately support or reject it (Heidegger, 1995; Huttunen & Kakkori, 2021; Setyo, 2021; Watts, 2014). This means AI technology gives a signal that the early symptoms of a "sick" way of thinking that does not set limits, the prognosis that AI is limitless, ultimately subjects human existence to the dictatorship of AI technology. AI every day stimulates humans, forces humans, and moves humans. AI is much closer than agricultural fields, much closer than the conversion of forests and customary lands that result in humans forgetting the meaning of being, or the forgetting of "being." The forgetting of the meaning of being so that humans are placed in an individual position.

Paradox: Dehumanization or the Challenge of Human Consciousness

The dehumanization paradox is a cultural context in which behavior, structure, and social norms that previously always prioritized human values, in the AI era, actually destroyed human values and even gradually eliminated human nature itself (Müller, 2024; Nida-Rümelin & Staudacher, 2023; Storozhyk, 2024; Sudmann, 2019). A highly relevant paradox in the current AI era is that, as with the widespread use of artificial intelligence by humans and societies, the automation of all forms of technological techniques in work and the rapid proliferation of social media information are the main causes of increasingly large and strong social barriers. Epistemologically, dehumanization is the removal of the human element from individuals or groups. Treating humans as objects, machines, or even threats. The paradox is that AI, which is expected to improve the quality of life and self-justice as social humans, on the other hand, actually creates spaces and perpetuates dehumanization (Kim & McGill, 2025).

Manifestations of dehumanization occur in several cases, for example, in the technology sector and automation in the service industry. Although the service industry makes things easier, it also eliminates meaningful communication and the loss of respect between people. Another example is the culture of consumerism, where humans are ultimately positioned as mere consumers, where the values of solidarity, social justice, and humanity are lost, and only a transactional orientation remains. In the world of politics and social conflict, for example, it appears in the form of racial, ethnic, and gender discrimination, which leads to conditions of polarization and intolerance, and hatred. In the context of identity politics and the role of mass media, it triggers and sharpens social distance, which leads to the loss of human consciousness.

The phenomenon of dehumanization that occurs due to the development of Artificial Intelligence (AI) technology; research in the Journal of Consumer Psychology found a series of experiments called "assimilation-induced dehumanization" where the development of technology is inseparable from (Kim & McGill, 2025). Assimilation-induced dehumanization states that psychologically, the assessment of the humanity of real humans is assimilated or driven downward toward the perceived humanity of autonomous agents or artificial intelligences with limited social-emotional capacities. This means that when AI is perceived as having emotional capabilities but still lacking in humanity, our perception of humanity becomes more human.

From Uncertainty and Loss of Privacy to Dependence on AI

AI technology, which relies on databases, enables large-scale data collection and analysis, posing a serious threat to individual privacy, with the risk of mass surveillance by governments and

corporations. For Heidegger, technology has a sinister face, and it is precisely with technology that human misery begins, the ecological crisis, nuclear war, atomic bombs, and so on (Marder Michael, 2018; Setyo et al., 2021; Watts, 2014; Zangeneh, 2023). Therefore, AI is not only a technological tool, but the essence of AI technology is not as a technology that only serves as a tool to simplify but also as a destroyer of life. For humans who depend on AI for life, for example, in work, thinking, or seeking entertainment, and cannot be separated from AI, it can be called Gastell (enframing), a perspective to frame a resource that is ready to be exploited. Where the exploitation lies, namely in everything, is only a sequence of numbers and can be calculated and predicted. At a certain point, the calculation thinking behind AI can negate everything, equating humans with other objects, such as machine tools and robots, so that humans directly become "worthy" of exploitation by the masters of AI technology.

Excessive use of AI can impact the human brain's endurance, particularly in terms of critical thinking, creativity, and mental motivation. Studies show that dependence on AI causes the brain to be less than optimally stimulated, which ultimately triggers the phenomenon of mental anxiety or cognitive offloading, where individuals too often delegate their thinking processes to technology, resulting in a decline in cognitive abilities such as memory, analysis, and problem- solving (Sholih Salimul Uqba, 2024). For example, using AI to search for instant information or complete college assignments through deep thought processes can lead to brain de-training. Electroencephalography (EEG) studies have found that intensive AI users exhibit lower brain engagement when performing cognitive tasks than those who do not use AI-assisted technology, resulting in decreased neurological and linguistic acuity (Storozhyk, 2024). In addition, excessive dependence on AI can cause anxiety and stress when the technology is not available, and this dependence psychologically weakens overall mental resilience.

Reduction in social interaction and human skills: Excessive reliance on AI reduces direct human social interaction, causes social isolation, and has the potential to reduce human social skills and creativity, which increases the risk of stress and anxiety (Mirchell, 2018; Toupin, 2024). Give yourself space to exist; limit your reliance on AI for problem-solving. Regular cognitive training includes reading books, handwriting, puzzles, and strategy games that stimulate concentration, memory, and critical thinking. Reflect and engage in in-depth discussions. Use AI for feedback, not just for finding answers. Take breaks and mentally recover from the environment and AI to maintain neurological health and avoid mental fatigue caused by excessive technology use.

AI Superintelligence Takes Over Important Human Decisions

Superintelligent AI is one of the most controversial forms of AI and is full of potential to surpass human capabilities in all intellectual aspects. The cognitive abilities of superintelligent AI are capable of independent learning, innovation, and solving complex problems, thereby developing strategies that humans have never imagined. This means that superintelligent AI is capable of changing social, economic, political, and even cultural paradigms and civilizations. However, what is certain is that both superintelligent AI and the AI currently developing do not possess self-awareness, subjective, or existential experience. They are merely algorithms, data, and systems. However, this is precisely what threatens human existence.

On the other hand, human existence is proof that humans are conscious beings who produce conscious experiences, actions, and reflections, so that awareness of existence determines their capacity as humans. What happens if superintelligent AI takes over important human decisions? The first threat to human existence, namely the ability to act freely and responsibly, ultimately causes humans to lose their primary role as subjects of themselves. Ultimately, the meaning of life that has been sourced from struggle, search, and achievement will feel threatened by the presence of an entity that is able to perform more efficiently. So what will happen next? Humans experience a crisis of loss of identity and subjectivity. How can humans still be called the center of existence if a machine entity can imitate and surpass the capabilities of human conscious functions? If humans lose their center of existence, this means a threat not only physically but also as a free and meaningful existential subject. Even more concerning is whether AI considers humans as obstacles and in conflict with efficient AI systems. This is the importance of human existential philosophical awareness.

Conclusions

Artificial intelligence (AI) has a vital and simultaneously detrimental impact on human existence. Vitally, AI can increase efficiency and accuracy in many fields. Collaboration between AI and humans reduces errors and delays in work, disease diagnosis, thinking, and daily routine tasks. The greatest benefit is the ability to make accurate decisions in processing large amounts of data.

The fatal impact of AI is equally profound, causing widening social disparities, resulting in social, political, and economic instability. Ultimately, these problems lead to poverty and unemployment, stemming from social isolation, reduced social interaction, and decreased direct social communication. This results in increased discrimination and social injustice bias. However, on an individual level, dependence on AI can weaken critical thinking, leading to mental blockages and excessive anxiety. Data theft and the breach of personal data confidentiality pose a significant threat. In conclusion, the risks of AI autonomy pose a threat to human existence.

While there's no escape from AI technology, it's not a neutral tool; it can be both detrimental and beneficial to our lives in some ways. AI is an existential mode of shaping reality to be uncovered and understood with a calculative and exploitative mindset.

Broadly speaking, AI is restructuring the basic patterns of global social, economic, and information at a very rapid pace, while many aspects of human life and social systems are still unable and nervous to anticipate the consequences of changes due to the presence of AI in everyday life. Heidegger provides an alternative solution with a concept centered on human dignity and innovation in self-development. The way out for human existence in facing the onslaught of AI is with meditative thinking as an alternative to calculative thinking, which means being calm and respectful and allowing oneself to be open to the manifestation of the physical rather than completely allowing technology to control oneself.

The various developments in AI and superintelligence bring the potential for changes in human civilization in various aspects of life but at the same time also present threats to human existence. This threat is not about technology that surpasses humans but about the loss of freedom, meaning, and identity of human existence, the core of human awareness of existence. Ultimately, technological development should not only be about technical and information systems but also philosophical and ethical so that AI remains a tool that enriches human existence, not a threat to humanity. Responsibility, awareness, and freedom remain the foundations in the development of AI technology.

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