

PHILOSOPHY AND TECHNOLOGY: RETHINKING THE HUMAN RELATIONSHIP WITH THE DIGITAL WORLD

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ABSTRACT

This study examines the philosophical transformation of technology from a neutral tool into a mod of being that reshapes the human relationship with the digital world. It adopts a critical analytical approach inspired by Heidegger and contemporary philosophy of technology. The study finds that technology is no longer merely an external instrument but an active structure influencing human perception and reality. It also shows that digital identity has become fluid, while freedom in the digital sphere remains conditioned by algorithmic systems. The study concludes by emphasizing the need for a critical philosophical awareness to rethink the human position within the technological horizon. And proposes the development of a renewed ethical framework capable of guiding digital innovation toward preserving human autonomy, agency, and authentic existence in an increasingly hyper-connected society. Ultimately, it calls for a proactive philosophical dialogue between technologists and humanists to ensure that future digital ecosystems serve human flourishing rather than technological determinism.

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Introduction

The modern world is witnessing a radical transformation in the structure of human existence driven by the rapid development of digital technologies. Technology is no longer merely a neutral tool that humans use to achieve their daily goals; rather, it has become an active force that is reshaping the world and redefining the nature of humanity's relationship with reality, knowledge, and the self. The proliferation of artificial intelligence and social media platforms has given rise to a new way of life characterized by constant connectivity, a constant flow of information, and the blurring of the lines between the real and the virtual, as people now live in a digital environment that is no less influential than the physical world to which they belong. In this context, philosophy no longer stands as an outside observer of technology but has become directly concerned with understanding the profound transformations it has wrought in the structure of human consciousness. The philosophical question is no longer limited to the nature of technology but has expanded to encompass its impact on meaning and on humanity itself: Is humanity still a free agent in the digital world, or has it also become part of a technological system that controls its choices and shapes its perception of the world? Can we speak today of an independent human consciousness in the face of algorithms that determine what we see, what we think, and what we desire? This shift raises a fundamental issue regarding the nature of the relationship between humans and technology—a relationship that has shifted from a level of instrumental use to one of existential intertwining, where technology has become part of the very formation of human identity itself. Contemporary humans no longer live solely in a natural world, but in a digitally reshaped world where the boundaries between truth and representation, and between reality and simulation, are blurred; Accordingly, this research aims to analyze the relationship between philosophy and technology in light of contemporary digital transformations by revealing the existential, epistemological, and ethical dimensions imposed by this relationship. And an attempt to understand humanity's place in a world that is no longer built solely on matter but on data, information, and the constant flow of technology. Hence, the overarching question posed by this paper is: How does digital technology reshape humanity's relationship with the world, with itself, and with its own knowledge in light of a

grammatical analysis of digital reality? This gives rise to a number of related issues, namely:

- Can we consider technology merely a neutral tool, or does it embody a particular worldview that influences how humans understand existence?
- To what extent can humans be considered free in their choices within a space controlled by algorithms and guided by data?
- How can philosophy rethink the concept of humanity in light of the rise of artificial intelligence and virtual reality?
- The Philosophical Shift in the Concept of Technology from a Tool to a Mode of Existence:
- “Technique” is a Greek term that refers to art and skill¹. It may also refer to the totality of techniques and methods associated with a particular profession or art form.

The concept of technology is one of the concepts that has undergone the most radical transformation within contemporary philosophy, as it is no longer viewed merely as a set of material tools that humans use to control nature or improve their daily lives. In the world of data, the human becomes primarily the data processor in this virtual world, the *homo virtualis*, (Vicent blok, 2023, P3), but has become a problematic subject that touches upon the very structure of human existence. Technological development, particularly in its modern digital form, has not only changed the means of living but has also reshaped the way humans perceive the world, the limits of their knowledge, and even their understanding of themselves. This shift calls into question the traditional understanding of technology that prevailed in modern philosophy, which was based on the separation between humans as free agents and technology as a neutral tool subject to their will. However, this conception began to fade with the emergence of contemporary philosophy, particularly with the works of Martin Heidegger.

Technology as a tool in classical philosophy

1. The instrumental conception of technology (the philosophical tradition)

In ancient philosophy, the term “technique” was often contrasted with the term “art”; technique referred to both the aesthetic and applied arts. Aristotle states, “Art (technique) accomplishes what nature cannot, or imitates it.” Every craft aims to produce something, and it differs from theoretical knowledge, whose goal is truth. When the term first appeared in the English language in the 17th century, it was used to refer to discussions of the applied arts; gradually, however, it came to refer to the arts themselves. By the 20th century, the term had come to refer to the means and roles. The ancient Greek word ‘art’, namely technê, covers a wide spectrum of enterprises, such as craft, skill, art, technique, technology. (Papandreou, 2025, P2).

It has been a prevailing view in philosophical tradition that technology is merely a neutral tool in human hands, used to achieve specific rational goals. This conception is linked to Cartesian thought, which distinguishes between the knowing self and the objective world, viewing nature as an object of knowledge. Technology should not be conceived of merely instrumentally, i.e, as something that accompanies our bodily functions without also defining them structurally. (Pezzano & Pavanini, 2025, P2)

According to Descartes, the natural world can be explained through mathematical laws, and human beings, as thinking beings, are capable of understanding these laws. In his essay on the method, Descartes declares that human beings are masters and rulers of nature, stating: “In this way, we make ourselves masters and rulers of nature.” This makes technology an extension of the mathematical and analytical mind. (Descartes, 1998, P103).

In contrast, Francis Bacon believed that true knowledge is not attained through abstract intellectual contemplation, but rather through experience and observation. Here, technology becomes a direct result of empirical science, because, in his view, any knowledge that does not lead to scientific application is incomplete. According to him, technology is not merely a set of tools, but a practical embodiment of scientific knowledge. He said, “Knowledge is power.” (Bacon, 1857, P110).

2. Heidegger's Critique of the Instrumental Conception of Technology

Heidegger argues that technology is not merely a tool but a mode of revealing Being (the essence of technology is not something technical). (Heidegger, 1977, P4) The prevailing view in modern philosophy regards technology as merely a means or tool in human hands; this understanding is based on the notion that technology is functionally neutral, a superficial understanding that is insufficient to grasp the true meaning of technology. According to Heidegger, technology is not understood through its tools but through the way it reveals the world.

Every era has its own way of revealing truth (being). As the 21st century's economic approach largely syncs with technological advancement, techno-economic thinking frames nature and human endeavors primarily through the lens of utility and resource extraction (Roy et al, 2026, P223) In the modern era, technology does not reveal nature as a living presence but as resources, energy, and exploitable reserves; this shift is the essence of the philosophical danger of technology.

For Heidegger, the real danger lies not in machines themselves but in:

- The transformation of our view of the world.
- The loss of humanity's relationship with existence.
- The reduction of everything to utility.

Consequently, humanity itself becomes subsumed within the logic of technology; whereas in the modern era humanity was the master of technology, with Heidegger it becomes incorporated into it, a tool for revealing existence.

Digital technology and the reshaping of reality

1. From the physical world to the digital world

Digital technology is no longer merely a tool used to transmit information and facilitate communication; it has evolved into a deep-seated infrastructure that is reshaping reality itself. Technologies visualize, measure, signal, and generally communicate what

is going on in the world ... Technology is more than a mediator (Schurkmann, C. and Anders, L. 2025, P368, 386)

With the evolution of media, the world has shifted from being a directly perceived sensory experience to a reality reconstructed through technological systems, where human and social phenomena are translated into data that can be processed and analyzed.

In the digital age, a radical transformation has taken place, characterized by the conversion of reality into data. The world is no longer understood solely through direct experience, but through its digital representation: images, statistical data, and digital behaviors. This transformation makes reality itself amenable to computational processing, which changes the nature of the relationship between humans and the world and creates a constantly evolving environment that effectively influences people's lives, work, and social interactions. (Ben Milat, 2024, P362)

2. Algorithms and the Reproduction of Perception

Researchers define algorithms as a set of rules and instructions that are executed in a systematic, step-by-step manner to solve a problem or perform a specific task. (Bouteldji and Wahabi, 2023, P329).

In the digital age, algorithms are no longer merely neutral technical tools for organizing data; rather, they have become active structures that contribute to reshaping human perception itself. They do not merely convey information, but rather select, classify, and organize it according to invisible criteria, making human perception of the world the result of prior algorithmic processing... is no longer understood as mere tool but rather as a (potentially) symbiotic partner in cognition, perception, and action (Schleidgen, Friedrich and seifert, 2026, P2.)

In this context, perception becomes a technological intermediary, as individuals do not engage directly with reality but rather with a filtered version of it. Digital platforms rely on algorithms that:

- Select content tailored to each user
- Prioritize content based on interaction patterns and types.
- Directing attention toward specific topics to the exclusion of others.

This means that what appears to the individual is not necessarily what actually exists, but rather what the algorithm deems more relevant or more appealing.

Shoshana Zuboff argues that algorithms do not operate in a neutral technological vacuum but are embedded within what she calls “surveillance capitalism” an economic system based on extracting individuals’ behavioral data and transforming it into investable assets. In this context, data is not only used to understand the user and analyze their behavior, but also to guide and influence that behavior in a precise and indirect manner.(Zuboff, 2019, P8)

Humanity in the Digital Age: Between Identity Reconstruction and the Crisis of Freedom:

Given the profound transformations that digital technology has wrought on the fabric of reality, its impact is no longer limited to reorganizing the external world; rather, it has extended to encompass human beings themselves as beings living within this digitized reality. If algorithms have contributed to the reproduction and shaping of perception, the question shifts to a deeper level: How can humanity be reshaped within this technological horizon?

In this context, the concept of identity encompasses the characteristics and representations that constitute a person and grant them a sense of continuity and cohesion across time, at all cultural, social, and religious levels.

The sociologist Max Weber defines identity as: a group’s sense of shared origins, manifested in common external expressions such as symbols, melodies, and customs; it distinguishes those who share this identity from others, and their identity remains preserved in its existence and vitality, such as through myths, values, and cultural heritage. (Balta,2021, P201)

However, this concept traditionally associated with the idea of unity and stability no longer retains the same meaning in the face of rapid digital transformations. Instead, there has emerged what is known as “digital identity,” which refers to: that virtual identity that arises and interacts through the internet, and reflects psychological, social, and cultural dimensions. It is a virtual identity that has shifted from written language to intangible symbols blending various linguistic styles; it cannot be touched but can only

be observed through a range of youth discourses, upon which their social representations are built by projecting a specific image of the self.(Balta,2021, P207-208).

The disintegration of the unified self-concept

1. The Self as a Socially Interactive Product

The concept of the self in classical modern philosophy was characterized by a conception based on unity and stability, whereby the self was regarded as a coherent entity and the center of consciousness and perception.

Rene Descartes established the concept of the thinking self, which perceives through consciousness and cognition; it is the essence of a thinker that ensures the unity of existence through the act of thinking, whereas Immanuel Kant linked the unity of the self to the unity of consciousness, which organizes experience and gives it coherence. Rene Descartes established the concept of the thinking self through cognition and consciousness as the core of existence, whereas Immanuel Kant linked the unity of the self to the unit of consciousness which organizes and synthesizes human experience. (Col, 2025, P3).

However, this metaphysical conception of the self is undergoing a gradual disintegration in the digital age as a result of the profound transformations that have affected the nature of human experience within digital spaces; the self is no longer reduced to a single fixed center but has become distributed across multiple systems of digital representations and interactions, leading to the emergence of new forms of identity characterized by plurality, difference, and constant change. As Senthil Kumar and Santhya (2025) note: Selfhood is reimagined from sociological and postmodern perspectives as dynamic, relational, and context-dependent. Identity is a result of social interactions, cultural norms, and symbolic practices rather than an inherent quality.(Senthil and Santhya,2025, P4185).

Individuals no longer live a single, cohesive self, but rather a series of partial selves that take shape according to different contexts:

- Social media accounts.

- Digital images.
- Virtual interactions.
- And shifting social impressions.

This is what we might call the disintegration of the unified self.

In the contemporary context, the self is no longer understood as a fixed inner essence or a psychological given that precedes experience; rather, it is now perceived as an interactive product that takes shape within social and digital spatial relationships. Instead of being a ready-made given, identity has become a continuous process of construction and formation through interaction with others and with the technological media that mediate this interaction. In this interconnected digital world, identity manifests as a fluid interplay between authenticity and performance, shaping how individuals pursue meaningful self-expression while remaining aware of its performative aspect. (Ahmad, 2025,389)

Thus, the self becomes the result of a network of symbolic and social relationships rather than an entity independent of its environment; it is defined through the gaze, expectations, and responses of others, making it a quintessentially interactive self that changes as the social contexts to which it belongs change. Beyond simple documentation, digital interaction acts as a 'symbolic-affective ecology' where selfhood is constantly reshaped by algorithmic visibility and the quantified recognition of others. (Al- Subaie, 2026, P4).

This shift can also be understood in light of sociological approaches that view identity not as a purely individual given, but as a social affiliation produced within communicative cultural spaces. In the digital context, this interactive nature of the self is amplified because digital media not only transmit interaction but also reorganize and direct it according to mechanisms and algorithms.

Thus, the self is no longer a static entity but has become a social construct in constant flux, oscillating between what the individual presents of themselves and what others reflect back, while technology continuously reshapes it through images and representations. This is what makes identity in the digital age more fluid and more closely tied to the interactive structure produced by social relationships within the virtual space.

Freedom and Awareness in the Age of Technology and Algorithms

The contemporary digital age raises profound philosophical questions regarding the concepts of freedom and consciousness in the face of the dominance of technology and algorithms. Freedom is no longer understood as the absolute ability to choose, but has become a conditional freedom within complex digital systems that steer human behavior and shape human perception in invisible ways. While the digital space appears on the surface to be an open arena for expression and interaction, it is, at its core, governed by algorithmic structures that determine what is displayed, what is hidden, and what is deemed important. Understanding artificial intelligence (AI), particularly artificial neural networks, as 'extended human agency' rather than separate subjects...(AI) is conceptualized as as a teleological process integrated into the human digital lifeworld, where algorithms function as extensions of human purpose. (Schleidgen, and Seifert, 2026, P2)

In this context, the freedom of choice transforms into a guided freedom in which the user is steered through the analysis of their data and digital behaviors, making their decisions the inevitable result of algorithmic accumulations rather than an expression of their pure free will. Here, the concept of the free, independent self gives way to a pre-determined self. The more decisions that are made by machines, the more we will live at the sufferance of algorithms (Sparrow, 2026, P6). From a philosophical standpoint, this shift marks the erosion of authentic human agency, replacing Kantian autonomy with a techno-deterministic heteronomy. When choices are pre-structured by predictive models, the very nature of moral responsibility becomes diluted, as action no longer stems from existential deliberation but from algorithmic conditioning. Consequently, the self ceases to be an active author of its destiny, becoming merely an empirical node in a data loop.

As for consciousness, algorithms do not merely organize information; they also help shape attention itself by selecting and arranging content based on principles of appeal and engagement. This leads to a restructuring of the individual's perception of the world and reality, and thus human consciousness becomes indirect because it is filtered through a series of choices. AI can negatively interfere with decision-making, critical thinking, preference formation, personal identity, and behaviour.(Catena, 2026, P8). In human

terms, this means we are gradually losing our quiet, unmediated moments with ourselves and the world, When every thought, visual preference, and opinion is subtly guided by an endless out by noise designed to keep us scrolling. We slowly forget how to sit with complex ideas or form raw, independent judgments, trade-offing our unique mental freedom for the comfort of a pre-packaged reality.

We can also link this idea to the concept of the “self-economy,” whereby the goal of digital platforms is no longer merely to provide information but to ensure the user’s continued engagement for as long as possible through content design that reshapes and constantly directs attention. In this way, human consciousness becomes a field for technological investment rather than an independent space for free thought. This represents the profound transformation of the frameworks through which the world appears and of the very conditions of action. (Pizarro Contreras, Zho, and Zhang, 2026, P8), by monetizing our natural curiosity and attention, digital screens reduce lived experience into a mere commodity. Reacting constantly to digital prompts turns us into passive consumers rather than active creators of our own lives.

Conclusion

This research demonstrates that technology is no longer a secondary element or an incidental tool in human life, but has become a fundamental infrastructure that reshapes the conditions of human existence in the world. With the rapid pace of digital transformation, it is no longer possible to think of humans in isolation from the technological environment in which they live, as this environment has become a decisive mediator in the production of knowledge, shaping consciousness, and defining patterns of social interaction.

Philosophical analysis, particularly with the shift from an instrumental to an existential conception of technology, has revealed that the relationship between humans and technology is not merely one of use but one of deep interpenetration. Technology is no longer merely a means to achieve human ends; rather, it has come to participate in defining these ends themselves and in redirecting human action according to its own logic, and this is what causes contemporary humans to live within what might be called a

technological horizon, where their will intertwines with the algorithmic structures that surround them.

On the other hand, the research has shown that the digital world does not merely reshape reality but redefines it; the transition of reality to a digital format has led to the emergence of a new mode of perception based on selection, representation, and guidance. Thus, humans no longer interact with the world directly but through digital media that rearrange their priorities and influence their judgments and perceptions. This perception poses profound challenges regarding the objectivity of knowledge and the accessibility of truth in an information environment saturated with algorithmic selection.

At the level of the self, the research revealed that human identity is no longer fixed or unified, as classical philosophy conceived it, but has become multifaceted and open to constant transformation. For in the digital age, humans do not possess a single identity but live through multiple representations within virtual spaces, leading to a reconfiguration of the relationship between the self and the other, and between real and virtual presence. This fragmentation does not necessarily imply a loss of cultural identity.

It can therefore be said that the digital transformation imposes a new task on philosophy, one that goes beyond theoretical analysis to a profound critique of the technological structures that shape our contemporary reality. Philosophy today is called upon not only to understand technology, but also to uncover its hidden mechanisms and deconstruct its logic.

The real challenge does not lie in rejecting technology or breaking with it, but in building a critical consciousness capable of comprehending it without succumbing entirely to it. This requires the development of a new philosophical approach that restores the balance between humanity and technology, ensuring that the latter remains at the service of humanity, rather than humanity becoming merely a component within its system.

In this context, philosophy remains an essential tool for understanding current transformations and steering them toward a human consensus that preserves human dignity and freedom and grants the capacity for independent thought within a world that is no longer simple or straightforward but has become complex and saturated.

Thus, the future of the relationship between humanity and technology remains open to multiple possibilities, the definition of which depends on humanity's ability to be aware of these transformations and to exercise an effective critical role that ensures it does not lose itself within the world it has itself helped to build.

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