

2022, Vol. 3(3), 471-485  
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<https://dergi.bilgi.edu.tr/index.php/reflektif>  
DOI: 10.47613/reflektif.2022.84  
Article type: Research Article

Received: 08.08.2022  
Accepted: 09.09.2022  
Published Online: 01.10.2022

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## New Media Technologies as Pharmakon\*\* *Bir Farmakon Olarak Yeni Medya Teknolojileri*

### Abstract

This study, which involves two research areas that do not yet occupy enough space in the field of interest in the history of philosophy, namely the concepts of technology and Anthropocene, performs an analysis of how the world is evolving with technology, media technologies, and specifically the internet. The primary tools used in this research are the concepts and arguments of the phenomenological tradition and then the post-phenomenological philosophy and Stiegler philosophies. Since the medical, economic, political, cultural, and meaning-related crises of our age are now the crisis of the entire planet, especially in the Anthropocene Age, the causes and consequences of this crisis are studied. Our relationship with the technical object, which is at the very center of the crisis is examined thoroughly. As a result, therapeutic prescriptions for this inevitable pharmacological effect of technology have been revealed and explored on an ethical-political plane eventually.

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### Öz

Felsefe tarihinin ilgi alanı içinde henüz yeterince yer kaplamayan iki araştırma alanını, teknoloji ve Antroposen kavramlarını ele alan bu çalışma, dünyanın teknolojiyle birlikte nasıl evrimleşmekte olduğunu medya teknolojileri ve spesifik olarak da internet özelinde analiz etmektedir. Çağımızın tıbbi, ekonomik, politik, kültürel ve anlamla ilgili krizlerinin, Antroposen Çağı özelinde artık tüm gezegenin krizi olması sebebiyle, başta fenomenolojik gelenek, akabinde post-fenomenolojik felsefe ve Stiegler felsefelerinin araçlarıyla gerçekleştirilen bu çalışma, Antroposen'in krizinin sebep ve sonuçlarını araştırmaktadır. Krizin merkezinde konumlanan teknik nesneyle ilişkimiz etrafınca incelenmiştir. Sonuç itibarıyla, bir farmakon olarak teknolojinin mevzubahis kaçınılmaz çift yönlü etkisinin, etik-politik bir düzlemde keşfedilebilecek pozitif iyileştirici reçeteleri ortaya koyulmuştur.

### Keywords

Technology, anthropocene, media, internet, pharmacology

### Anahtar kelimeler

Teknoloji, antroposen, medya, internet, farmakoloji

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\*\* This article is extracted from my master's thesis, which was accepted in the Department of Philosophy at MSFAU in June 2022.

## Introduction

The Anthropocene Age is the name used for the current historical period in which we can observe how human beings interact with themselves and their environment in the world they currently dominate. The crisis shaped by the dominant character of the Anthropocene has deepened and perhaps irreversibly transformed the world. This crisis, which first appeared in Husserl in modern philosophy and was formulated as a trilogy of “the crisis of the sciences as natural and human sciences, the crisis of philosophy as a special science and the crisis of meaning”, shapes the current phenomenological debates through the Husserl and Heidegger dialogue (Husserl, 1994; as cited in Şan, 2017, p. 238).

Both interpretations by Bernard Stiegler and D. Ihde and P. Verbeek, based on the phenomenological and existential hermeneutics put forth by Heidegger, assume that the essence of the crisis based on the correct interpretation of technology lies in the dynamic relationship between subject and object, which necessarily expands our perspective on this relationship. It is of vital importance to draw a new and healthy horizon for future generations because all new technologies, which are the products of a certain mode of production technique, impose a reproduction mechanism on human beings, making it necessary to understand a mode of life order that is a mixture of organic and inorganic. For Stiegler, this order can only be understood by correctly identifying the “inorganic organized matter”, that is, the technical object, which he refers to as “a third kind of being” and a being “between the inorganic existence of physical sciences and the organized existence of biology” (Stiegler, 1998, p. 17). The main question in these interpretations of post-phenomenology and Bernard Stiegler’s philosophy, which rises above the phenomenological tradition, is asked to reveal the technical structure in the relationship between the conscious act of human beings and its intentionality towards its object, and to reveal the essential temporal character of this technique, which we will discover by means of media technologies through this research. In terms of the technique-oriented approach of McLuhan’s theory, the media is also a tool like all other technical tools. Thanks to this tool, “the human’s central nervous system and sensory organs are externalized” (McLuhan, 1994, p. 7). While the terms media, medium, tool, and technology may all be used interchangeably in this technique-oriented approach, it is at this stage that the saying “the medium is the message” finds its true meaning. McLuhan asserts that the medium itself –rather than the content it transmits– is what matters in communication. A light bulb, for instance, is not regarded as a communication medium since it lacks content, unlike a newspaper. However, because it transmits energy, it is a medium just like newspapers and television since it encourages social interaction in the space it brightens (McLuhan, 1994, p. 11).

In this respect, this research attempts to explore human’s “artificial nature” integrated with the mixture of organic and inorganic materials with an interpretation that takes media technologies as its point of departure. This research attempts to do so in the new climate that aims to rediscover the limits of the human body, especially with the discussion of prosthetics.

Additionally, as stated by Stiegler, the individuation practices raised by the organology of technology are followed to reveal the causes of current crises within the scope of body and technology intersection.

## Philosophy of Technology

In Heidegger's late period work, translated into English as *The Question Concerning Technology* (1977), a question of freedom lies at the center of his study of technology. While examining the human relationship with what he describes as the essence of technology, he first states that the essence, which is described as the essence of technology itself, is not technological (Heidegger 1977, p. 43). However, the instrumental character of technology is not sufficient to reveal its essence (Heidegger, 1977, p. 45). The difference between the end and the means itself requires questioning because of the causality principle between the two comes from the metaphysical passages of the history of philosophy. Therefore, approaching technology through an end means that this relationship will lead to an uncertain and insufficient result (Heidegger, 1977, p. 46). For Heidegger, the main question is to unravel the being that brings these different types of causality together and to reveal their existence. The question about the essence of technology is a revelation, in other words, *Aletheia*, a question of truth and freedom (Heidegger, 1977, p. 51).<sup>1</sup>

Heidegger answers the question asked about the essence of modern technology, that its essence is *Ge-stell* (Heidegger, 1977, p. 59). *Ge-stell*, which Heidegger points to as the essence of modern technology, is stated to be not technological itself. According to Heidegger, this essence is that "it is constantly provoking the rationalization of nature as a stock for human use" (Karakaş, 2020, p. 135). The difference that separates modern technology from primitive toolmaking becomes evident at this point. Because of this domination, and use as a resource, the essence of modern technology is *Ge-stell*, and precisely because of this, it is dangerous both for nature and for human beings. It is dangerous because under the pressure of revealing, taking the truth as a reserve, and a constant production imperative, a constant "becoming", this truth cannot reveal itself and withdraws itself. The philosopher who carried out the most comprehensive philosophical study on technology is the French thinker Bernard Stiegler in the context of this research. According to Stiegler, Heidegger makes an erroneous and incomplete determination about technology by overlooking a very basic *Who and What* distinction (Colony, 2010, p. 117). Stiegler's research on human beings and technology is primarily shaped by a temporality perspective. Stiegler's philosophical project is to reveal that the ontological status of *Dasein* is originally conditioned by technology, which Heidegger tries to solve with temporality. As mentioned above, Heidegger's effort in his study of technology is about how *Dasein* can be free in its relationship with technology, or more precisely, with the essence of technology. He claims that the liberating relationship that *Dasein* will establish with technology cannot be established on a material basis.

It is precisely at this point that Stiegler's point of view differs from Heidegger. Technology, according to Stiegler, is fundamentally ontic-technical, meaning it has the ontic basis of the ontological results and cannot be comprehended without considering its material basis. For Heidegger, the essence of being, which has a simple truth in itself, is not shaped by an external technique in any way, while for Stiegler, this essence is already technical and not external to human beings (Lemmens, 2017, p. 12). Especially today, as the speed of technological progress is at a stand, the technical object, that is, "organized inorganic beings, are originally constitutive (in the strict phenomenological sense) of temporality as well as spatiality, in quest of a speed "older" than time and space, which are the derivative decompositions of speed" (Stiegler, 1998, p. 17). The central claim of Stiegler's work is that, through an externalization process, the life that has been shaped by retaining finitude and limitation turns into a technical life. Moreover, he describes this process as an individuation and trans-individuation process, particularly with reference to Simondon (Simondon, 2020), and claims that temporality is established using this original technique. Basically, opposing Heidegger's claim that the essence of technology is not technical, he tries to ascribe a new position to technology as a fundamental technical act from which both individual human existence and collective life arise. To sum up in one sentence, "the human is the technical, that is, time" (Stiegler, 1998, p. 116). Through tool making, the human invents himself; "The interior and the exterior are the same thing, the inside is the outside, since man (the interior) is essentially defined by the tool (the exterior)" (1998, p. 142).

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This idea, which clearly reveals the relationship between technique and time, is important for Stiegler's whole philosophical project. Stiegler, while examining the relationship between consciousness and time asks, "How can a consciousness listen to the same temporal object twice?" (Stiegler, 2011b, p. 18) and this question necessarily reveals to him the tertiary retentions he developed on Husserl's formulation. According to Stiegler, this consciousness of time is "impossible without the existence of analog techniques for recording a melody phono-graphically" (2011b, p. 18). Only in the possibility of tertiary retention, which is best described as being recorded, can consciousness realize the perception in the primary retentions by an act of selection and the "intervention of imagination in the heart of perception" as secondary retentions. "By a phonogram, in that for the first time it makes possible the identical repetition of the same temporal object, within the context of a multiplicity of phenomena seen as so many diverse occurrences of one and the same object" (2011b, p. 18). Thus, rather than being a technical copy, the record is a sign of the inseparability of all these temporal consciousnesses, and therefore, for Stiegler, an integral component of time. These are memory support techniques and mnemotechnics, which include "photograms, phonograms, cinematograms, videograms, which enable the recording of traces, and all kinds of digital technologies that shape the infrastructure of control societies of the hyper-industrial era" (Stiegler, 2011a, p. 56-57).

According to Stiegler, epiphylogenetic memory, which is the combination of epigenetic and phylogenetic memories is a *techno-logical*<sup>2</sup> memory in which language and technique

intermingle (1998, p. 177). This technological memory is “an artificial memory that we can find in language, tool production, product consumption, and religious practices” (Lemmens & Hui, 2017, p. 29). Thanks to this technical memory that human beings can externalize, they come to the forefront in the evolutionary process by making the information transferable to the coming generations, and they become able to remember by transferring this information repeatedly. It is important to emphasize the founding role of tertiary retentions, which Stiegler considers essential, in the relational ontology between the subject and the object to clarify the relationship between primary and secondary retentions, which Husserl pointed out in *The Phenomenology of Internal Time Consciousness*. What Stiegler calls tertiary retentions is a technique of remembering, a process of mnemotechnics. For Stiegler, the nature of tertiary retentions, i.e., the third type of memory, is purely a result of the externalization or recording of knowledge. Memory externalized by recording opens the door to a grammatization process in which individuation is both impeded and allowed. Social and physical organizations are also rearranged through mnemonic technical organs. We can include writing and image in the classical sense among these organs, as well as all kinds of meaning-making devices from stone tools to machines, from electronic household appliances to any digital media as the carriers of all kinds of traces and signs of memory (Stiegler, 2012a, p. 45). For Stiegler, technical tools must be evaluated in terms of transductive relations, which Stiegler defines as general organology, and which emerges when the coexistence of living and artificial organs is evaluated together with social organs. Because neither human nor technique can be evaluated separately from each other, organology in which psychic, social, and artificial systems are all effective together has a place in the individuation process of the human, who is already a technical being (Stiegler, 2013a, p. 69).

## Organology and Pharmacology

An important concept that emerges in Stiegler’s philosophy is the general concept of organology of this process, in which human beings evolve and individualize within a technical life, and both human beings and technical life develop by transforming each other. This system of organs, which serves as the technical, collective, and psychic individuation processes’ equivalent and is formed in connection with others in every circumstance, serves as a foundation for transcending the individual. They are classified as psychic or psycho-somatic organs, social organs, and technical organs. As discussed above, the relationship that human beings establish with time is only possible through technical organs, and it is useful to underline that technical organs are highly effective on psychic and social organs. By reversing the effects of the technical organs that molded the psychic and social organs, this dynamic process in which both the human and technological existence become a constant mixture is described (Stiegler, 2015, p. 120).<sup>3</sup> The clearest definition of technical organs at this point is the media. It could be considered as information storage and transport medium in which memory is externalized as tertiary

retention becomes transferred through the grammatization process. Beyond the instinctive energy of being an animal, the explanation of a libidinal economic system also arises from an organological basis for Stiegler (Lemmens, 2017, p. 297). The final pathway of Stiegler's philosophy before his unexpected passing was the organology reading, which is the continuation of the grammatization process he dealt with in the individuation discussion. In this path, the individuation problem is combined with modern political philosophy, and the political one is related to ethical considerations when memory is externalized and becomes communal for human beings.

The word organology, a combination of the words organon which means an instrument, and logos is basically a branch of science, which involves the classification of musical instruments. When Stiegler uses this term, he uses it to refer to the new phenomenon that emerges as a result of the occurrence of temporal retention and protention. According to Stiegler, general organology gives us the rules for analyzing, thinking, and prescribing human facts at three indissociable levels: "the psychosomatic, which is the endosomatic level, the artifactual, which is the exosomatic level, and the social, which is the organizational level" (2017, p. 130). In this context, "all bodily organs such as eyes, hands, and genitals as organic organs", the media as technical organs –technical organs that are now articulated to the human body by means of the prosthesis– and finally "family, institutions, law, religious, economic, linguistic and social organs as social organs are integrated. Pharmacological transfer, in which those three organs are articulated, refers to general organology" (2012b, p. 48).

According to Stiegler, technology is pharmacological because it is simultaneously poison and a cure. The task of the politics of technology in the face of capitalism will be to destroy this poison of technology. Stiegler's reference to the default origin of the human through the myth of Prometheus and Epimetheus, and the lack of an origin, this process, in which a human being continues to establish himself with technique, reveals the pharmacological character of technology. The complexity of this debate is what makes "the principles of general organology are formalized, as a kind of pharmacological drama, that is, as the constantly renewed and reposed problem of the decay of negentropic conquests into entropic waste" (Stiegler, 2018b, p. 55). This pharmacological feature should be considered together with the relation of undecidability and meaning that is constantly postponed, which Derrida introduces with the concept of *différance*. The pharmakon, as Derrida treats in Plato's reading of *Phaedrus*, always has a double character. The curative and toxic characters of the pharmakon should not be ignored (Derrida 2014, p. 49-50). Since the pharmacological idea of technology arises from its tertiary character, which is always the time missed, Stiegler uses *différance* to explain his analyses. The primarily toxic nature of the technique occurs when it limits thought, which weakens the memory and destroys the psychic memory. The second curative character of the technique emerges in what Stiegler calls "the second moment of the epochal of the technique [le redoublement épokhal]." This second moment also called the positive pharmacology of technique, is revealed as the process of socially assigning a new technical system and develop-

ing psychic and collective individuation based on this new technical system (Lemmens, 2011, p. 36). “Escaping the Anthropocene” exactly rises at this point. A new technical system is essential to thwarting the deindividuation practices since the crisis of Anthropocene is at the core of the psychic and collective individuation based on *Ge-stell*. However, since the industrial revolution, our relationship with technology has revealed a deindividuation process more prominent than an individuation process, in which the difference between I and us has eroded and the toxic nature of pharmacology has become stronger, leading to both the self and the other turning into consumers.

It is possible to see the most prominent example of the pharmacological dimension of the technique in the relationship we establish with knowledge in general organology, which emerges in the context of the history of an externalized, recorded, and accumulated collective memory, namely grammatization. Especially in the Anthropocene Age, information has turned into a rapidly growing data complexity on a cosmic scale. In this way, it has become a closed system i.e., entropic in which life knowledge [*savoir-vivre*], and all related skills are automatized and discharged. In Stiegler’s words, “The Anthropocene is an ‘entropocene’, that is, a period of intense entropy production because information ceases to be information as it is purged and automated, and becomes closed systems, that is, entropic” (Stiegler, 2019, p. 2). According to Stiegler, the fact that the machine does not necessarily require either labor or employment brings the end of the Keynesian economic model, and therefore, a new economic model and redistribution criterion will be required to escape the Anthropocene. In an entropic market, where automation and technological standardization are dominated by computational logic, the possibility of individuation and thus singularity has disappeared, and the protensions, which mean a healthy future orientation have been blocked.

The exit from the crisis of the Anthropocene, according to Stiegler, requires a new pharmakon that carries “new possibilities of psychic and collective individuation”, and it thus requires therapeutic prescriptions “–in the form of magic, then religion, then politics– that constitute practices of care (sacrifice, ritual, worship, deliberation, and debate),” practices configured by the social systems within which a form of care emerge (2018b, p.34). Stiegler’s practical work with institutions such as *Ars Industrialis* and *Institut de recherche et d’innovation* (IRI) to change the entire architecture of the internet is noteworthy at this point. The fact that the new version of the internet, which advances through a distributed and decentralized architecture like web 3.0, has received significant response worldwide. The worry that the current structure of internet technology, which is thought to be the biggest technological invention of our time, is gradually evolving into the algorithmic domination machine, highlights the need for further studies in the field. Moreover, the hardware dimension of the internet is becoming more and more integrated with the human body, making it necessary to take a closer look at the intersection between the body and the internet, which itself has become more prominent recently as a result of technical progress.



## The Body and the Internet as Technology

In order to examine all kinds of externalized records of memory in relation to the human body through this philosophical path we followed, it is useful to underline that the body is a dynamic structure that can be transferred, changed, and transformed, just like memory. According to Stiegler, the technical prosthesis, which is more than just an extension and externalization function for the human body, points to the creation of the body necessary to be human, while for human beings, these extensions mean the purpose of being the human, not a tool. “This is what Stiegler means by technique: man is prosthetic, constituted by external things with which he interacts, does not have a pre-existing essence, does not possess qualities that are theirs” (Howells, C. & Moore, 2013, p. 138-139). Therefore, it becomes itself by individuating through memory, which it can externalize, and as Stiegler says, “a tool is, before anything else, memory” (1998, p. 254).

It is not surprising that Stiegler, who, as a result of his examination starting from the default origin of the human, deduces that a human being’s relationship with the outside world is a product of memory transfer and therefore a technical process. As Stiegler states, “the externalization process of memory, produces knowledge” (Stiegler, 2013b, p. 66). The internet is the mnemotechnological apparatus that left its mark on the 21st century throughout the human history, which has become a civilization that acquires, processes, and develops information through mnemotechnological apparatuses. The historical origins of a communication and interaction network called the internet as we experience it today, which has covered almost the entire globe are based on a digital network called *ARPANET*. It was first needed within the scope of the defense industry activities of the USA and developed in the 1960s to enable internal communication possible. Then, in the 1980s, we came across a network called *ENQUIRE*, developed by the researchers of the European Organization for Nuclear Research (*CERN*) for the purpose of sharing information. By 1989, the first version of the internet was ready for individual users, thanks to the *www* (world wide web) network developed with an HTML-based software language by Tim Berners-Lee, who is also one of the *CERN* researchers (Şahin, 2022).

As of this first period, which is defined as web 1.0, the internet covers a period that does not allow the user to interact outside of the display and operates with a low capacity in terms of software and hardware. The era of increased user engagement through computers and smartphones, known as web 2.0, started to take shape in the early 2000s and has drastically grown. The most fundamental difference between the first period of the internet and the second period is that in the second period users started to participate on the internet without knowing any software language and to produce all kinds of content. In this period, as we witnessed the rapid development of social networks, individual internet usage experienced a global explosion and the variety of services and products available over the internet has shown rapid development.



In every period of history, new communication technologies have given rise to new unforeseen problems, while promising great hope and claiming to solve many problems. Considering the scale of the economic, social, and cultural effects it has created, the concepts of big data and algorithmic governmentality notions that have emerged as of this second period of internet technologies made a great breakthrough, bringing with them many concerns, especially about data security and privacy of individual life. In the second period of the internet, as in the first period, the dominance of private companies over data has become more dominant, and concerns have become more evident for individual users, who have given away much of their data to the marketing initiative of companies. Web 3.0, which is the next version of the internet, is being discussed with the claim of being an alternative to the internet's becoming an algorithmic domination machine, with its architectural structure shaped over a blockchain-based distributed network structure and the claim of being a decentralized network.

The concept of blockchain means a "transaction register" in computer terminology, in which blocks that are connected to each other in a chain and completed at certain time intervals are articulated to each other. Just like in the discovery of writing, information is externalized from the human memory and transferred to an "immortal" record. Thanks to blockchain technology, all kinds of data exchange between people turn to a digital recording system that is open to the viewing of the whole network simultaneously and can never be changed after the transaction takes place. The way for users to join this network is through an individual password that they should never forget, and thanks to this password, the property rights of all kinds of digital assets as a part of the network can be recorded in this digital registry and exchanged between users without a central structure. When considered in parallel with the memory-forgetting relationship, the web 3.0 field, which is based on blockchain technology, emerges as a new phase in which the collective human memory is articulated into individual property relations.

The most important distinction between the first and second internet eras is that this third one emerges as allowing data to be transacted on a decentralized blockchain network simultaneously in a transparent, auditable, secure, and global manner by maintaining each user's ownership of their own data and keeping it in their own digital wallets. It is thought that this new version of the internet architecture, which can be considered as a unified pool of the collective human memory, when combined with artificial intelligence technologies that have made rapid progress in the last few decades, will add a new dimension to the relationship of human beings with information. In summary, the innovations brought by web 3.0 by differentiating from its own history are as follows: the background is shaped through blockchain-based distributed wallets, enabling peer-to-peer sharing, taking control over data from central structures, and keeping it under the ownership of users (Cook et al., 2020). When evaluated together with all these structural transformations, there is a development that progresses in parallel with an individuation process described by Stiegler in the internet's own history. It is possible to see that internet technology, which emerged as a means of storing information in

the beginning, has become a tool to produce both knowledge and desire today. As it became clearer with the metaverse discussions, the internet, which appears as a digital medium where information is recorded, transferred, and reproduced stands before us with the claim of transforming civilization altogether on a platform where the digital and the physical are integrated with the web 3.0 version.

With the web 3.0 version, the debate about whether the internet can create an alternative to algorithmic domination brings with questions about human existence and property relations on an ethical-political dimension. In line with Stiegler's reading, new technologies such as the internet, which can be considered a digital pharmacon, are toxic as the technique first presents itself as a poison, and they need therapies, and improvements to turn poison into a cure (Lemmens & Hui, 2017, p. 33). Above all, the variety of techniques with which the internet connects people is where the internet's unprecedented success compared to the media that precedes it lies. Metaverse, which is described as the "next big thing" after the internet, stands out with the difference it brings to this sense of presence and property relations. It is believed that this sense of presence will greatly improve thanks to a tactile/embodied internet experience once our bodily potentials such as looking, hearing, seeing, touching, and tasting are freed from the limits of 2D geometric screens. The key to achieving this is the integration of the digital and the physical, with the development of this universe through human-machine interaction, through the use of an avatar that acts as a digital twin of a person in other universes.

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At this point, it is useful to underline that the area we define as body experience itself has an opacity. When the digital integration of the boundaries of the physical world takes place through our bodily experience, we see that we have to reconsider the definitions of reality. What we regard as reality and how we experience it, how and through which channels we acquire it come to the fore. In order to understand how the internet environment, which is still evolving with web 3.0, may function as a tool for us, we must realize that it will be transparent to us and become "ready-to-hand" in Heideggerian terms. In this respect, concepts such as web 3.0 or Metaverse should be evaluated together with the concept of embodied or tactile internet as a new medium. According to the International Telecommunication Institute (*ITU*) definition, embodied internet is defined as "an internet network that combines ultra-low latency with extremely high availability, reliability, and security" (Kavanagh & Mundy, 2021). The tactile/embodied internet can be described as an internet integrated with the human body with its structure that enables tactile interaction with visual feedback. The term haptic relates to the sense of touch, particularly the perception and manipulation of objects using touch and proprioception. Proprioception, regarded as the prerequisite for the potential of embodied internet, is a perception of oneself that enables one to understand where one's bodily parts are located in its particular environment and how one should behave accordingly. And this self-sense, made possible by embodied internet, will serve as the foundation for the internet of things (IoT)<sup>4</sup> of which human beings will eventually become a component. It makes possible a new world description and ontological approach in which it becomes the product of a cos-

mological web. The variety of devices on the internet that we interact with is increasing day by day, and the temporal and spatial boundaries of our bodily configuration in the world are stretching.

The embodied internet works by running multiple technologies simultaneously at both the network and application levels. It is thought that the embodied internet in its fully developed state will become effectively used by IoT and robots. As content and data are transmitted over a 5G network, the user experience will replace the human intelligence through computing that has crossed the mobile threshold. At the application level, automation, robotics, telepresence, augmented reality (AR), virtual reality (VR), and artificial intelligence (AI) will play a role (Kavanagh & Mundy, 2021). When the internet and concurrently developing technologies are considered as a whole, it becomes clear that civilization is evolving at an increasing rate in terms of both the internet as a mnemotechnical apparatus and the social, economic, and cultural systems it produces. In this respect, examining the developments in this field is of vital importance in terms of both the effects they create and the new results and problems arising from these effects.

The worldwide network, which was initially only accessible through computers, has gradually grown to include mobile devices that we can carry in our hands and pockets, smartwatches that we can always wear, and unmanned aerial vehicles that allow us to go beyond where we can with the capacity of our own bodies. It will be integrated into removable robotic apparatuses, wearable technology products, which is one of the most studied technologies, and perhaps the human brain in a way that supports post-humanist claims, and it will turn the human body into a total machine by making the device a completely invisible organ of the body, thanks to the brain-machine interfaces. Until the positive pharmacology of technology alters it, this pharmacological transference will become more and more diverse.

At the point where we currently are, as Stiegler states, “our existence is digitalized in every aspect” (Stiegler, 2013b, p. 75-80). This is the digitalization of not only the physical and individual human beings but also the digitalization of the system we live in. Today, as the interaction between human beings and systems takes a new direction, the fate of mass media creates a good space to seek answers to the question of how human beings will live. Stiegler states that hyper-industrial capitalism builds its techniques on these mass media. This society in which workers are largely proletarianized even in their individual leisure time should signify absolute usability and convenience but is rather controlled in an overly massive way. Thereby a new order of bondage is established which can be considered a control society in which cultural capitalism is developed and life is standardized with “*marketing concepts*” (Stiegler, 2011a, p. 54). It builds the techniques of the period, which Stiegler calls hyper-industrial capitalism, on things like radio, television programs or the internet, where millions of people connect and access the same content at the same time.

A massively formed cultural consumption is driven neither by desire nor consciousness. This is, as it were, a clear threat to the “intellectual, emotional and aesthetic capacities of hu-

manity” (2011a, p. 54). This period called the Anthropocene, contains the signs of a period in which we are always in contact with mnemotechnological apparatuses, and even in the next generations, this relationship will take one step further and will become impossible to break, and will become a natural body for human beings as a result. Since we have seen the whole evolution of the embodied internet, the next generation of internet technologies, in less than a human lifetime, it is highly difficult to respond accurately to a question regarding its application areas. In which fields it cannot be applied is a better question. The possibility that it may be employed even in yet undiscovered realms beyond the limits of human capability is the most fundamental characteristic that makes it the “next great thing.” A specific approach, integrating research on immortality with this field clearly shows the significance of research at the point where the human body and the internet intersect.

Finally, considering the claim that the new practices that emerge after this new technological progress can create an alternative to the inequalities in the world, questions remain as to how much this ecosystem destroys the existing resources of the world, and whether it makes it possible for people to have access to these resources. Seeing the carbon footprint that the whole blockchain and NFT ecosystem left and knowing that the technology is still not fully developed and there are many uncharted waters, it seems crucial to closely study the problem in terms of energy ethics and ecological conversation. It seems that the various regulation and prohibition attempts by public mechanisms and traditional capital structures cannot be successful due to the distributed nature of internet technology. Individuals can continue to be a part of this system through various virtual private networks (vpn) and anonymous identities. For precisely this reason, the direction of this new medium –which appears to have the ability to revolutionize relationships between the state and the individual– will take humanity in the future remains a philosophical problem.

## **Conclusion**

The concept of Anthropocene stands before us as the most obvious sign of the darkness of our age. However, since this era signifies a time in which the light, as being a medium, prevails in the first place, as Agamben states, it appears as a time in which we should see the darkness within the light, rather than shedding light on the darkness (Agamben, 2020, p. 93). Initially, a philosophical examination of decision-making was conducted, in which technology was brought to an ethical-political plane by interacting with the media, by following the causes and effects of the crises of the Anthropocene Age, in which inequalities expanded through algorithmic governance and automation obstructed individuation practices. As a result of this research, which started with the immanence of the technique in the ontic state of human beings, the positive pharmacology of the technique was investigated as a possible way out of the crisis.

Modern technology, which is one of the main agents of the Anthropocene Age, or more accurately, the technological formation of modern human beings, is both the cause and the

result of the computational logic that appears as the *Ge-stell* of existence and the resulting mnemotechnical apparatus. The fact that people are obliged to use the technique as a pharmacion will pave the way sooner or later for a fight against digital society and automation. In this new order, which started to emerge after the Industrial Revolution and continued with the computational revolution, the algorithmic governmentality rising in a neo-liberal economic background, through the self-correlation of the big data it contains, in other words, by hyper-automation, is no longer just about the actual, but also it poses a threat to the potential, that is, to behavior patterns and preferences (Rouvroy ve Berns, 2013, p. 171 as cited in Şan, 2022). It follows traces and makes assumptions as it aims to manage uncertainty, or in other words, the future. In this sense, the body, which is positioned as an individual user, will have to connect with its meta-beings, which will be positioned as a digital twin in the digital universe, to seek the information that it left in the play in the form of a digital trace. It becomes the victim of general proletarianization once it loses all its future orientation to an entropic system, such as its political preferences, aesthetic judgments, happiness gestures, and future imaginations. Finally, by losing their theoretical knowledge they transform into a new proletariat, by losing their consumer position they turn into a user. Since it will not be possible to think critically about whether algorithms that have passed the technological singularity are working correctly or not, the total loss of labor seems inevitable in the face of hyper-automation that arises under this form of governmentality. Therefore, the question of what the future of work will be in an automatic society stands before us as reality that we have to face. People who lose their practical skills and theoretical knowledge in the face of automation will inevitably become unskilled. At this point, it becomes clear that the examination of technology should also be an examination of the labor put forth by means of technique. It is important to follow the consideration of this research, which proceeds through the transformative power of labor, albeit through a technical mediation, in an automated society, to pave the way for a better future. The most obvious therapeutic prescription that will pave the way for proletarianization seems to be to consider amateurism as an experience of desire and passion as opposed to the proletarianization of all wage labor (Stiegler, 2016, p. 204).

Finally, attention should be paid to new approaches such as green technology and slow technology, where the ideology of technology is also diversifying within itself. Beyond the positivist factuality of technical progress, normative attitudes towards technology should be the center of the politics of technology. The politics of technology should be centered on normative descriptions of technology rather than just the fetishism of positive factuality of technological advancement. Precisely for this reason, a transdisciplinary web science in which the knowledge of the private sector, the academy, and civil society come together is more necessary than ever. Beyond this research, where we see an analysis of the academic articulation to be made on pharmacology in a philosophical sense, in terms of media technologies, pharmacology is highly effective in other disciplines such as medicine, law, engineering, politics, etc. Academic studies in other disciplines will contribute greatly to the development of the field.

In the private sector, companies and civil society need to start developing and establishing the new academy, law, medicine, and policy of the new world, as a producer of technology that has even begun to replace the traditional academy in a way that is more than ever.

- 1 Heidegger uses the term Entbergen as the German word for the verb.
- 2 There is a special reason why Stiegler wrote the word “technological” as “techno-logical” by dividing the emphasis into two: by emphasizing the coexistence of technique and logic, “to show that language and tool form enables the process of human self-externalization” (Roberts, 2012, p. 6).
- 3 This expression is also used in Turkish by the press organs, the judiciary organs, etc.
- 4 The term “Internet of things” (IoT) refers to physical items (or groups of such objects) equipped with sensors, computing power, software, and other technologies that communicate with one another and exchange data through the Internet or other communications networks (Gillis, 2021).

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