

Bernard Stigler's Theory of Media Technology and Impact on Communication Studies

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Abstract: In today's digital era, media technology is critical in shaping modern society. Accompanied by the rapid development of digital technology, the functions and roles of the media have undergone tremendous changes, and the speed, quality, and ways in which people access information have undergone unprecedented changes. Advances in media technology have reshaped how people interact with the outside world and profoundly impacted culture, cognition, and identity. Bernard Stiegler's media technology theory provides a theoretical framework for re-examining the relationship between humans and technology from a technological perspective. Stiegler argues that technology is both a tool for human development and the second origin of human beings. By proposing the theory of 'tertiary retention,' the crucial role of technology in the externalization of memory is revealed. Technology acts as both an antidote and a poison, facilitating the progress of human society and posing significant risks. In the digital age, changes in media technology have brought about problems such as cultural homogenization, identity crisis, and "systemic ignorance" and even led to the "proletarianization" of social consciousness. Stiegler's theory criticizes the logic of capitalism behind digital technology and argues that human beings must re-examine their relationship with technology to avoid falling into a technologically dominated cultural dilemma.

Keywords: Bernard Stigler, medium, tertiary retention.

1. Introduction

In digital age, media and communication are essential in shaping contemporary society. Modern communication and media have become a central topic of contemporary research, as communication and media organize the core of all aspects of modern life, from broad patterns of social institutions and cultural systems to intimate daily encounters and individual understandings of the world. [1] Moreover, mediated communication in the present era is inextricably linked to technology, with digital technologies dramatically changing the speed, quality, and accessibility of information about the outside world. These technological developments have reshaped how people interact with their surroundings, highlighting the transformative nature of digital media.

Renowned contemporary French philosopher Bernard Stigler provides new contributions and perspectives on the development of communication today. Stiegler's theory of media technology provides essential insights into the modern information society, offering guidance and warnings about the convergence of media technology and the evolution of media society. Stiegler's media

technology theory incorporates theoretical findings from several disciplines, including philosophy of technology, media theory, and art. This interdisciplinary approach leads to the disappearance of the traditional boundaries of communication and media studies and proposes a new research paradigm, media technology [2]. In addition, Stiegler sees technology as a pre-existence to the birth of humanity, where technology is equal to the organs of humanity because humanity itself is not a unique species that can survive in the world and is not like an animal that has claws, etc. that can protect the individual. Stiegler's work maps the intricate relationship between humans and technology; for example, the union of humans and technology is contingent and species-defining. [3]

Stiegler's series of studies explores the interplay between media, technology, and human existence. Stiegler views technology as a human organ. In other words, the creator of technology is human, and human beings are vulnerable by nature compared to other species. However, in today's fast-paced development of media technology, the immediacy and transience of information can unconsciously erode human culture and cognition, leading to a shift in human identity from producer of technology to proletarian and a lack of access to culture and cognition. That raises a fundamental question: is the transformation of human identity influenced by technology or driven by the capitalists behind digital technology?

2. Technology and Pharmacology

2.1. Sociology of Technology

Starting from the phenomenology of Heidegger and Husserl, Stiegler argues at the existential level that technology is the second origin of humans and that technology is memory. [4] Stiegler emphasizes that technology is not just a tool created by humans but a co-evolving entity that shapes and is shaped by human existence. [4] As Stiegler once suggested, 'everything from a post-natural state can be called technology.' [5]

Stiegler demonstrates the “mutual invention of man and technology” through the origins of humanity. Stiegler's argues Epimetheus carelessly used the treasure trove of performances on irrational animals and wasted it all, leaving humanity with nothing. Prometheus came to test the distribution results and found that all the other animals possessed the proper power, but only humanity was naked and had no sharp teeth or claws. Prometheus stole the creative function of technology and fire from Hephaestus and Athena to save humanity, a crucial theft because the technology could not be acquired or utilized without fire. [5] Thus, Stiegler argues that humanity is the product of a double fault: forgetfulness and theft. [5] This myth reveals a flaw in the origin of humanity, stemming from the failure of Epimetheus to endow humanity with any abilities, and to compensate for this flaw in the origin, technology was necessary, making technology the origin of humanity. In other words, Stiegler argues that human development is intrinsically linked to the development of technology, positioning technology as the second origin of humanity.

Developments in media technology have dramatically changed the landscape of modern communication and information dissemination, especially the shift from Web 1.0 to Web 2.0, which Tim Berners-Lee introduced in 1989 as Web 1.0, the first generation of the World Wide Web.[6] Web 1.0 is the “read-only web,” in which web pages are developed to be static and not changed frequently, and the primary purpose of a website is to publish information for anyone at any time and to create an online presence. [6] In other words, the identity of human beings in the Web 1.0 era is that of a receiver of information. In addition, the continuous changes in media technology facilitated the rise of Web 2.0. In 2004, Web 2.0 was proposed by Dale Dougherty, vice president of O'Reilly. [6] Web 2.0 is also known as the Smart Web, the Human-Centred Web, the Participatory Web, and the Read/Write Web. [6] Post Web 2.0, information began to flow in both directions

between content providers and viewers. For example, Facebook, Instagram, Twitter, etc., and other social media platforms have enabled diverse online interactions and diverse user participation. [6] The identity of human beings is transformed from passive recipients of information in the Web 1.0 era to active participants in creating and disseminating content in the 2.0 era. Thus, the evolution from Web 1.0 to Web 2.0 highlights the transformative impact of media technologies on communication, dissemination, and user engagement, emphasizing the ongoing co-evolution of humans and technology.

The extension of media technologies from Web 1.0 to Web 2.0 has had an impact and influence on modern culture. For example, Facebook, a social media platform introduced in the Web 2.0 era, connects people from different cultural backgrounds around the world; where influential Facebook users may often chant different values and practices, which may lead to cultural invasion and the gradual erosion of local identities and contribute to the phenomenon of intercultural nation. [7] In other words, in the modern era of codification, content on social media platforms directly influences human thought and consciousness and disappearance of the boundaries between individuals and groups, exacerbating cultural homogenization. In addition, identity is an integral part of culture that allows people to distinguish between groups and individuals. [7] While Web 2.0 has brought about a second shift in human identity, humans have also unconsciously pushed their self-identity into scarcity, resulting in a third shift. The value of individual subjectivity is gradually erased in this process, and digital media technology creates a new value orientation of data, leading to a rupture of society, history, and memory, where culture is no longer perceived through experience but rather depends on digital media technology. [4] Therefore, Web 2.0 will unintentionally erase individualized human beings while transforming human identity, and media technology, as the second origin of human beings, brings about unpredictable toxicity while co-evolving with human beings.

2.2. Technologies as poisons and antidotes

Media technology, while realizing the immediacy of modern communication and information dissemination, has also become a "poison." As Stigler once declared, technology is the basis of human beings and society. Today's digital technology has produced a poison that has led to the "proletarianization" of human beings and the whole society, and the continuous externalization of knowledge under digital technology has exacerbated its "loss" from the individual to the collective, and ultimately to human civilization, extends from the individual to the collective, and ultimately to human society. [8] For example, influencers on Facebook may promote cultural homogenization by promoting different values and practices, leading to cultural invasion. When netizens use global languages such as English, they unconsciously drive users to follow trends that may undermine local languages and traditional cultures. This trend-following process can also lead to a loss of individuality. In other words, individuals have lost their identity to a certain extent. With the rapid development of media technology, individuals are so busy recording and storing that they forget to appreciate, experience, and learn. People lost the ability to perceive life and suffered cognitive and emotional loss. Knowledge of manual labor, life, and theoretical knowledge are also lost in this process, which Stigler calls significant knowledge loss. [8] Thus, while media technology enables the immediacy of communication and information dissemination, it ignores the person's individuality and leads to cultural homogenization, which produces the 'proletarianization' of human beings and whole societies.

In addition, Derrida argues that pharmakon has two sides in Greece, implying both antidote (remedy) and poison.[9] In the era of Web 2.0, social media platforms not only play the role of antidote but also that of poison. For example, in the Black Lives Matter (BLM) movement that emerged in 2013, social media served as a narrative amplification tool that enabled BLM groups to

form coalitions and amplify and disseminate non-mainstream discourses on police brutality and black liberation. [10] Analyzed from another perspective, social media platforms, a product of media technology, can facilitate cross-cultural communication, reduce discrimination, and increase social cohesion. Social media platforms allow users from different backgrounds to interact, share experiences, and learn about other cultures, leading to mutual tolerance and understanding of cultural diversity among individuals. In addition, cross-cultural communication increases the inclusiveness of people from different cultural backgrounds, reduces discrimination, and, to a certain extent, increases the sense of belonging of marginalized people, leading to a greater understanding of cooperation in the community. Thus, social media platforms challenge stereotypes, promote inclusiveness, and enhance social cohesion.

The dual role of technology as both remedy and risk highlights its ability to cause and mitigate sensual catastrophe. [11] There is no binary prescriptive dichotomy in the duality of pharmacy; technology as a medicine may present itself as the suppression of one side over the other at different times, and Stigler argues that technology has evolved to the point where in today's society, its toxicity outweighs the understanding of the medicinal properties to become the dominant side. This period manifests itself as a loss of the individualization of the Being. [10] In other words, according to Stigler, there is no simple dichotomy in this duality; technology can be remedial by suppressing one aspect at a different time. However, in modern societies, the harmful aspects of technology have outstripped the human understanding of its benefits, weakening personal identity and the disappearance of individuality. In addition, Stiegler proposes a mechanism for cooperation between marketing and the spiritual industry in the "post-industrial cultural era" and points out the three dimensions of the new problem areas brought about by the spiritual industry: symbolic misery, cultural and political issues, and spiritual catastrophe.[12] Overall, the relationship between technology and human beings is complex, with technology acting as both a poison and an antidote. While technology has the potential to improve human life and social development, the toxic aspects currently predominate, leading to significant challenges, including the loss of individuality and mental health.

3. Memory and cultural industries

3.1. Tertiary Retention

Stiegler's tertiary Retention is Husserl in origin. Stiegler states that temporal objects and stasis are finite, leading to Husserl's intentionality concept. Husserl states, 'When we let the sounds play one by one in our recollection or imagination, we are not listening and do not hear.' [13] After the melody has disappeared, we no longer perceive the vanished melody as present, "but we still have it in our consciousness; it is no longer the melody of the present, but it is the melody of the just past." [13] In contrast, "in remembrance, the temporal present is the present that is recalled, the present that is presented; similarly, the past is the past that is recalled, the past that is presented, but not the past that is truly possessed by the present, not the past that is perceived, first given and intuited." [13] In other words, "if I recreate a melody that has been heard, then the present of the phenomenon of remembrance instantiates a past: a sound now resounds in the imagination, in remembrance." [13] In essence, Husserl's view is to understand the self as a continuous, unified stream of consciousness that integrates past experiences through retention and memory, thereby creating a dynamic, coherent sense of self over time. As Stiegler mentions in referring to the possibility of carrying over the unfinished fullness of one experience to another, it presupposes the existence of the possibility of such a secondary retention. [14] However, Stiegler critiques Husserl's phenomenology, arguing that Husserl ignores tertiary retention.

The tertiary retention is the third memory. Stiegler argues that "phenomena themselves do not reveal themselves to us, but can only be experienced by us." [14]. Stiegler divides memory into three kinds: 'First memory or primary retention, belongs to the present moment of the object, is the "just past past" of the object and is an experience; second memory or secondary retention is remembrance or second recollection; and third memory or image-consciousness, the third memory is dependent on the technology and existence; it is presented in the form of a technological object; it is the epiphylogenetic supports; it is a testimony to the past of the dead, in other words, a trace of the past not experienced by consciousness. [15] The third memory can be understood as a technology that witnesses human civilization's development and the externalization of human memory (external organ of memory). In addition, the material vehicle of the third memory provides an appropriate means of recording the process of repetition. In Stiegler's discourse on audio-visual technology, technology overcomes the adverse effects of forgetting by creating identity and unity. In the replenishment and retrospection of the temporal object, memory transforms from original perception to temporal holding. It acquires the effect of co-temporalization of subjective consciousness and external temporal consciousness. [16] In other words, the existence of tertiary retention(third memory) based on technology and as a tool for the externalization of human memory emphasizes, to a certain extent, the reproducibility of the tertiary retention, thus weakening the rupture of the life process of deferral, which Derrida points out is "différance."

3.2. Film

Stiegler's analogy of consciousness to film is shown through the editing construction technique of montage to show what he wants to show to the person. This is achieved together through the selection, editing, and dislocation between primary, secondary, and tertiary retention. [17] Stiegler argues that cinema taps into what Kant describes as the "mediator that links the categories of the understanding and sensible phenomena" and declares that modern people are almost more likely to choose television or film with images to pass the time than reading a book. The flowing images in a video easily attract attention, and people always tolerate the boredom of such moving images more than the experience of mere words. [18] In other words, the mechanical and temporal flow of the temporal object overlap and have a natural effect on the stream of consciousness that has that object and that recording process as its object, combining the past with the real. [18] Analyzed from another perspective, tertiary retention (third memory) emerges when the object and the stream of consciousness that is the object of that recording process generate the past and bring it to reality, and through the combination of the past and the reality bring to human beings the transmission of consciousness and the resonance of emotions that transcend time.

However, in the wake of the post-industrial cultural era, technological change has also ushered in a crisis for humanity. In Stiegler's discourse on audio-visual technology, he argues that technology overcomes the negative impact of forgetting by creating identification and unity. Through the supplementation and retrospection of temporal objects, memory truly transitions from original perception to temporal retention, thereby attaining the synchronic effect between subjective and external temporal consciousness.[16] In other words, technology has helped humans overcome their weaknesses and emotional resonance with the present past. However, the rise of technology has forgotten the industrialization of capitalist modernity, i.e., the industrialization of the spirit. The transformation of the new bourgeois reception of modernity, in addition to the direct shaping of real everyday life by the relations of the commodity economy, is also expressed in a change in the ideological reception. [18] As Stiegler states, "A certain capitalized 'Our' process of unification, which is also the unification of the various past moments of the human community (unification du divers du passé de la communauté), becomes identified and organized, thereby allowing the projection of the community's future (la projection de son avenir)." This is the process of the

unification of history and the future.[19] In other words, the transformation of technology leads to the disappearance of individual personalization and the entropic homogenization of the collective. Therefore, in the post-industrial cultural era, the destruction of the internal synthetic structures of the human intellect and the complete industrialization of memory have become objects captured by market principles. At this stage, the transformation of consciousness will inevitably lead to the destruction of consciousness, resulting in the unconscious existence of the collective "We." Stiegler identifies this state as "systemic stupidity," referring to the proletarianization of human consciousness.[16]

4. Conclusion

Stiegler's theory of media technology provides significant insights for re-examining the intersubjectivity between humans and technology, urging us to confront the complex challenges posed by the development of contemporary digital media technologies. With the advent of the post-industrial era, technology has controlled human subjective consciousness to a certain extent, confining humanity within pre-established cultural frameworks. In this process, the objects of industrial society determine the sensory materials available to the subject, and external industrial technology reshapes the subject, with sensibility and personal experience being constructed by technology.[20] From Stiegler's interpretation of the desires in Deleuze, Guattari, and Freud's works, technology influences ideology, destroys the desire to rethink thought, and reinforces stupidity. [21] In other words, technology is no longer a simple tool, means, or method but carries a predictive and preemptive purpose. As Heaney notes, Stiegler elucidates the educational responsibility generated by the rhythmic intergenerational flow, which includes creating environments that focus on the future, aiming to create environments devoid of technology. This environment is determined by the objects of its focus: political life, spiritual life, and political life; together, these constitute what is termed "spiritual life." [22]

From the perspective of intersubjectivity, when examining Stiegler's view of media technology and the relationship between humans and technology, it becomes evident that he deconstructs the traditional notion of the subject, seeing humans and technology as mutually existent, inseparable two sides of the same coin. "The subject is engulfed by a larger collective, uncontrollably alienated and deteriorating, leading to the more widespread prevalence of ignorant individuals, with individual consciousness becoming homogenized and synchronized." At the same time, Stiegler critiques "social time," which is the sum of synchronized consciousness, arguing that we are re-organized into an animalistic social structure within the synchronous system of the internet, where individuals exist as cells within the collective and are subjugated to a super-individual organism—the "anthill." [20] As the post-industrial era progresses, technology increasingly homogenizes human ideology, resulting in a severe loss of individuality and mental well-being, leading humanity towards systemic stupidity.

Moreover, from the perspective of Marxist social critique, the rapid development of technology has exacerbated the proletarianization of humanity. In the process of externalizing knowledge, digital media technology gradually causes individuals to lose control over their consciousness and thoughts. While technology shapes ideology, it destroys the desire to rethink and resist, leading society to ignorance and conformity. Thus, Stiegler's theory of media technology reveals the profound impact of technology on human consciousness and culture and emphasizes the importance of individuality and mental health in a technology-dominated society. In the post-industrial era, humanity needs to re-examine its relationship with technology, remain vigilant against the crises brought about by technological homogenization, and explore ways to maintain human uniqueness and autonomy amidst technological advancement. Ultimately, we must consider how to find a

balance between human consciousness and technological development under the dominance of technology to avoid falling into the trap of systemic stupidity.

References

- [1] David Deacon, Michael Pickering, Peter Golding, Graham Murdock.(2021). *Researching Communications: A Practical Guide to Methods in Media and Cultural Analysis*, Bloomsbury Academic
- [2] Tang Xue.(2023).A study of Bernard Stigler's view of Media Art.Dissertation of Guizhou normal university.
- [3] Mark B. N. Hansen.(2017). Bernard Stiegler, *Philosopher of Desire?* *Boundary 2*, Vol.44, No.1: 167–190.
- [4] Tang Yixiao. (2023).Bernard Stiegler's view on media technology.Dissertation of Jilin University.
- [5] Bernard Stiegler.(1994).Technics and Time, Vol.1, Peicheng,Yilin publisher.
- [6] Manishkumar R Solanki, Abhijit Dongaonkar.(2016). *A Journey of Human Comfort: Web 1.0 to Web 4.0*. *International Journal of Research and Scientific Innovation (IJRSI)*,Vol.3, No.9:75-78
- [7] Mui Joo Tang, Eang Teng Chan.(2020). *Social Media: Influences and Impacts on Culture*.Springer Nature Switzerland,vol 1228:491–501
- [8] Wang Qingliu. (2019).Stigler technology - medicine thought research. Dissertation of Shanghai university.
- [9] Meng Qiang.(2022).On Writing and Medicine: Derrida's interpretation of Phaedrus.Nanjing Social Sciences,Vol.6,37-42.
- [10] Marcia Mundt, Karen.Ross, and Charla M Burnett.(2018) *Scaling Social Movements Through Social Media: The Case of Black Lives Matter*.
- [11] Wu Qingfang.(2023).Research on Bernard Stigler's Aesthetic Thought. Dissertation of Sichuan normal university.
- [12] Liu Riming.(2024). Stigler's Absorption and Misinterpretation of Marx's Technological Thought.*Academic monthly*,Vol.56,57-65
- [13] Edmund Husserl.(2002). *Phenomenology of life*,Niliangkang,Zhangyanguo,Shanghai translation publisher.
- [14] Bernard Stiegler.(2010).Technics and Time, Vol.2,trans. Zhao heping,Yin luo,Yilin publisher.
- [15] Luo Yueming. (2017).On Stiegler's Memory Studies.Dissertation of Shanghai University.
- [16] Chen Meng.(2024). From Third Holding to Digital Holding - A New Reading of Stigler's Phenomenology of Technology in the Context of Digital Technology.*Journal of Guang xi Normal University (Philosophy and Social Sciences Edition)*,Vol.60,No.1,142-150.
- [17] Xu Jiayue. (2018) .Interpretation of Stigler's Technology and Time. Dissertation of Nanjing University.
- [18] Bernard Stiegler.(1994).Technology and Time, Vol.3,trans.Liu Dong, Pneg gang,Yilin publisher.
- [19] Zhang Yibing.(2017). Bourgeois modernity: The "we" in the reconstructed mode of reception -- an interpretation of Stigler's Technology and Time. *Dong Yue Tribune*,Vol.38,Vol.7,22-29.
- [20] Wang Daqiao, Feng Lequn(2024).Collectivization of individual experience: technical perception and its aesthetic critique.*Shandong Social Science*,Vol.2,No.342,68-77.
- [21] Turner, Ben (2016) *Ideology and Post-structuralism after Bernard Stiegler*.*Journal of Political Ideologies*, Vol.22,No.1,92-110.
- [22] Conor Heaney. (2020). *Rhythmic Nootechnics: Stiegler, Whitehead, and Noetic Life*, *Educational Philosophy and Theory*, Vol.52, No.4, 397-408.