# Exploring the Alienation of Digital Labor in the Era of Digital Capitalism—Based on Marx's Theory of Alienated Labor

ZHANG Wanruo

Nanjing Normal University, Nanjing, China

In the era of digital capitalism with the explosion of data and information, human society will be greatly affected by digital capital, and all walks of life will be included in the chain of information-based labor production, giving rise to a new type of labor form called "digital labor". This paper discusses the alienation of digital labor in the context of digital capitalism, take Marx's theory of alienated labor as the perspective, and analyze the fourfold alienation of digital labor in terms of producing products, labor process, self-realization of laborers, and social relations by combing the historical development of digital labor. Based on the above analysis, the article proposes the logical and practical paths to crack the alienation of digital labor: improve media literacy and thinking discernment, make full use of the positive effects of digital technology, and strengthen the governance of digital platforms, in order to build a fairer and more shared digital labor environment, and to realize the self-emancipation of laborers and the healthy development of the digital economy.

*Keywords:* digital labor, digital capitalism, labor alienation, Marxian theory of alienated labor

## Introduction

With the advancement of digital technology, the production and living landscape of modern society is undergoing an unprecedented transformation, with technology leading human society towards a new era of digital economy. Against this background, economic globalization and the revolutionary changes of the Internet have jointly influenced the path of mass society, the high density of information has become an important feature of mass society, and digital capitalism has been widely extended to various fields of mass society such as politics, culture, economy, and ideology, and has been integrated into the daily life of the public. The arrival of the information society has not only reshaped the mode of production, but also given rise to a new type of labor that closely matches with it—that is, digital labor.

With the development of Web 3.0 technology and the rise of platform economy, especially social media and e-commerce platforms, the labor process of digital workers has become more flexible, but it has also intensified the alienation of labor. Workers face "false freedom" and "algorithmic control", and their labor value is appropriated without compensation, and their autonomy of labor is gradually lost. Therefore, Marx's theory of alienated labor, which he elaborated in his classic work "Philosophical Manuscripts of Economics of 1844", is still applicable in the context of digital capitalism, and manifests itself in a new form, i.e., the "alienation of digital labor", which poses a new challenge for the society and the economy. Using Marx's theory of alienated

ZHANG Wanruo, School of Marxism, Nanjing Normal University, Nanjing, China.

labor, this paper discusses digital labor and its alienation phenomenon in depth, and aims to solve the problem of alienation of digital labor under the framework of digital capitalism, to enhance the autonomy of digital laborers, and to maximize the use of the driving effect of digital technology, so as to provide references and inspirations for the healthy development of China's digital economy.

## Literature Review

In 1977, Dallas Smyth triggered a broad discussion on the topic of "blind spots" in his article "Communication: Exploring the Blind Spots of Western Marxist Theory". He innovatively took the lead in introducing the concept of "audience commodity", considering audiences as commodities, and derived the concept of "audience labor", which constituted the initial outline and earliest prototype of the subsequent concept of "digital labor" (Terranova, 2004). In the 21st century, Italian scholar Tiziana Terranova has deepened this topic in her monograph, proposing a new concept of "digital labor", emphasizing that it is a form of "free labor" in the Internet space, covering multiple activities such as website construction, software optimization, mailing list participation, and virtual community building. Michel Negri and Antonio Hardt further defined the non-material attributes of "digital labor", pointing out that such labor focuses on non-material fields such as services, cultural products, knowledge creation and communication, and is distinguished from traditional labor because it does not directly produce physical or lasting material benefits. It is distinguished from traditional forms of labor because it does not directly produce physical or lasting material benefits (Hardt & Negri, 2001). In examining the role of labor in the production of digital media, Christian Fuchs utilizes Marx's labor theory to delve into the nature of digital labor and its implications. He exhaustively parses key issues such as algorithms, data mining, and platform economies. Whereas conventional studies of digital labor usually take a socio-cultural perspective, the introduction of Marxist political economy further focuses on the structure of production and labor relations, providing new perspectives for a deeper understanding of the nature of digital labor.

Advances in information technology have driven the internationalization of capital's competition and profit-seeking in the networked world, and these technologies have not only challenged traditional norms of wealth and markets, but have also transformed the way capitalism cooperates globally. In the age of digital capitalism, the production process of digital labor, the control of labor, and the way surplus value is generated have undergone profound changes. Individuals face the coexistence of the will of the subject and the alienation of digital labor produced in new types of labor relations, and workers are often unconsciously caught up in technological control and market exploitation. Digital laborers create value for the platform by providing content, data, etc., for free or at a low price, but they are unable to obtain corresponding returns, and the fruits of their labor are divorced from themselves and controlled and exploited by capital. Therefore, based on the characteristics of the digital economy and past research, digital labor can be regarded as labor in the form of producing, disseminating, and consuming digital content, data, information, and emotional value in the context of the era of digital capitalism, based on high-tech technologies such as the Internet, big data, and cloud computing, and carried out on digital platforms such as social media, e-commerce platforms, online games, and other digital platforms. It includes both paid professional labor and unpaid or low-paid audience labor and playful labor.

In Marx Returns, Fox states, "With our daily lives all but subsumed into the logic of commodified economic liberalism. Therefore, it is important to rethink what Marxism means by 'critique' and consider the political-economic developments behind the age of digital capitalism" (Fuchs & Mosco, 2016). As a profound dissector of the capitalist system and a pioneer of critique in the field of media communication, Marx not only revealed

the inherent limitations of the capitalist social structure, but also provided a forward-looking insight into the rise of the information economy and society. Marxist theory, especially the theory of alienated labor, has shown its powerful interpretation of the issue of "digital labor", and its insight into the political and economic forces behind digital capitalism and the complex relationship between technological development and capital accumulation have provided a solid theoretical foundation for the study of the political economy of communication. By analyzing the connotation of digital labor alienation under the framework of Marx's theory of alienated labor, it can not only inject more humanistic and realistic concerns into the study of communication political economy, but also help to understand the nature of labor relations in the era of digital capitalism, realize a comprehensive understanding of digital labor alienation, and explore the realistic paths for transcending digital labor alienation. Therefore, this paper will analyze the alienation of digital labor in the digital era with the basic framework of Marx's theory of alienated labor, and provide a possible path to solve the problem, so as to transform the negative "negative energy" of digital labor to human beings into positive "empowerment".

## Analyzing the Four Alienation Characteristics of Digital Labor Based on Marx's Theory of Alienated Labor

In his work "The Philosophical Manuscripts of Economics of 1844", Marx made a profound explanation of the concept of alienated labor. According to him, the concept of "alienation" refers to the social phenomenon in which man's material and spiritual creative activities and their fruits are transformed into an alien force external to man, hostile to man, and ultimately dominating, controlling, and ruling over man. Alienation will result in (1) alienation of the worker from the product of his own labor; (2) alienation of the worker from his own labor activity; (3) alienation of man from his own class essence; and (4) alienation of man from man, the four forms of alienated labor (Marx, 1979). In line with traditional labor, digital labor is also controlled and mastered by the logic of capital and cannot escape the fate of alienation. In his book *Digital Labor and Karl Marx*, Fox points out that "digital labor is based on the alienation of the labor subject, the object of labor, the instrument of labor, and the product of labor" (Han & Liu, 2020). Thus, the following section will draw on Marx's theoretical framework on alienated labor to thoroughly explore the characteristics of digital labor and its new appearance of alienation, and further explain the fourfold characterization of digital labor alienation from the four aspects of Marx's theory of alienated labor.

### Alienation of Digital Labor Products: Materialized Control of Information Content

According to Marx's theory of alienated labor, under the conditions of capitalist private ownership, "the more objects a worker produces, the fewer he can possess and the more he is ruled by his own product, i.e., capital" (Marx & Engels, 2009). Under the era of digital capitalism, the products of digital labor exist in the nature of data on major online platforms, and every like and retweet, every search and browse, every finely-tuned photo, trendy online language, and popular emoticons of digital users are all incorporated into the process of digital labor. Digital platforms make use of computer artificial intelligence technology that advances with the times, and with the help of a large number of digital products created by digital laborers, convert the massive resources provided by laborers at extremely low or even no-cost prices on various platforms into valuable and transactional data, personalize and recommend them to the users, and form an implicit control over them in terms of their consciousness and behavior, as well as in the process of using the data and recommendations of the users, and put their information, emotions, socialization, and all other social activities into the control of the algorithm,

inducing them to further invest in digital labor reproduction, so as to obtain a steady stream of profits. In the all-encompassing net of capital, data has been transformed from a labor product created by digital laborers into a tool for capitalists to enslave and exploit people's surplus value, and a series of digital labors, such as voice on the Internet and browsing and searching, has been transformed from a labor act that deserves a certain amount of compensation into a labor that has been appropriated by the capitalists without compensation. As a result, digital laborers are alienated from the series of data raw materials they have generated—not only will they not be able to obtain possession of the digital labor products they have produced, but they will also be devoured by the labor products, and their own psychological cognition, ideology, and subjective behaviors will also be enslaved.

**Alienation of the Digital Labor Process: Being Forced to Labor Mechanically**

Marx defines labor as the creative activity of human beings to realize their self-worth in the world by giving material form, which essentially implies the practice of subjectivity with the dual attributes of satisfaction and freedom (Sayers, 2020). While the majority of digital workers, including Internet users, start from their own subjectivity, browsing information on major online media platforms, seeking physical and mental pleasure and relaxation, capitalists are controlling and exploiting digital workers indulging in the virtual world through digital capital. In this convenient and open digital platform with no restrictions on time, place, or requirements, the subjective online entertainment activities are transformed into unpaid labor exploited implicitly by capital, prompting digital workers to unconsciously receive massive amounts of information and, at the same time, to continuously create data and information for the capitalists, which greatly increases the "labor time" of the digital laborers. Digital labor activities carried out under this model may appear to be a form of leisure and recreation, but in fact they imply a model of forced labor that goes against subjectivity. The majority of digital laborers will gradually change from happiness to loneliness in the process of "producing" the products of digital labor, and will gradually fall into the deceptive production of contemporary capitalism, which is monitored by digital capital.

**Self-alienation of Digital Workers: Addiction to the Virtual and Loss of Subjectivity**

In theoretical framework of Marxism, human beings are regarded as the interwoven body of complex social relations, and each individual is embedded in a wide network of social relations, and as a concrete manifestation of social existence, human beings embody the category attribute of self-consciousness in the transformation of the objective world. The essential attribute of human beings lies in their class existence, and "productive labor" is not only a concentrated manifestation of human "class characteristics", but also a free, conscious, and voluntary behavioral activity (Guo & Zhang, 2022). On the contrary, in the current era of digital capitalism, digital labor has been endowed with more unconsciousness and gratuitousness, and at the same time, it has been readily accepted by more and more workers. The site of digital labor is constantly expanded and even tends to be invisible, and individuals ride the torrent of digital information into the virtual world, maintaining the richness of social relations through updating dynamics, posting comments, and so on. In the era of digital capitalism, there are countless phenomena such as "phubber" and "Cyberman", and individuals are forced to be wrapped up in digital capitalism, and it seems that modern people's lives cannot be separated from their cell phones for a single moment. The deep embedding of digital technology in life scenes has blurred the boundaries between the virtual and the real, and between work and entertainment. Labor should be an individual's free and conscious activity, but the current situation of modern people being "kidnapped" by electronic products profoundly reflects the detachment of human beings from the essence of freedom. The anxiety generated by forced digital labor and the capital-driven "addictive consumption" have led people to repeat the free data production work under the guidance of

Internet platforms, and to provide surplus value for digital production without compensation. In the digital economy and society, the autonomy and subjective judgment of human beings have been greatly weakened, and it has become extremely difficult for them to freely decide on their own labor process, which greatly violates the nature of human beings.

**Alienation of Social Relations: Isolation and Increased Competition**

Marx's theory of alienated labor deeply analyzes the internal logic of the alienation of human relations, pointing out that this alienation is the inevitable product of the alienation of the laborer from the product of his labor, the labor process itself, and the essential characteristics of human beings. For "man's relations with himself become object and real to him only through his relations with others" (Marx & Engels, 2009). The alienation of digital labor leads to a certain extent to the hierarchical differentiation of social relations, and driven by the logic of digital capital, digital laborers are to a great extent bound by digital technology and the efficiency of digital labor, which means that the more people who know how to use the laws of digital labor and the more familiar they are with the mode of operation of the major Internet platforms, the better they are able to make use of high-quality information and shared resources, and thus incarnate as the "digital elites", gaining more attention in the era of digital capitalism, occupying the commanding heights of the digital capital chain, and digital inequality being further widened. While the labor products and data produced by ordinary digital laborers are expropriated by major digital platforms without compensation, the vast number of digital laborers are induced by capital to become more dependent on the virtual world, and fall into the predicament of spiritual turmoil and even material poverty in the virtual space, triggering anxiety and alienation in terms of lifestyles, interpersonal interactions, and identities, and are reduced to relying on the digitalized virtual body existence. Specifically, the virtual space characteristic of digital labor weakens the deep interpersonal connection and social support system of workers, making them face the blurring of professional identity and the rupture of social network in the absence of face-to-face communication, which may lead to the confusion of self-cognition. For example, firstly, it is difficult to replace real social support with polite likes on social media. Secondly, the ambiguity of professional identity makes it difficult for individuals to position their roles in real-life social interactions, exacerbating social anxiety. Thirdly, the "persona" culture on digital platforms encourages workers to present one-sided selves, exacerbating the confusion of self-identity and the falseness of interpersonal relationships. In addition, the fear of socialization and competition that can be triggered by long-term reliance on online work models further weakens workers' social connections. Finally, the competitive nature of the digital labor market, the quantitative nature of performance evaluation, and the need to update skills as a result of technological advances force workers to continuously learn in order to adapt to changes in the marketplace, which together intensify competition among workers, intensify personal stress and competitive dynamics, and deepen the alienation and antagonism of social relationships.

## Discussion: A Realistic Path to Solve the Alienation of Digital Labor

In the wave of digital capitalism, the new model of digital labor derived from Marx's labor theory of value has, on the one hand, greatly promoted social and economic progress, but on the other hand, created the conditions for capitalism's exploitative mechanism of using scientific and technological labor for value creation. In order to ensure that the development of digital economy can follow the phenomenon of alienation beyond the dominant logic of capital, enhance the subjectivity of digital laborers, and give full play to the positive role of digital

technological innovation, this paper focuses on exploring three aspects of transcending digital alienation from a dialectical perspective:

First of all, it is necessary to strengthen the governance of digital platforms, and create a community of destiny for building and sharing the digital world with sufficient institutional safeguards. In his book *Digital Labor and Karl Marx*, Fox proposed the political goal of establishing a "shared Internet" or "working class Internet" (Fuchs, 2014). The government should use a combination of legal regulation and administrative supervision measures to strengthen its macro-control function, in order to further regulate the operating order of the digital economy, and strive to improve the security mechanism of data property rights. This is aimed at activating the inherent potential of the digital economy, breaking the phenomenon of "data silos" constructed by capital and technical barriers, and promoting digital governance in the direction of the rule of law, standardization, specialization, and long-term effect. Internet companies, self-media platforms, and digital workers should also participate in network digital governance, contribute to the construction of harmonious network labor-capital relations, crack the alienation of digital labor in the era of human-machine integration, and promote the self-liberation of all human beings in the era of digital capitalism. Realizing multi-subject shared network digital governance is a concrete path to practice Marx's idea of the proletariat uniting against bourgeois exploitation, and it also echoes Marx's theoretical propositions of public ownership of the means of production and the elimination of class antagonisms, and provides theoretical guidance and a practical path to build a healthier, fairer, and more shared digital economy and society.

Additionally, it is essential to make full use of the positive role of digital science and technology, subvert the old relations of production, and realize science and technology for good. According to Marx, the elimination of labor alienation should be "premised on the tremendous growth and high development of productive forces" (Marx & Engels, 2009), and science and technology is the first productive force. In the face of the blind wave of digitization rolled up by digital fetishism, we should take the initiative to break the shackles of digital technology, make full use of the dividends of science and technology, and create a highly open data network and sharing platform that is not for profit. At the same time, we should also pay attention to reconstructing the relationship between people and technology, broadening the application direction of science and technology through people-oriented values, cultivating people's ability to master digital technology, and getting rid of the dependence on things. This is the inheritance and development of Marx's theory on the revolutionary change of social relations of production, and the realization of Marx's vision of a future communist society in which "the free development of each individual is the condition for the free development of all".

It is indispensable to encourage netizen to turn passivity into initiative in the face of complicated data and information, and become independent individuals with subjective initiative and self-awareness. At the same time, they should cultivate a critical sense and the ability to distinguish between truth and falsehood, have the courage to defend their personal rights and interests through rights defense channels when their privacy is infringed upon, and refuse to engage in repetitive and meaningless online productive behaviors that are exploited by capital.

Finally, it is necessary to improve media literacy and the ability to identify thinking and raise awareness of rights protection. Marx attached importance to the comprehensive development of human beings, and believed that education and awakening the subjective consciousness of workers were the key to overcoming alienation. Marx attached importance to the comprehensive development of human beings and believed that education and awakening the subjective consciousness of workers were the key to overcoming alienation. It is important to encourage netizens to turn passivity into initiative in the face of complicated data and information, and to be

independent individuals with subjective initiative and self-awareness. At the same time, it is also important to cultivate their critical awareness and ability to distinguish between truth and falsehood, so that they are able to defend their personal rights and interests when their privacy is infringed upon, and to refuse to engage in repetitive, meaningless, capital-exploiting online productive behaviors. This is in line with Marx's idea that the proletariat must awaken to itself and become a self-aware subject of history. By enhancing individual self-awareness, it not only defends against the ideological manipulation of capital, but also promotes workers' awareness of their own rights and interests. This is also in line with Marx's emphasis on the logic of workers' self-emancipation, i.e., through self-education and collective action, to achieve freedom from exploitation and oppression

## Conclusion

Marx's theory on alienated labor not only reveals the essence of the alienation of digital labor for us, but also provides theoretical guidance for us to find a realistic way to get rid of digital alienation. Through in-depth analysis of the characteristics of digital labor in the era of digital capitalism, the manifestation of alienation and its root causes, this paper demonstrates the guiding significance of the Marxist theory of alienated labor in the study of digital labor, reveals the four-fold manifestation of alienation of digital labor in the era of digital capitalism in terms of the production products, the labor process, the workers' self-actualization, and the social relations, and explores the logical and practical paths to decipher the alienation of digital labor. It also explores the logical and practical paths to decipher the alienation of digital labor. Realizing the self-emancipation of workers and the harmonious development of society as a whole is an important direction for the development of digital economy in the future, and this paper aims to provide theoretical guidance and practical paths for the healthy development of the digital economy, and to build a fairer and more shared digital labor environment by improving media literacy and discernment, making full use of the positive effects of digital technology, and strengthening the governance of digital platforms.

## References

Fuchs, C. (2014). *Digital labour and Karl Marx*. New York: Routledge Press.

Fuchs, C., & Mosco, V. (2016). *Marx is back*. ("Communication Post" Workshop, Trans.). Shanghai: East China Normal University Press.

Guo, Y. W., & Zhang, D. (2022). The generation and solution of labor alienation under digital capitalism. *Shandong Trade Unions' Tribune, 28*(2), 68-77.

Han, W. L., & Liu, L. (2020). The digital labor process and its four forms of manifestation. *Finance & Economics, 64*(1), 67-79.

Hardt, M., & Negri, A. (2001). *Empire.* Cambridge: Harvard University Press.

Marx, K. (1979). *Economic and philosophic manuscripts of 1844*. (The Bureau for Compilation and Translation of Works of Marx, Engels, Lenin and Stalin, Central Committee of the Communist Party of China, Trans.). Beijing: People's Publishing House.

Marx, K., & Engels, F. (2009). *Collected works of Marx and Engels: Volume 1*. Beijing: People's Publishing House.

Sayers, S. (2020). *Marx and alienation: Essays on Hegelian themes*. (Y. Cheng, Trans.). Beijing: China Renmin University Press.

Smythe, D. W. (1977). Communications: Blind-spot of Western Marxism. *Canadian Journal of Political and Social Theory, 1*(3), 1-27.

Terranova, T. (2004). *Network culture: Politics for the information age*. London: Pluto Press.