

Reflection on Labor Problems Under the Condition of Digital Technology

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With the rapid development of digital technology, new forms of digital capital and transnational capitalism have emerged under the manipulation and utilization of capital. Digital capital is composed of intangible and intangible products in labor. It is like traditional capital, which completes capital accumulation from the exploitation of surplus value, that is, data and information begin to operate as a new capital. With the renewal of technology, the form of labor has evolved from material labor to non-material labor and then into digital labor. Digital technology is not limited by time and space, which leads to transnational information sharing and transnational capitalism. However, alienation and exploitation always exist in digital labor. According to the unique characteristics of digital labor, the time and place of exploitation have undergone tremendous changes, and the time boundary between rest and labor has also become blurred. The scope of exploitation coverage is further expanded.

Keywords: non-material, digital labor, labor alienation

Introduction

After the financial crisis of 2008, Western theorists began to reflect on the shortcomings of the capitalist system. The research recovery of Marxist political economy has spurred the upsurge in the study of Capital, and also attracted attention to the characteristics of contemporary labor. The concepts of “intangible labor” and “digital labor” began to become popular. Therefore, using Marxist labor theory of value to examine the difference between contemporary labor and traditional labor, and to determine the characteristics of digital labor, has become a hot issue that contemporary theories need to face.

Transnational Capitalism Under Digital Technology

Technological development continues to update people’s production and lifestyles, such as various social software, remote office, and mobile payment. This means that digital technology has reshaped the communication mode between people, even between people and non-human subjects. Regarding the concept of digitization, in 1996, the American scholar Nicholas Negroponte’s book *Being Digital* described it as “In this concept of digitization, we live in a virtual space, using digital information technology to complete information communication, learning and working activities” (Nicholas, 1996, p. 1). Alvin Toffler believes that the third wave society is the driving force of our modern life. It is the revolutionary change of digital information technology that has brought about a new social life. They all pointed out that knowledge and information play

an important role in economic and social development, and the era of digital technology has arrived. There are similarities between the formation of digital capital and traditional capital.

In the Capital, Marx argues that money is only a general equivalent, and that it is in the exchange of things for things that general forms of value arise. Therefore, currency expresses general abstract social relations. The exchange of currency does not constitute capital. In Marx's view, the origin of capital is the production link rather than the exchange link, not the commodity capital brought by currency exchange. In this system, the real imbalance is capital. Workers sell their labor to create surplus value for capitalists; the accumulation of surplus value becomes capital. The creation of the body in the digital interface has been popularized. In the economic Manuscript of 1857, "general intelligence" is used to describe the core concept of the development of capitalism. This general intelligence is produced by the artificial labor, which is a kind of non-material labor, and can be tangible or invisible. For the current digital age, we can call it "general data", which is an objective existence, and we can make judgments and choices based on big data. In the age of data, data is valuable. Some investment and consulting companies can calculate these data through cloud to obtain investment guidance. This is the new type of capital, namely "digital capital" (Lan, 2018). This data is provided by search engines, social software, shopping sites, etc., and it's all derived from the traces of our daily lives. Thus it can be seen that digital capital is still the category of capitalism; capitalist countries have entered the "knowledge economy age". These cloud computing data have high economic and use value, but these data are not shared, but occupied by digital capitalists. Digital capitalists effectively use and guide these data to become the top of capital operation.

Fuchs believes that the digital labor on social media is conforms to Marx's labor view, which includes three parts, namely, purposeful activities or labor itself, objects, and materials. The subject transforms the object with the help of materials, objectifies the labor itself in the process of labor, and develops the object into a use value that meets the needs of the subject. An object has use value because it has value, and the essence of value is that it is a social system, which is common to all commodities and is a common factor in the exchange relationship. Exchange value is the manifestation of value. When labor is integrated into an exchange commodity, it can obtain the final surplus value (Cleaver, 2000). Digital labor also has dual factors of specific labor and abstract labor. Internet users create the ideological culture products with significance and value. Platform converts these data into data commodities; the user has the use value of labor. They consumed time in the platform that can count as labor time. Network platform of the capitalist is a dual attributes of customer data and customer profit. The surface looks like the customer can choose their favorite network behavior, but the customer choice is limited within the scope of platform; users cannot establish their own control network. They do not have the ownership of the digital goods; all creation is to produce monetary profits for capitalist (Fuchs, 2010). The capital revise the statistics again behind the social platforms. After Internet users spontaneously express their opinions, their social network behaviors, interests, and browsing behaviors, all these browsing and usage traces will be integrated by big data and sold to advertisers. So advertisers can push relevant information based on the information. Social media and platforms benefit from this. Commercial media obtain value through this behavior of selling user culture and browsing traces. When combining social media together, commercial media purposefully and systematically use advertising to complete the original accumulation of capital.

The current stage of capitalist development is called "transnational information capitalism, which is neither continuous nor discontinuous. It needs to be viewed in a unified way" (Fuchs, 2013, p. 144). Eric Olin Wright believes that it is of great significance to use information society to explain the internal changes of

capitalism. His empirical analysis of the American class structure shows that the expansion of capitalist contradictions brought by information technology in the production process makes the capitalist structure complicated (Wright, 2000). Fuchs pointed out exploitation still exists in the world famous electronic social media such as Facebook, Google, and Silicon Valley. Like the traditional exploitation mode of capitalism, digital capital will not change the nature of exploitation of digital labor. Digital labor is the source of value of digital products and the object of exploitation of digital capital. In order to seize high monopoly profits in the global, capital flows everywhere and is deeply exploited. The combination of human and material factors in the information productive forces cannot be separated from the relations of production, especially class relations. There are cellular factors that replace the present society in the transnational capitalist society. The dialectical relationship between the productivity and production relations is revealed.

The Emergence and Characteristics of Digital Labor

The use of digital technology has brought tremendous changes to lifestyles. It also brought new concept of labor and production, which is non-material labor. The opposite of non-material labor is material labor, which means “the creation of immaterial products, brain or mind work, emotional production and the combination of communications technology and primitive traditional industries” (Hardt & Negri, 2004, p. 475). In Maurizio Lazarato’s “Immaterial Labor”, he showed that manual labor gradually included processes that could be defined as “mental” labor. New communication technologies increasingly required knowledgeable subjects, and capitalist production requires a combination of the two (Li & Ma, 2016).

Non-material labor not only has productive economic value, but also has produce subjectivity. Marc Diani pointed out in “Immaterial Society” that material and immaterial are not opposite. With the development of science and technology, capitalist labor is not only manual labor, but also mental labor (Diani, 1998, p. 3). Because of the tremendous value it brought to capital, the form of labor gradually changes to immaterial labor. This concept was first put forward by Italian autonomous Marxism; they read “Machine Fragments of Marx”; labor time is no longer a measure of wealth. The machine became the means and a way to reduce and shorten the necessary labor time, and became capital, the means by which capital suppressed labor and became independent. The status of knowledge and information in class society is constantly rising, and technology reduces the necessary labor time (Marx, 1998, p. 387). Antonio Negri and Michel Hart, the representatives of Empire, put forward that the form of labor in late capitalism is immaterial labor, and put forward that the revolutionary subject is the “mass”. Negri and Hart systematized the theory of immaterial labor.

Regarding the interrelationship between non-material labor and digital labor, it was originally proposed by American scholar Nicholas Negroponte that in the environment of digital concept, our daily life is developed in a virtual space; all communication and technical exchange development is completed through information dissemination. Digitization is all over our life, and digital labor is inevitably a part of daily labor. Tiziana Terranova, a scholar at the University of Naples in Italy, proposed in “Free Labor: Producing Culture for the Digital Economy”, argues that “in the digital economy era, online social media get free labor from the information posted by the masses of netizens” (Tiziana, 2000, p. 33). Terranova proposes a preliminary definition of digital labor, in which free labor is “voluntary and unpaid, enjoyed and exploited”, and it manifests itself in the different labors performed by digital laborers.

Today’s society is an information society in terms of its productivity factors. As far as production relations are concerned, today’s society is a capitalist society. The production factors and production relations are

interrelated and contain each other. The information elements of productivity and asset accumulation relationship should not be bipolar opposition. The rise of information productivity is intrinsically related to the demand for capital to obtain more profit accumulation through technical means. To a certain extent, it is the inevitable result of the development of capitalism that society has become an information society. This is because science and technology can only become actual productive forces if they are transformed into productive forces, and can be possessed by capitalists free of charge. Then, under the capitalist mode of production, the phenomenon of alienation of digital capital shows new characteristics. The Internet grabs the labor achievements of online users' labor, and it can be absorbed on a global scale without consuming human power. The users of digital labor have the independent characteristics of subjectivity and social autonomy. This feature is different from the traditional hired laborers. Users can express their ideas freely on the network platform and contact and communicate in the virtual space.

Different from the traditional labor, digital labor has two major characteristics, namely, the duplication of digital workers' identity and the diversity of digital labor places. In "User-Generated Content, Unpaid Labor, and the Cultural Industry", David Hirsmondev (2010) analyzes autonomous Marxists and other unpaid labor. Analyzing the new forms of social labor, the constant change of digital capital will blur the distinction between worker, author, and citizen. Digital workers are often authors of the end market, but the real author has been alienated. The identity of digital workers is complicated, and they are no longer simple hired workers. In *Digital Labor: The Internet as Both Playground and Factory*, Trebo Scholz (2012) studies the digital workplace. In addition to traditional wage labor, the Internet also includes free labor that blurs leisure time and work time. When users cannot feel it at all, the Internet closely connects play and labor.

Mohammed Kazerang argues that Marxist labor theory began to apply the era of collaborative computer-mediated communication beyond the traditional factory industry. Jeremy Arose proposes that Marx's theory provides a new interpretation of the new forms of employment, exploitation, and alienation that arise in the digital infinite economy. This new form of labor not only brings about exploitation and alienation, but also takes place in an infinitely expanded and unlimited place. Jeremy Aroles (2014, p. 144) proposed that Marx's theory has a new way of interpreting the new forms of employment, exploitation and alienation generated in the digital immeasurable economy. This new form of labor has not only brought about exploitation and alienation, but the location of occurrence has also expanded infinitely and without restriction.

Capital's Full Exploitation of Digital Labor

Digital labor has become an important part of today's information network media era. Under the social background of transnational information capitalism, capitalist labor has always been exploited. The exploitation of digital labor conforms to the four provisions of Marx's labor alienation. Its forms of exploitation are also divided into two types, namely, the exploitation of relative surplus value and the exploitation of absolute surplus value. However, due to the new forms of digital labor and digital capital, the way, place, and time range of exploitation are different from traditional labor exploitation.

The first is the ambiguity of working time and rest time. The most common form of exploitation is that users generate a large amount of data on different platforms. These data are occupied by large companies. They process the data and then push advertising and other messages to users based on the processing of the data, prompting consumption. For the labor subject and labor form of digital labor, there are also differences from traditional labor. The main body of labor is not only the industrial industry in the traditional sense, but also

includes the users of information networks. There are huge differences in working hours and working places. Working hours and rest periods are more blurred, and users' unpaid digital labor. It is done in the context of "playing". With the development of the social era, the development of online games has blurred the concepts of play and labor. Dallas pointed out from the perspective of Marxist labor and labor reproduction that people's leisure time is absorbed into labor in the traditional media era. In the modern digital information age, people get a sense of existence and accomplishment from the virtual game world, and they become a part of capital production.

When Julianne Kukridge was studying the production of online games, he found that a lot of players would provide suggestions for designers and game companies in public interface game forums and other aspects for a better game experience, and propose modifications. However, these game modified copyright does not belong to gamers, but still belongs to game companies, which invisibly exploits labor producers.

Secondly, the expansion of the scope of labor locations, the existence of information and digital technology in all aspects of society, makes it impossible to clearly define the occurrence of digital labor, such as hunting in the Indian software industry. "Hunting" (Aneesh, 2000, p. 3) refers to the material practice of obtaining work visas for Indian programmers and brings them to the United States for on-site work. This is a uniquely Indian practice of recruiting IT programmers around the world through Indian consulting firms. This kind of "hunting" allows any Western company to cut and hire their workforce at will, bringing in staff when they need them, and saving them the long-term benefits of permanent staff. Moreover, according to different needs, labor can be carried out in different time zones; work locations can be globalized, and through the convergence of time to maximize the completion of software development and testing. In such "hunting", Indian programmers are sold as commodities to wherever ICT capitalists need them, and they fully serve the interests of capitalists. In this way, the labor force becomes an exploited, decentralized, and isolated force, unable to form an effective union against capital. The lack of effective self-insurance capabilities directly leads to cheaper labor, which reduces wage costs and maximizes benefits. Because they do not have long-term benefits, they are highly uncertainty and mobility, and are called "high-tech nomads" (Upadhyya & Vasavi, 2008).

The uneven development of ICT industry is magnified by the production of Indian software engineers. Capitalists gain greater capital accumulation through value export, which is a new imperialist partition. They pillage the technological knowledge economy of India and other countries in the southern hemisphere by being the powerhouse of huge financial capital. Most Indians today cannot receive the "products of the new elements of the information society" that exist in the Indian software industry. This new type of exploitation is the capital through the output to the relative lack of material, wages, raw material cost of regions and countries, to the local economy to foreign capital control, the implementation of information technology of colonialism labor exploitation, dedicated to the worldwide activities of the lowest cost, to obtain higher profit to complete capital accumulation.

In the current form of capitalist development, the new production mode of labor makes the production of surplus value and capital accumulation manifest as symbolic, invisible digital labor in the form of information goods and services. The application of digital information has made digital labor an important means of capital accumulation and commodity production. Digital labor has regulated capital and power on a transnational scale. Under the background of transnational capitalism, Marx's theory of labor criticism is used to analyze the

development and change of labor in the digital age, and further clarify the differences between digital labor and traditional forms of labor exploitation, so as to criticize labor in the digital age.

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