

Digital Capitalism and Its Contradictions: Capital Accumulation, Labor Exploitation, and Alienation

Mengdi Wang*, Wenzhe Hao

Department of History, Fudan University, Shanghai, China

**Corresponding Author*

Abstract: This article examines how digital technologies are reshaping capital accumulation, labor exploitation, and human alienation under contemporary capitalism. It argues that digitalization expands the domains of valorization by commodifying knowledge, experience, attention, and data, while accelerating capital turnover through the compression of time and space. Data-driven forecasting and customized production further improve the coordination of supply and demand, reduce inventory risks, and enhance the efficiency of accumulation. These gains, however, are accompanied by intensified forms of domination. Platform users perform unpaid activities that generate traffic and facilitate the redistribution of surplus value, while algorithmic management, automation, and digitally mediated competition extend working hours, increase labor intensity, and blur the boundary between work and everyday life. Digital technology therefore functions not merely as a productive force but also as an infrastructure of control that deepens workers' dependence and alienation. Yet capital does not exercise sovereign command over technological development. As digitalization advances, the tension between private appropriation and increasingly socialized production becomes more pronounced. The article concludes that technology-enhanced accumulation does not resolve capitalism's structural contradictions; instead, it amplifies them and thereby exposes the historical limits of the capitalist mode of production.

Keywords: Digital Labor; Capital Valorization; Exploitation; Alienation; Contemporary Capitalism

1. Introduction

The 1990s saw the rise of fast developing digital

technologies. It was widely expected that such technological progress would allow people to work less laboriously and to gain better personal dignity. Yet the realities of work have developed in a much harder direction. The "996" schedule and work culture represents a clear hardship upon those laboring. Ubiquitous big-data systems constantly bring the feeling of being monitored or steered. While computers and smartphones appear to increase people's cultural and intellectual lives, they in truth bind and constrain people. Such developments reflect the appearance of new economic forms within a digital age of capitalism. These challenges to established theories of value and alienation and exploitation within industrial production form the subject of this article.

2. Capital Valorization in the Digital Age

Science holds a wonderful talent to alter how people create things, starting from the change from small hand mills to large mechanized factories and moving to the modern digital time with automated creation. When capitalism uses science and technology, these tools become very strong for increasing wealth, which is most clear in the digital world today. The new digital technologies have created a fresh place for wealth building. Because these digital tools were built, the value of information has become much higher, and people's thoughts, experiences, and skills now have a more important spot in what is produced. Many scholars put this work into the group of immaterial labor, which includes creating knowledge, data, talks, and feelings. In the platform economy, these unseen results are used to find the worth of things: digital workers help change social rules, how people like things, and what the market wants, while digital systems turn knowledge and talks into ways to gain wealth. Therefore, the area of gaining wealth has grown from physical making to include the digital world of thought, culture, and social actions. [1]

Beyond this, digital technologies help products and wealth to move without being limited by space or time, which makes the movement faster and reduces the waiting time for wealth. When wealth is in a digital format, it travels as fast as electricity, and how products are sold seems like small changes in electrical power or numbers. Different from the uniform large production of Fordism, gathering, looking at, and using lots of data is making production much smarter, more specific to each person, and more accurate. [2] This change happened because people wanted unique things to buy. Online shopping sites and social media pages watch, gather, and sort what people do and like when they look at things. People themselves now look through options more before they pick something to buy. [3] This special making of products and matching supply to demand helps fix the lack of seeing what will sell that was common in large productions. Because of this, companies can handle their tools and items with more care, which lowers the chance that value will not be seen. With smart control using data, factories can work very fast without making many things that do not sell. The speed of gaining wealth grows a lot when this is done.

3. Exploitation and Alienation under Contemporary Capitalism

Many scholars observe that contemporary capitalism continues using digital technologies to increase the burden placed upon workers while making people feel more isolated. Recent investigations have discovered that these digital controls frequently lead to a situation where individuals earn low wages, experience loneliness, work late hours and on holidays, and suffer from a lack of sleep and extreme fatigue. [4] Because digital technology becomes a tool of capitalism, digital technology gains a complicated nature. It has been seen that digital technology represents more than just a mechanical tool for growth. Algorithms allow for the constant management, scoring, and punishment of workers. Specifically, these algorithms can assign tasks by limiting what people do and suggesting activities, score individuals by logging their performance and assigning grades, and provide rewards or dismissals to guide behavior. [5] Compared to the old types of machinery, digital technology possesses a stronger power to organize work and has become a primary way to increase workload,

tighten control over the working environment, and generate more profit.

Different from the workers in factories of the past, digital technology has created fresh areas for activity that include how people gather and sort knowledge. Experts argue that this kind of digital work can earn money without any pay, making it a type of free labor. [6] The activities performed on digital platforms are exceptionally hidden from view. This work is not seen clearly or identified as work by the people who use it. Social media sites like Facebook and YouTube offer places for people to talk and share videos. Large groups of people are often attracted by the videos people share, which brings attention to the sites and benefits the businesses. Despite this, no money is ever sent to the people who make these videos by the platforms. It is often felt by users that they are lucky to have a free place to show themselves and speak their minds.

The idea that these free activities are directly taken advantage of should not be assumed. Instead, the companies that run these platforms help move and keep money earned by other businesses while the things users make mainly serve to attract people to the site. For this process to be understood, several points need to be made clear. Digital work happens because people use their minds and bodies when they use the internet and digital systems. This is not the kind of work that a business owner buys or that happens in a paid job. Current academic writing advises against calling regular use of these sites actual work that produces things. User data is not valuable by itself; this information becomes useful only when educated workers organize it and change it during the production process. Direct taking of profit occurs when a company buys working effort and uses it to create something, rather than just having people use a platform. [7] Digital work of this kind is seen as a type of unproductive work because even though users make data by looking at pages or posting, they do not use this data to make things they own. They also do not create new value inside the employment structure created by the platform owner.

The money earned by social media and search engine websites ultimately comes from the effort of people who made the products sold on the site, not from the effort of those who use the site. [8] It is well known that these platforms use user data to get ads and sell items. The money the platform makes shows mostly how value already

created in other places is taken and moved, rather than how users make new value. Research claims that the money these sites make should be thought of as rent and taking of value. [9] Although what platform users do looks like unpaid digital work, this does not mean it should be called productive labor. Users post things and speak their minds on their own free will, so there is no employment contract. All these reasons suggest that people who use digital platforms are not directly taken advantage of by the platform itself. The people who use these sites help expand the way other businesses take profit, and the platform provides the tools for this to happen while taking a part of the money.

Aside from this hidden and indirect way of getting profit from digital tools, a more open type of exploitation happens when the power balance between owners and workers grows unequal as digital technologies are used more. This exploitation leads to an increase in workload for people who do not feel like they can stop it. Recent research on constant connectivity shows that digital technologies enable work to extend into nonwork time, making the boundary between professional and private life increasingly difficult to maintain. Although such connectivity may offer greater flexibility, organizational norms and expectations can encourage employees to remain available after working hours and on weekends. Digitally mediated work therefore exposes rest and private life to recurring occupational demands while shifting much of the responsibility for maintaining boundaries onto workers themselves. [10] Excessive labor in pursuit of surplus value already existed in the era of large-scale mechanized industry. Yet because its brutality was readily visible, socially unacceptable, and likely to provoke forceful resistance, its duration and intensity were ultimately constrained.

Under digitally driven production, however, large numbers of jobs are displaced, employment conditions deteriorate, and competition intensifies. Legal regulation may appear to limit working hours - even approximating the ideal of the eight-hour day - but formal limits do not necessarily meet workers' material needs. A worker who restricts labor to eight hours may be placed at a considerable disadvantage in employment competition, while unemployment entails the loss of wages and thus of the material basis of survival. Workers are therefore

compelled to enhance their competitiveness through such practices as voluntary unpaid overtime and continuous skill improvement, thereby extending working time and increasing labor productivity. Both absolute and relative surplus value increase, and exploitation intensifies accordingly. Digital technology also enables exploitation to transcend spatial and temporal limits. Even though workers do not choose to work overtime, onerous tasks can be transmitted through digital communication technologies - thus blurring the distinction between working and personal time. Work does exist during formal working hours, but it can also permeate other aspects of life and leisure. All of these factors contribute to the extension of working time beyond the worker's control or intention. Such extension is not caused solely by capital command, but rather due to the continued development of digital technology. The result is greater exploitation of workers.

The other side of this form of exploitation is human alienation. The most conspicuous element of this is how both users and workers are subjected to control through platforms and technologies. The traditional sense of alienation from the products of labor exists and even grows. With the merging of work and life, workers become even more deeply alienated from vital activity. Recent research points to four related dimensions of alienation within algorithmic work: estrangement from the product, from laboring activity, from human creative capacities and other workers. [11] All prior analyses show workers losing their independence to data and technology. The condition of workers may even be more extreme than that of the distorted, mechanized worker in "Modern Times," who is merely doing the same thoughtless task.

4. The End or a New Phase? The Future Trajectory of Contemporary Capitalism

Digital technology represents a major instrument of capitalist expansion because capital gains increased efficiency in valorization and strengthened control over labor and human alienation. Using big data and artificial intelligence, capital improves the prediction, guidance, and control of production, consumption, and labor performance. This technological advantage consolidates the dominant position of capital within employment relations. As Kellogg and her colleagues observed, algorithmic systems "tend to give

employers disproportionate access to key resources in the workplace.” [12] Under such employment conditions and quantified evaluations, workers are drawn into a self-reinforcing spiral of competitive overwork - commonly described as “involution.” Both the extension of working time and intensification of labor are presented as natural outcomes - individual choice or market competition - that hide exploitation.

Digital control and depersonalization effectively prevent workers from voicing objections or undertaking collective action. Yet the capabilities afforded by digital technology did not eliminate capitalism’s internal contradictions. In fact, such continued expansion of capital accumulation can bring those contradictions into even sharper relief. As Harvey noted, under certain conditions, “the contradictions become more obvious. They sharpen and then get to the point where the stress between opposing desires feels unbearable.” [13] The more that digital capitalism demonstrates its formidable capacity for valorization and control, then the more fully its structural contradictions - relating to expanded production vs effective demand, technological progress vs labor displacement, and capital concentration vs social inequality - will be exposed.

On the one hand, capital accumulation and the expansion of production encourage business organizations to move beyond the traditional model of direct management by individual owners toward joint-stock ownership, corporate organization, and professionalized management. This historical tendency has assumed a more institutionalized and financialized form in contemporary capitalism. As Drobotz et al. observe, “Institutional investors are increasingly shaping global capital markets and corporate governance through growing ownership, increased shareholder activism, and rising passive investment strategies.” [14] The socialization of production has therefore not simply eliminated private ownership. Rather, ownership is dispersed among large numbers of shareholders while effective managerial control is concentrated in the corporate entity and its professional managers. Historically, from the expansion of joint-stock companies in the late nineteenth and early twentieth centuries to the rise of large corporate enterprises and institutional investors after the Second World War, private capital ownership has been

repeatedly reorganized and institutionalized. At the same time, states have become more deeply involved in capital allocation through full ownership, controlling and minority equity stakes, and policy-based finance, producing plural ownership structures in which state and private capital are intertwined.

Research distinguishes among models in which the state acts as the sole owner, majority investor, minority investor, or strategic supporter of firms. [15] This historical development is therefore more accurately understood as the relative weakening of private capital’s direct managerial function, the growing separation of ownership from control, and the increasing socialization of production management, rather than as the straightforward replacement of private appropriation by social ownership.

On the other hand, although exploitation under contemporary capitalism has intensified, it also displays a tendency to escape direct control. Put differently, the immediate impetus behind this intensification increasingly comes from digital technology rather than from capital alone. Capital can certainly use digital technology to make exploitation more convenient and less visible. Viewed from another angle, however, capital is also compelled forward by technological development: changes in the sphere and organization of production oblige capital to adjust its methods of management and exploitation. The scope of such adjustment is nevertheless limited, for advanced technologies - above all digital technologies - may eventually develop beyond capital’s capacity to command them. Consider intelligent production. The collection of demand data remains confined to standardized, programmatic categories that lack individual lived experience.

The result is the paradox that users must be told what they themselves prefer. Demand represented in data form is therefore partially distorted and may mislead producers; this is simply the blindness of production in a different guise. Furthermore, whereas competition formerly centered on meeting actual user demand through cost, quality, price, and customization, it now increasingly encompasses the collection and even the construction of demand. Actual needs become progressively less important than capital’s capacity to tell users what they want, convince them that the need is real, and induce otherwise unnecessary consumption so that capitalist output can be

absorbed. Data-driven demand construction and recommendation systems confine users to fixed circles while simultaneously binding producers. When the fight moves away from making goods to creating a desire for them, platform capital gets stuck in a loop that doesn't go anywhere. At this time, trying to fix things will not work because the financial system is going toward its end.

5. Conclusion

Capitalist exploitation does not come from technology alone but from how humans relate to each other while creating, owning and using technology. Digital technologies could make working time shorter, give humans more abilities and create the foundation for social connections. However, when a small group owns everything and tries to grow their money, these freeing possibilities are controlled by the need for profit. Workers are pushed out by automation even while the fighting among them grows. Social interactions are changed into data for the platforms, and managers can control workers even outside of the office. Technology appears to be a force that controls how people produce things and their daily lives. This process hides the social connections that are part of how technology is made and used. It is at this moment that technological fetishism appears. Yet, this connection holds a conflict within itself. The more that capital relies on shared knowledge, data and efforts, the less those productive forces match with individual ownership or strict control. Technologies made to help capital gather more money may reveal the lack of logic and the historic limits of the social structures that control them. The technology seen as a promise of new life for capitalism might destroy the factors that allow capitalism to continue. Even though liberation will not happen by itself because technology advanced, society has to take control of technology in a democratic way and change its purpose toward less repetitive tasks and more human freedom.

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