

# Critical Perspectives on Digital Capitalism: Theories and Praxis. Introduction to the Special Issue

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**Abstract:** Digital capitalism matters. Digital capitalism shapes our lives. Digital capitalism needs to be better understood. We need critical theories of digital capitalism. We need to better understand praxes that challenge digital capitalism and aim at fostering digital democracy and digital socialism. tripleC's special issue on "Critical Perspectives on Digital Capitalism: Theories and Praxis" wants to contribute to establishing foundations of critical theories and the philosophy of praxis in the light of digital capitalism. This article introduces the topic and provides an overview of the special issue.

**Keywords:** digital capitalism, digital labour, class, domination, democracy, public sphere

## 1. Why the Analysis of Digital Capitalism Matters

Facebook and Google exploit our digital labour. That's digital capitalism. In late 2022 and early 2023, Google laid off 12,000 employees, Microsoft 10,000, Twitter more than 10,000, Amazon 18,000, and Facebook 11,000. That's digital capitalism. Algorithms are used by corporations for socially sorting and discriminating against customers who struggle to make ends meet and live in deprived neighbourhoods. That's digital capitalism. Lots of clickwork is conducted by poorly paid women in the Global South. That's digital capitalism. Digital fascism, fake news, post-truth culture and algorithmic politics circulate on capitalist and state-capitalist Internet platforms. That's digital capitalism. Information war and echo chambers polarise the digital public sphere, making a new World War between imperialist powers that compete at the global level for the control of territory, economic power and political as well as ideological hegemony and the nuclear annihilation of humankind and life on Earth more likely. That's digital capitalism.

Recently, digital workers assembling iPhones protested against the poor working conditions they faced at Foxconn in Zhengzhou during the COVID-19 pandemic. That's a praxis that challenges digital capitalism. In 2021, warehouse workers founded the Amazon Labor Union. That's a praxis that challenges digital capitalism. The non-profit federated Internet platform Mastodon has become a viable digital alternative in the light of users' discontent with Elon Musk's takeover of Twitter. That's a praxis that challenges digital capitalism. Internet experts and users have co-written the Public Service Media and Public Service Internet Manifesto that demands turning the Internet into a public good and advancing digital democracy. That's a praxis that challenges digital capitalism. While fascists spread post-truth on social media, the progressive news hour

Democracy Now! has since 1996 utilised the non-commercial Internet, Public Service Media, as well as community radio and television stations for broadcasting a high-quality, independent news programme that reaches millions of viewers and questions fake news. That's a praxis that challenges digital capitalism.

Digital capitalism matters. Digital capitalism shapes our lives. Digital capitalism needs to be better understood. We need critical theories of digital capitalism. We need to better understand praxes that challenge digital capitalism and aim at fostering digital democracy and digital socialism. tripleC's special issue on "Critical Perspectives on Digital Capitalism: Theories and Praxis" wants to contribute to establishing foundations of critical theories and the philosophy of praxis in the light of digital capitalism.

## 2. The Analysis of Knowledge and Digital Media in the Critique of Political Economy

In Marxist theory and the Critique of Political Economy, there is a long history of the analysis of knowledge in capitalism that goes way back to Marx. We can here not cover and reflect on this history properly, but merely mention some examples.

In the *Grundrisse*, Marx argued that the "development of fixed capital indicates to what degree general social knowledge has become a *direct force of production*, and to what degree, hence, the conditions of the process of social life itself have come under the control of the general intellect and been transformed in accordance with it" (Marx 1857/1858/1993, 706). Marx anticipated the rising importance of knowledge in production as a consequence of the development of the productive forces. In his study of the *Grundrisse*, Roman Rosdolsky comments that Marx here foresaw "the development of machinery as an automatic system" and stresses that emancipation from exploitation requires "that the development of machinery" facilitates the "radical reduction of working time" as the foundation of "the abolition of class society" (Rosdolsky 1977, 243). Rosdolsky highlights that Marx analyses the antagonisms of technology in capitalism.

In debates on democratising socialism, Radovan Richta (1969/2018) at the time of the Prague Spring stressed that democratic socialism needed the use of computers as one of its material foundations. In this context, he coined the notion of the scientific and technological revolution. He argues that science and technology have become key productive forces, which reflects Marx's insights in the *Grundrisse* about the general intellect: "New productive forces, first and foremost *science* and its application in technology, are entering the production process on all fronts, and with them goes the base of all scientific activity – social integration and finally the growth of human capacities that underlies all creative activity. [...] Science is now penetrating all phases of production and gradually assuming the role of the central productive force of human society and, indeed, the 'decisive factor' in the growth of the productive forces" (Richta 1969/2018, 26, 28).

On the one hand, Richta stresses that the scientific and technological revolution has been embedded into the dialectic of capitalism's continuity and discontinuity: "Some people believe that capitalism has undergone a complete regeneration, others are loath to admit any substantial modification. The reality is, however, more complicated. In its social and class basis, capitalism has not changed, but there has been a substantial change in the conditions under which the self-expansion of capital can and is taking place; this imposes a new relationship to the productive forces, and important innovations throughout the reproduction process" (Richta 1969/2018, 62). On the other hand, he points out computing's and the scientific and technological revolution's potentials to act as the material foundation of democratic socialism: "The new status of

science in society and the approaching shift of revolutionary strivings to new domains are coming to the fore: the economics of human resources assumes new significance, new conditions present themselves for shaping the socialist way of life and there is a growing need to solve the difficult problem of participation in civilization, to develop democratic forms of social life and so on" (Richta 1969/2018, 19).

Since the 1950s, there have been Marxist theory debates on computer-based automation in capitalism. Contributors have included, for example, Friedrich Pollock (1966), Harry Braverman (1974), Projektgruppe Automation und Qualifikation (1975, 1987), André Gorz (1982), David Noble (1984), and many others. Whereas some have expected that computer-based automation will bring about the end of work, which has been interpreted as either the rise of post-scarcity socialism or mass unemployment and de-qualification, others have argued that new jobs and skills are emerging. Similar debates are underway today in the context of AI-based automation (Butollo and Nuss 2022; Steinhoff 2021; Srnicek and Williams 2015).

Let us briefly mention one of the Marxist works on automation. André Gorz (1982) says that "post-industrial society" (81) has transformed capitalism and that computer-based automation has "eliminated most skills and possibilities for initiative" (28) and is "in the process of replacing what remains of the skilled labour force (whether blue or white collar) by a new type of unskilled worker" (28) so that a post-industrial neo-proletariat has emerged. He sees automation as antagonistic and, therefore, argues that it has brought about potentials for abolishing the proletariat and capitalism and establishing what he terms a "post-industrial socialism" (82) where "the time spent on heteronomous labour is to be reduced to a minimum" so that "the mass of socially necessary labour" is "distributed among the population as a whole in such a way that the average working day reduced to a few hours" (101) and there is the "abolition of work" along with "the development of autonomous activity" and the "liberation of time" (2).

Although again and again criticised for various reasons, it cannot be denied that the books by Michael Hardt and Antonio Negri have given an important impetus to Marxist theory, also concerning the analysis of computing and digitalisation. In *Empire*, Hardt and Negri (2000) argue that a "postmodern capitalism" (397) has emerged that is shaped by the dominance of what the two authors term "immaterial labour", a notion they base on Marx's concept of the general intellect (29): "The central role previously occupied by the labor power of mass factory workers in the production of surplus value is today increasingly filled by intellectual, immaterial, and communicative labor power" (29). Immaterial labour, according to Hardt and Negri, has three key features: "the communicative labor of industrial production that has newly become linked in informational networks, the interactive labor of symbolic analysis and problem solving, and the labor of the production and manipulation of affect" (30). In this age of immaterial labour, the proletariat is not limited to industrial labour but exists all over society, which includes many realms of non-wage-labour. "*In postmodernity the social wealth accumulated is increasingly immaterial; it involves social relations, communication systems, information, and affective networks. Correspondingly, social labor is increasingly more immaterial; it simultaneously produces and reproduces directly all aspects of social life. As the proletariat is becoming the universal figure of labor, the object of proletarian labor is becoming equally universal. Social labor produces life itself*" (258).

Building on Negri and other works in Autonomous Marxism, Nick Dyer-Witheford (1999) in his book *Cyber-Marx* argues that computing and the Internet are at the heart of what he terms "a post-Fordist, postmodern, informational capitalism" (7) that is highly antagonistic and has new potentials for "the common sharing of wealth" (2) and "an information-age communism" (13). In the Autonomous tradition, various authors

have spoken of the emergence of cognitive capitalism (Moulier-Boutang 2011; Vercellone 2007). Vercellone (2007, 16) understands cognitive capitalism as a stage of capitalist development where the “relation of capital to labour is marked by the hegemony of knowledges, by a diffuse intellectuality, and by the driving role of the production of knowledges by means of knowledges connected to the increasingly immaterial and cognitive character of labour”. For Moulier-Boutang (2011, 56-57), cognitive capitalism is a “system of accumulation, in which the accumulation is based on knowledge and creativity, in other words on forms of immaterial investment. [...] By cognitive capitalism we mean, then, a mode of accumulation in which the object of accumulation consists mainly of knowledge, which becomes the basic source of value, as well as the principal location of the process of valorisation”.

This short discussion that could be further extended indicates that the *tripleC* special issue “Critical Perspectives on Digital Capitalism: Theories and Praxis” stands in a rich tradition of Marxist theory where a multitude of concepts focused on knowledge and capitalism such as the general intellect, the scientific and technological revolution, post-industrial capitalism, post-industrial socialism, immaterial labour, cognitive capitalism, etc. have been coined. One can, of course, spend lots of time engaging with and criticising each of these concepts. The important point is, however, that within Marxist theory, a theoretical and analytical strand has emerged that is focused on the roles that knowledge, communication, media, digital media, and digital communication play in and beyond capitalism. This special issue is a contribution to this type of Marxian analysis and theory construction.

### 3. The Notion of Digital Capitalism

Why do we as editors of this special issue suggest the use of the term “digital capitalism”? Aren't there other, better concepts? There is indeed a multitude of critical concepts that theorise and analyse the role of digital communication in capitalism. On the one hand, they include notions such as data capitalism, platform capitalism, high-tech capitalism, informatic capitalism, cybernetic capitalism, media capitalism, cyber-capitalism, or virtual capitalism. On the other hand, there are notions such as cognitive capitalism, knowledge capitalism, semio-capitalism, communicative capitalism, intellectual capitalism, or mental capitalism.

The first series of notions is focused on technological structures, i.e., objects. In contrast, the second series of notions is focused on ideas and culture, i.e., subjectivity. Primarily employing one of these terms therefore tends to solve the social theory problem of what roles structures and practices play in society in favour of either objects (structures, technologies) or subjectivity (ideas, practices). There is, however, a dialectic of structures and practices: Structures condition, enable, and constrain practices that result in the production and reproduction of social structures that again condition, enable, and constrain practices that again produce and reproduce structures, etc. *ad infinitum*.

The notion of “digital capitalism” is not automatically superior to any of the concepts just mentioned. They all have in common that they analyse the continuities and discontinuities of contemporary capitalism in a dialectical manner. In the public and academic debate, the notions of digital labour and digital capital have become relatively widely used in the past fifteen years. The notion of the “digital” in the context of critical analysis therefore has gained a dual, dialectical meaning. It is neither just focused on structures, technologies, and objects nor just focused on practices, humans, and subjects. In the context of capitalism, it rather has both a more subjective and a more objective connotation. Therefore, the notion of digital capitalism is suited to ground a

critical-dialectical analysis that allows us to understand the dialectics and antagonisms of digital objects and digital subjects, digital capital and digital labour, digital technologies and digital knowledge, etc. (Fuchs 2022).

Dialectical thought stresses the simultaneous identity and difference of phenomena, which creates tensions that drive development. One important tension in society is the one between the economic and the non-economic. We use the terms capitalism and digital capitalism not just with respect to the economy, i.e., (digital) production, (digital) distribution, and (digital) consumption. Rather, capitalism is a societal totality, a societal formation (*Gesellschaftsformation*) where the economic and the non-economic, exploitation and domination, class and identity, etc. stand in dialectical relations. Digital capitalism is the digital dimension of capitalism conceived as a societal formation (Fuchs 2022).

We use the following working definition of digital capitalism:

“Digital capitalism is the dimension of capitalist society where processes of the accumulation of capital, decision-power, and reputation are mediated by and organised with the help of digital technologies and where economic, political, and cultural processes result in digital goods and digital structures. Digital labour, digital capital, the digital means of production, political online communication, digital aspects of protests and social struggles, ideology online, and influencer-dominated digital culture are some of the features of digital capitalism. In digital capitalism, the accumulation of capital and power is mediated by digital technologies. There are economic, political, and cultural-ideological dimensions of digital capitalism. Digital capitalism is an antagonistic dimension of society, a dimension that stands for how the economic class antagonism and the social relations of domination are shaped by and shape digitalisation” (Fuchs 2022, 312).

#### 4. Overview of the Special Issue

The special issue gathers 14 articles and is divided into four sections: (1) Theorising Digital Capitalism; (2) Digital Labour and Class; (3) Domination in Digital Capitalism; and (4) Democracy, Public Sphere and Digital Capitalism.

##### 4.1. Theorising Digital Capitalism

In the opening piece to the special issue, *Christian Fuchs* presents foundations of a critical theory of capitalism. He argues for defining capitalism not merely as economy and not as culture but as a formation of society (*Gesellschaftsformation*) and builds a concept of digital capitalism on such an understanding of capitalism. He engages with Nancy Fraser’s concept of capitalism, some existing concepts of digital capitalism as well as related concepts, namely informational capitalism (Manuel Castells), surveillance capitalism (Shoshana Zuboff), and platform capitalism (Nick Srnicek). The paper also discusses the relationship of violence and digital capitalism, which is of particular importance in an age where a new world war has become more likely.

*Jodi Dean* argues that communicative capitalism is becoming neofeudal. The winner-takes-all principle of communication networks and platforms has brought forward a few tech billionaires (tech lords) who control the platforms and many precarious workers who depend on these platforms (proletarianised serfs). In an ecosystem where platforms only provide the digital infrastructure mediating interactions, “capital accumulation occurs less through commodity production and wage than through services, rents, licenses”.

*Friedrich Krotz* theorises digitalisation with the help of Marxist scholars such as Alfred Sohn-Rethel and contextualises the computer in the mental and physical division of labour. He describes the computer as a machine that is different to humans and thereby contributes to the further development of critical humanism. The article concludes with possibilities of a different digitalisation that serves humanity and not capitalism.

*Maïa Pal and Neal Harris* introduce McKenzie Wark's concept of 'vectorialism' as an "entirely new mode of production" currently developing. The authors question Wark's focus on the mode of production methodologically drawing on arguments of E. P. Thompson and Political Marxists. Using the example of undersea cables, Pal and Harris show that "the contemporary use of infrastructure space remains consistent", concluding "that capitalism is unlikely to be displaced any time soon".

#### 4.2. Digital Labour and Class

By focusing on high-skilled tech workers in the software industry, *Helene Thaa, Mirela Ivanova, Felix Nickel, Friedericke Hardering and Oliver Nachtwey* investigate the subjective interpretation of work in digital capitalism. While software workers hold strong claims towards their work and advance an ethos of the good technology, they simultaneously consider technology as a natural and autonomous force. Software workers thus capture a contradictory position between the critique and legitimation of digital capitalism.

*Jasmin Schreyer* presents and contrasts two case studies of German bike couriers. While the workers at the multinational food delivery corporation are confronted with mistrust and algorithmic management, the couriers of a local co-operative tend to describe their work as communicative, trustworthy and self-determined. By providing rich insights from qualitative interviews, the study walks a tightrope between platform capitalism and platform co-operativism.

*Anthony Fung, Wei He and Feier Chen* conduct an ethnographic study on "intern labour". They see this work of mostly undergraduate or postgraduate students as a new form of labour exploitation introduced by high-tech companies in China after their economy shrunk due to the pandemic. This "process by which the new generation is induced to accept a much more precarious economy [...], yet is able to nevertheless survive" is coined "involution" in contrast to "revolution".

*Petter Ericson, Roel Dobbe and Simon Lindgren* analyse a set of academic publications of Critical AI Studies, a field that has been growing in recent times. The study shows that concepts such as class and capitalism only play a role in a distinct niche of the field, while the engagement with race and gender are more broadly presented. The authors argue for an integrative approach that brings together feminist, anti-racist and anti-capitalist struggles within critical AI research.

*Max Haiven, Graeme Webb, Sarah Olutola and Xenia Benivolski* – a team of scholars, creative writers and curators – provide a preliminary report about the "Worker as Futurist" project. The project subversively turns upside down the notions of dystopia and utopia in and beyond digital capitalism. Building upon worker's inquiry, rank-and-file Amazon workers were asked to write short science fiction stories about "the world after Amazon". The authors contextualise the project and reflect on what they have learned from the participants.

#### 4.3. Domination in Digital Capitalism

*Sébastien Shulz, Mathieu O'Neil, Sébastien Broca and Angela Daly* research how the greening of digital commons works in theory and daily practices of three initiatives in

France. The authors found several constraints for the initiatives to “become a viable ecological alternative to digital capitalism” and suggest defeating those by using E.O. Wright’s anticapitalist strategies framework.

*Stefania Animento* analyses how racism and digital capitalism are interrelated. Drawing on marketisation and racialisation approaches, the author researches the situation of Uber drivers in Berlin. Animento finds “that platforms organize the mobility of racism along their infrastructures”, making racism “infrastructural”.

*Paul Obi* researches digital capitalism in Africa focusing on Nigeria as the biggest economy of the continent. Using the example of Silicon Valley Big Techs, the author shows that prosumer capitalism can be understood as a new form of colonialism with a strong state-corporate interrelationship.

#### 4.4. Democracy, Public Sphere and Digital Capitalism

*Charli Muller* engages with the writings of Rosa Luxemburg and her understanding of infrastructures (means of transportation and communication) and applies it to contemporary debates around the public ownership of the Internet. Just as Luxemburg considers infrastructural state investments mainly as an expansion of capitalist accumulation, Muller warns us that calls for the public ownership of the Internet are only progressive if they are situated in a broader anti-capitalist political programme.

In the closing piece to the special issue, *Elisabeth Korn and Jens Schröter* criticize Fuchs’, Unterberger’s and Habermas’ calls on restructuring the public sphere as “implicitly based on the assumption that a technology that emerged in capitalism can be used for different, even contradictory, purposes”. Instead, they argue, that the very notion of democracy has to be re-evaluated beyond representative democracy.<sup>1</sup>

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<sup>1</sup> A debate between Korn/Schröter and Fuchs about democracy, public service media and capitalism will be hosted in a future issue of the journal.

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