

DIGITAL CAPITALISM

MEDIA, COMMUNICATION AND SOCIETY VOLUME THREE

CHRISTIAN FUCHS



Digital Capitalism

This third volume in Christian Fuchs's Media, Communication and Society book series illuminates what it means to live in an age of digital capitalism, analysing its various aspects, and engaging with a variety of critical thinkers whose theories and approaches enable a critical understanding of digital capitalism for media and communication.

Each chapter focuses on a particular dimension of digital capitalism or a critical theorist whose work helps us to illuminate how digital capitalism works. Subjects covered include: digital positivism; administrative big data analytics; the role and relations of patriarchy, slavery, and racism in the context of digital labour; digital alienation; the role of social media in the capitalist crisis; the relationship between imperialism and digital labour; alternatives such as trade unions and class struggles in the digital age; platform co-operatives; digital commons; and public service Internet platforms. It also considers specific examples, including the digital labour of Foxconn and Pegatron workers, software engineers at Google, and online freelancers, as well as considering the political economy of targeted-advertising-based Internet platforms such as Facebook, Google, YouTube, and Instagram.

Digital Capitalism illuminates how a digital capitalist society's economy, politics, and culture work and interact, making it essential reading for both students and researchers in media, culture, and communication studies, as well as related disciplines.

Christian Fuchs is a critical theorist of communication and society. He is co-editor of the journal *tripleC: Communication, Capitalism & Critique.* He is author of many publications, including the books *Foundations of Critical Theory* (2022), *Communicating COVID-19: Everyday Life, Digital Capitalism, and Conspiracy Theories in Pandemic Times* (2021), *Marxist Humanism and Communication Theory* (2021), *Social Media: A Critical Introduction* (3rd edition 2021), *Communication and Capitalism: A Critical Theory* (2020), *Marxism: Karl Marx's Fifteen Key Concepts for Cultural & Communication Studies* (2020), *Nationalism on the Internet: Critical Theory and Ideology in the Age of Social Media and Fake News* (2020), *Rereading Marx in the Age of Digital Capitalism* (2019), *Digital Demagogue: Authoritarian Capitalism in the Age of Trump and Twitter* (2016), *Digital Labour and Karl Marx* (2014), and *Internet and Society* (2008).



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Media, Communication and Society Volume Three

Christian Fuchs



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Part I

Introduction



Chapter One

Introduction: What is Digital Capitalism?

- 1.1 About this Book
- 1.2 This Book's Chapters
- 1.3 What is Capitalism?
- 1.4 What is Digital Capitalism?

References

1.1 About this Book

This book deals with the question: what is digital capitalism? It illuminates what it means to live in digital capitalism and presents analyses of a variety of aspects of digital capitalism and engages with the thought of a variety of critical thinkers whose theories and approaches enable a critical understanding of digital capitalism.

The book at hand is the third volume of a series of books titled "Media, Communication & Society". The overall aim of *Media, Communication & Society* is to outline the foundations of a critical theory of communication and digital communication in society. It is a multi-volume book series situated on the intersection of communication theory, sociology, and philosophy. The overall questions that "Media, Communication & Society" deals with are: what is the role of communication in society? What is the role of communication in capitalism? What is the role of communication in digital capitalism?

Digital Capitalism presents and engages with the theoretical approaches of Karl Marx, Friedrich Engels, Georg Lukács, Theodor W. Adorno, Henri Lefebvre, and Dallas Smythe as the foundation for the critical analysis of digital capitalism. The book analyses a variety of digital capitalism's aspects, including digital positivism, administrative big data analytics, critical digital and social media research, what society we live in, everyday life in digital capitalism, the digital culture industry, the role of ideology in digital capitalism, reified consciousness on the Internet, the authoritarian personality on social media, the critical theory of digital labour and the international division of digital labour; the digital labour of Foxconn and Pegatron workers, software engineers at Google and online freelancers; the political economy of targeted-advertising—based

Internet platforms such as Facebook, Google, YouTube, and Instagram; the role and relations of capitalism, patriarchy, slavery, and racism in the context of digital labour; digital alienation, the role of social media in the capitalist crisis, the relationship of imperialism and digital labour, Marx's labour theory of value in the context of information industries, trade unions and class struggles in the digital age, platform cooperatives, digital commons, and public service Internet platforms. Digital Capitalism illuminates how a digital capitalist society's economy, politics, and culture work and interact.

The book is organised in the form of 13 chapters, including an introduction and a conclusion. Each chapter focuses on a particular dimension of digital capitalism or a critical theorist whose work helps us to illuminate how digital capitalism works.

The chapters are organised in the form of four parts. Part 1 forms the introduction. Part 2 focuses on theorists and part 3 on themes. Part 4 is the book's conclusion. In part 2, the discussed theorists are Friedrich Engels (chapter 2), Georg Lukács (chapter 3), Theodor W. Adorno (chapter 4), Henri Lefebvre (chapter 5), and Dallas Smythe (chapter 6). The sequence of the chapters in part 2 is organised by ascending birth dates of the discussed theorists. Karl Marx's works are utilised throughout the book, which is why there is not a specific chapter dedicated to his works (for a discussion of Marx in the context of communicative and digital capitalism, see Fuchs 2020b, 2019, 2016b). Part 3 discusses a variety of themes and dimensions of digital capitalism, namely digital positivism (chapter 7), big data (chapter 8), social media in capitalist crises (chapter 9), the connection of capitalism, patriarchy and racism in the digital age (chapter 10), digital labour (chapters 10 and 11), and digital imperialism (chapter 11).

Here are the main questions that each chapter asks:

- Chapter 1: What is digital capitalism?
- Chapter 2: How relevant are Friedrich Engels's works in the age of digital capitalism?
- Chapter 3: How can Georg Lukács' book History and Class Consciousness inform the critical analysis of digital capitalism and of ideology in the digital age?
- Chapter 4: How can Theodor W. Adorno's critical theory illuminate how digital capitalism works?
- Chapter 5: How can Henri Lefebvre's three-volume book *Critique of Everyday Life* inform a critical theory of communication? How can it inform a critique of digital capitalism?

- Chapter 6: How can Dallas Smythe's notions of the audience commodity and audience labour inform the analysis of the political economy of targetedad-based Internet platforms?
- Chapter 7: What are the features and problems of big data analytics? What are the features of critical digital and social media research?
- Chapter 8: How can we critically analyse and understand social media and big data's political economy?
- Chapter 9: What have been the roles of social media in crises of capitalism?
- Chapter 10: How can understanding the relationship of exploitation and oppression inform the study of digital labour and digital capitalism?
- Chapter 11: What is the relationship of digital labour and imperialism?
- Chapter 12: How can Karl Marx's labour theory of value inform the analysis of the information economy?

There is a number of key thinkers whom you encounter in this book. I want to introduce these thinkers briefly to the reader.

Karl Marx (1818–1883) was a philosopher, economist, sociologist, journalist, and revolutionary socialist. In 1999, he won a BBC online poll that determined the millennium's "greatest thinker" (BBC 1999). His key works include Economic and Philosophic Manuscripts, The Manifesto of the Communist Party (together with Friedrich Engels), Grundrisse, and the three volumes of *Capital*. Karl Marx plays a role throughout this book in all chapters. He is the most important thinker for a critical theory and critique of the political economy of communication (see Fuchs and Mosco 2012, Fuchs 2020a, 2020b, 2016b).

Friedrich Engels (1820–1895) was Marx's closest comrade, collaborator, and friend. He co-authored The Manifesto of the Communist Party together with Marx, funded and supported Marx's works, edited volumes two and three of Capital, and made original contributions to critical social theory with works such as *The Condition of the Working* Class in England and The Origin of the Family, Private Property and the State. Chapter 2 ("Friedrich Engels in the Age of Digital Capitalism") is dedicated to the analysis of the relevance of Engels's works and especially The Condition of the Working Class in England for the analysis of digital capitalism (see also the collected volume "Engels@ 200: Friedrich Engels in the Age of Digital Capitalism", Fuchs 2021a).

Georg/György Lukács (1885–1971) was a philosopher who is often considered the most influential theorist of the 20th century. In his book *History and Class Consciousness* he coined based on Marx the notion of reified consciousness that influenced ideology critique and the development of the Frankfurt School's notion of instrumental reason. Zur Ontologie des gesellschaftlichen Seins (The Ontology of Society's Being) is Lukács' second masterpiece (see Fuchs 2016a, chapter 2, and Fuchs 2018). Chapter 3 ("History and Class Consciousness 2.0: Georg Lukács in the Age of Digital Capitalism and Big Data") is dedicated to the discussion of how History and Class Consciousness can inform the critical analysis of digital capitalism.

History and Class Consciousness has just like Karl Marx's works influenced the development of Marxist humanism, an approach that has an emphasis on dialectical analysis alienation, practices, class struggles, and democratic socialism (see volumes 1 and 2 of my book series Media, Communication and Society, of which the volume at hand forms volume 3). In France, Henri Lefebvre has been the most important 20thcentury Marxist theorist and Marxists humanist. There are many parallels between Lefebvre and Lukács. Lefebvre was the French Lukács. Henri Lefebvre (1901–1991) was a Marxist-humanist philosopher and sociologist. He can be considered as the most important and most influential French Marxist theorist. He published more than 60 books, including the three-volume The Critique of Everyday Life and The Production of Space (for an analysis of how The Production of Space matters for a critical theory of communication, see Fuchs 2019). Chapter 5 ("Communication in Everyday (Digital) Life. A Reading of Henri Lefebvre's Critique of Everyday Life in the Age of Digital Capitalism") analyses how Henri Lefebvre's three-volume Critique of Everyday Life helps us to critically analyse the analysis of digital capitalism.

Theodor W. Adorno (1903-1969) was a German philosopher and sociologist who together with Max Horkheimer shaped the approach of Frankfurt School critical theory. Among Adorno's most well-known works are Dialectic of Enlightenment (written together with Horkheimer), The Authoritarian Personality, Minima Moralia: Reflections from Damaged Life, Introduction to the Sociology of Music, Hegel: Three Studies, The Jargon of Authenticity, Negative Dialectics, and Aesthetic Theory. Chapter 4 (Adorno and the Media in Digital Capitalism) analyses how Adorno's works can inform the critical analysis of digital capitalism.

Dallas Smythe (1907-1992) was a Marxist political economist who played an important role in the formation of the academic field of the political economy of communication. Smythe's most influential work has been his essay Communications: Blindspot of Western Marxism, in which he coined the notions of the audience commodity and audience labour that he uses in the analysis of advertising's political economy. These concepts have been revived as the foundation of the analysis of the political economy of targeted advertising on social media platforms. Chapter 6 (Dallas Smythe and Digital Labour) focuses on the guestion of how Smythe's work can inform the analysis of platforms such as Facebook and what role the concept of digital labour plays in this context (see also Fuchs 2012, 2014a, 2014b, 2015).

One can frequently hear that the thought of Marx and those inspired by him is outdated and is no longer relevant today. Thinkers such as Marx, Engels, Lukács, Adorno, and Smythe were not just analysing the time they live in but also provided concepts that are relevant for the general analysis of capitalism and can therefore be updated for the analysis of digital capitalism. Given that capitalism has taken on peculiar forms in the 21st century, Marxian analysis continues to be of high relevance in the age of digital capitalism.

1.2 This Book's Chapters

Chapter 2 is focused on "Friedrich Engels in the Age of Digital Capitalism". It asks: How relevant are Friedrich Engels's works in the age of digital capitalism? It shows that Engels class-struggle-oriented theory can and should inform 21st-century social science and digital social research. Based on a reading of Engels's works, the chapter discusses how to think of scientific socialism as critical social science today, presents a critique of computational social science as digital positivism, engages with foundations of digital labour analysis, the analysis of the international division of digital labour, updates Engels's Condition of the Working Class in England in the age of digital capitalism, analyses the role of trade unions and digital class struggles in the digital age, engages with platform co-operatives, digital commons projects and public service Internet platforms are concrete digital utopias that point beyond digital capital (ism). Engels's analysis is updated for critically analysing the digital conditions of the working class today, including the digital labour of hardware assemblers at Foxconn and Pegatron, the digital labour aristocracy of software engineers at Google, online freelance workers, platform workers at capitalist platform corporations such as Uber, Deliveroo, Fiverr, Upwork, or Freelancer, and the digital labour of Facebook users.

Chapter 3 is titled "History and Class Consciousness 2.0: Georg Lukács in the Age of Digital Capitalism and Big Data". It discusses the relevance of Georg Lukács' 1923 book *History and Class Consciousness* in the context of digital capitalism. It does so by analysing how Lukács' concepts of the dialectic of subject and object, ideology, reification, reified consciousness matter today in the context of big data and digital

capitalism. The essay shows that History and Class Consciousness' critique of reification, ideology, and reified consciousness remains highly topical in the age of digital capitalism and big data. Lukács' analysis allows us to critically analyse how social media, big data, and various other Internet technologies are used as tools of reification. At the same time, Lukács reminds us that only human praxis can establish alternatives.

Chapter 4's title is "Adorno and the Media in Digital Capitalism". The aim of the chapter is to show the relevance of Theodor W. Adorno's critical theory for the analysis of digital capitalism. After an introduction (section 4.1), section 4.2 deals with prejudices against Adorno. Outright rejection and opposition to Adorno are particularly prevalent in the field of Cultural Studies. Section 4.3 engages with and updates the notion of the culture industry in the age of digital capitalism. It outlines the foundation of the concept of the digital culture industry. Section 4.4 updates Adorno's concept and theory of the authoritarian personality. Drawing on empirical research on how Donald Trump and other right-wing authoritarians use Twitter and other social media, it is shown how authoritarianism is communicated on social media. Section 4.5 deals with the question whether we live in a digital society or digital capitalism. It builds on a similar question that Adorno was asking about industrialism, namely Do we live in an industrial society or in a capitalist society? Taken together, the analysis aims to show the relevance of Adorno's critical theory as part of an update of Marxist theory in the 21st century for the critical analysis of communication and digital capitalism.

Chapter 5's title is "Communication in Everyday (Digital) Life. A Reading of Henri Lefebvre's Critique of Everyday Life in the Age of Digital Capitalism". Henri Lefebvre (1901-1991) was one of the most influential French Marxist intellectuals of the 20th century. Chapter 4 asks: How can Henri Lefebyre's Critique of Everyday Life inform a critical theory of communication? How can it inform a critique of digital capitalism?

Everyday life is an important category for a dialectical theory of society and communication. Lefebvre stresses the dialectical multidimensionality of society and alienation, which allows us to distinguish between the economic, political, and the cultural as dialectically interacting and interpenetrating dimensions of society, capitalism, alienation in general, capitalist alienation, and alienation in digital capitalism. Lefebvre reminds us of the predominantly capitalist character of digital technologies. In digital capitalism, we find an ideology that mystifies information and the digital. Computing has the potential to deepen capitalism and class and to advance socialist selfmanagement. Lefebvre's work resonates with the critical theory of digital labour.

Chapter 6's title is "Dallas Smythe and Digital Labour". Dallas Smythe established the notions of the audience commodity and audience labour in 1977 for understanding the political economy of commercial media using advertising as their capital accumulation model. His article has resulted in a foundational debate of Media and Communication Studies that involved Smythe Graham Murdock and Bill Livant. In recent years there has been a very significant rise of references to Smythe's concepts of audience labour/ commodification in academic works. This increasing interest has on the one hand to do with a return of a stronger interest in Marx's works and Marxist political economy as well as the rise of social media platforms such as Facebook, YouTube, Twitter, Weibo, Pinterest, Instagram, Blogspot, VKontakte, LinkedIn, TumbIr etc. that use targeted advertising as their capital accumulation model. Explaining how this form of capital accumulation model rises has resulted in the development of the category of digital labour. This chapter presents foundations of how to use Dallas Smythe for understanding digital labour on advertising-funded social media.

Chapter 7 holds the title "From Digital Positivism and Administrative Big Data Analytics Towards Critical Digital and Social Media Research". It argues for a paradigm shift in the study of the Internet and digital/social media. Big data analytics is the dominant paradigm. It receives large amounts of funding, is administrative and is a form of digital positivism. Critical social media research is an alternative approach that combines critical social media theory, critical digital methods and critical-realist social media research ethics. Strengthening the second approach is a material question of power in academia.

Chapter 8 holds the title "Social Media, Big Data, and Critical Marketing". Its task is to critically understand social media and big data's political economy. It outlines key classical texts (section 8.2), contemporary texts (section 8.3), and future research directions (section 8.4) that can help us achieve this goal. The focuses on four classical thinkers and one text by each of them: Dallas Smythe, Karl Marx, Raymond Williams, and Sut Jhally. The chapter also focuses on two key areas of current critical research about social media: digital labour and digital alienation.

Studying social media and big data from a critical marketing perspective is interesting but also complex. It involves multiple dimensions, topics, questions, and approaches. Chapter 8 identifies possible research questions that remain fairly unexplored and could be taken up by PhD students and other scholars.

"Social Media and the Capitalist Crisis" is the title of chapter 9. It focuses on an analysis of social media's roles in the crisis of capitalism. I first present a Marxist analysis of the causes of the ongoing capitalist crisis. It focuses on empirical indicators that measure the development of factors that influence the Marxian rate of profit. The second part discusses the role of targeted social media advertising in the crisis. It focuses on the development of global advertising since the start of the crisis in 2008 and processes of financialisation. The social media industry stands in the context of these developments. The third part discusses ideology in the context of social media. I present empirical results that challenge the idea that contemporary rebellions and revolutions are Twitter revolutions, but stress at the same time that we can also not completely dismiss the role of the Internet in collective action, but rather need a dialectical-realist analysis grounded in empirical social research. I also present some initial empirical findings of the phenomenon of red scare 2.0 in the United Kingdom. It shows how anti-socialist ideology about Jeremy Corbyn is played out and challenged on Twitter. The presentation aims to show how social media are in complex ways embedded into the contradictions of capitalist society, economy, politics and ideology.

Chapter 10's title is "Capitalism, Patriarchy, Slavery, and Racism in the Age of Digital Capitalism and Digital Labour". It asks: How can understanding the relationship of exploitation and oppression inform the study of digital labour and digital capitalism? Chapter 10 combines the analysis of capitalism, patriarchy, slavery, and racism in order to analyse digital labour. The essay presents a typology of differences and commonalities between wage labour, slave labour, reproductive labour, and Facebook labour. It shows that the digital data commodity is both gendered and racialised. It analyses how class, patriarchy, slavery, and racism overgrasp into each other in the realm of digital capitalism. The chapter also introduces the notions of the organic composition of labour and the rate of reproductive labour and shows, based on example data, how to calculate these ratios that provide insights into the reality of unpaid labour in capitalism.

Chapter 11 is focused on "Digital Labour and Imperialism". Lenin's Imperialism, the Highest Stage of Capitalism, Bukharin's Imperialism and World Economy that were both published in 1917 as well as Rosa Luxemburg's 1913 work *The Accumulation of* Capital spoke of capitalism as imperialism. It was a time of strikes for pay rises, Henry Ford's invention of the first assembly line that laid the foundations for Fordism, World War I, trusts and monopolies, antitrust laws, the October Revolution, the Mexican Revolution, the failed German revolution, etc. It was a time of the extension and deepening of as well as of challenges to capitalism. Chapter 11 first reviews the notion of the role of the international division of labour in classical concepts of imperialism. It then uses these foundations for discussing the role of the international division of

labour in the production of information and information technology today and introduces in this context the notion of the international division of digital labour. The overall task is to illuminate the relationship of digital labour and imperialism.

Chapter 12's title is "The Information Economy and the Labour Theory of Value". It discusses aspects of Marx's labour theory of value in the context of the information industries. First, taking the Temporal Single-System Interpretation of Marx's labour theory of value as methodology, the chapter calculates economic demographics at the level of socially necessary labour time and prices of an example case. Second, the chapter questions the assumption that the labour theory of value cannot be applied to the information industries. This chapter tests this hypothesis with an analysis of the development of labour productivity in six countries. Chapter 12 concludes that the labour theory of value is an important tool for understanding the information economy and the peculiarities of the information commodity.

Chapter 13 is the conclusion of the book Digital Capitalism. It presents the main findings of the previous chapters and discusses further implications.

1.3 What is Capitalism?

In order to understand what digital capitalism is, we need an understanding of what capitalism is all about. We need to ask: What is capitalism?

Werner Sombart: Modern Capitalism as Entrepreneurial Acquisition

Werner Sombart (1863-1941) was a German sociologist and economist. In 1902, he published the book *Der moderne Kapitalismus* (*Modern Capitalism*). He contributed to the sociology of capitalism. Sombart defines capitalism as an economic system dominated by capital that is focused on the acquisition of money by competition and technological increase of productivity:

capitalism designates an economic system significantly characterized by the predominance of "capital" [...] The spirit, or the economic outlook, of capitalism is dominated by three ideas: acquisition, competition, and rationality. The purpose of economic activity under capitalism is acquisition, and more specifically acquisition in terms of money. The idea of in creasing the sum of money on hand is the exact opposite of the idea of earning a livelihood, which dominated all precapitalistic systems, particularly the feudal-handicraft economy. [...] While acquisition constitutes the purpose of economic activity, the attitudes displayed in the process of acquisition form the content of the idea of competition. [...] Economic rationality penetrates gradually into other cultural spheres, reaching even those which are only remotely connected with economic life. [...] capitalist technology must insure a high degree of productivity. [...] The technology characteristic of the capitalist system must also lend itself most readily to improvement and perfection. For constant technical improvements are an important weapon in the hands of the capitalist entrepreneur, who seeks to eliminate his competitor and to extend his market by offering goods superior in quality or lower in price. [...] The Ideal Entrepreneur combines the traits of inventor, discoverer, conqueror, organizer, and merchant. (Sombart 2017, 4, 6, 9, 11, 12, 15)

Joseph Schumpeter: Capitalism as Entrepreneurial Creative Destruction

Sombart sees the entrepreneur as the subject of capitalism who invents new economic strategies. Sombart here anticipated the Austrian-American economist Joseph Schumpeter's (1883–1950) stress on the entrepreneur as the subject who innovates capitalism by causing creative destruction. Schumpeter defines capitalism as "that form of private property economy in which innovations are carried out by means of borrowed money, which in general, though not by logical necessity, implies credit creation" (Schumpeter 1939, 216) and where "[c]reative destruction is the essential fact" (Schumpeter 1943/2003, 83).

Sombart's and Schumpeter's definitions of capitalism fetishise and idealise the capitalist as capitalism's subject and are methodologically individualist in character. The economy is reduced to the individual spontaneous activity of the entrepreneur. There is neither a capitalist class nor the working class in these definitions of capitalism. They are devoid of class, labour, surplus-value, surplus-labour, and exploitation — elements that are key for the Marxian understanding of capitalism. Sombart stresses the need to grow capital as a feature of capitalism and that technological innovation is a means for capital growth. Schumpeter has a strong focus on creative destruction via technological innovations.

Max Weber: Capitalism as Calculation of Capital

In the introduction to his book *The Protestant Ethic and the Spirit of Capitalism*, the German sociologist Max Weber (1864–1920) gives a definition of capitalism:

But capitalism is identical with the pursuit of profit, and forever renewed profit, by means of continuous, rational, capitalistic enterprise. [...] We will define a capitalistic economic action as one which rests on the expectation of profit by the utilization of opportunities for exchange, that is on (formally) peaceful chances of profit. [...] Where capitalistic acquisition is rationally pursued, the corresponding action is adjusted to calculations in terms of capital. This means that the action is adapted to a systematic utilization of goods or personal services as means of acquisition in such a way that, at the close of a business period, the balance of the enterprise in money assets (or, in the case of a continuous enterprise, the periodically estimated money value of assets) exceeds the capital, i.e. the estimated value of the material means of production used for acquisition in exchange. [...] The important fact is always that a calculation of capital in terms of money is made, whether by modern book-keeping methods or in any other way, however primitive and crude. Everything is done in terms of balances: at the beginning of the enterprise an initial balance, before every individual decision a calculation to ascertain its probable profitableness, and at the end a final balance to ascertain how much profit has been made. (Weber 1992, xxxi-xxxiii)

Like Sombart, Weber takes from Marx implicitly the notion of accumulation of capital for defining capitalism. But he does not speak of accumulation, but of renewed profit, capitalistic acquisition, and capital excess. Weber's notion of rational action is at the heart of his understanding of capitalism which is why he stresses that capitalists have to make calculations about invested capital and expected returns in order to yield profits. Weber influenced the Frankfurt School's notion of instrumental rationality. His understanding of capitalism falls behind the one of Marx. It lacks a focus on class and exploitation and the labour process that creates commodities and surplus value that are owned by the capitalist class.

The examples of Weber, Sombart, and Schumpeter show that bourgeois definitions of capitalism often are focused in a one-sided manner on capitalists' actions, interests and rationality. Such understandings disregard the class antagonism and capital's exploitation of surplus-value producing labour that, as Marx writes, is the "secret of profit-making" (Marx 1867, 280).

Although Anthony Giddens has thoroughly read Marx, which is why he stresses that capitalism "is a class society" (Giddens 1984, 317) and that the "buying and selling of time, as labour time, is surely one of the most distinctive features of modern capitalism" (Giddens 1984, 144), when it boils down to defining capitalism, the definition he and his colleagues give is devoid of the working class and its exploitation and the focus is on the action of capitalists: capitalism is an "economic system based on the private ownership of wealth, which is invested and reinvested in order to produce profit" (Giddens et al., 2018, 14).

Insofar as they use and define the term capitalism, also neoliberal economists have often understood capitalism as economic order. For example, one of the most famous neoliberals, Milton Friedman, defines capitalism as "organization of the bulk of economic activity through private enterprise operating in a free market" (Friedman 1962) [2002], 4).

Varieties and Commonalities of Capitalism

Hall and Soskice's (2001) varieties of capitalism approach are grounded in institutional political economy. They see the firm as the central actor in capitalism. According to Hall and Soskice, the firm operates in five spheres: (1) the sphere of industrial relations where working conditions are defined, (2) the sphere of relations between firms and their employees, (3) inter-firm relations, (4) the sphere of corporate governance, (5) the sphere of vocational training and education.

Hall and Soskice understand capitalism not just as an economic system, but as an economic system plus its governance and educational relations. Spheres (1), (2) and (3) constitute economic relations, sphere (4) is political in character, and sphere (5) is part of the cultural system of society. Sphere (5) disregards cultural institutions that are important in the definition of meanings, ideologies, and knowledge, and the reproduction of the body and the mind, especially the media system, entertainment, sports, health care, and the academic system. Furthermore, Hall and Soskice do not include systems and spheres shaped by the accumulation logic that stand outside of the economic system into the definition of capitalism. The problem of institutional approaches is that they define actors such as firms as capitalism's central collective actors. They do not give enough attention to the key roles that classes and class struggles play in capitalism.

Hall and Soskice (2001) distinguish between two basic types of capitalism, namely liberal market economies and coordinated market economies:

In liberal market economies, firms coordinate their activities primarily via hierarchies and competitive market arrangements. [...] In coordinated market economies, firms depend more heavily on non-market relationships to coordinate their endeavors with other actors and to construct their core competencies. These non-market modes of coordination generally entail more extensive relational or incomplete contracting, network monitoring based on the exchange of private information inside networks, and more reliance on collaborative, as opposed to competitive, relationships to build the competencies of the firm. (Hall and Soskice 2001, 8)

Albert (1993) distinguished between the Anglo-American and the Rhine model of capitalism, which is a differentiation that corresponds to the one made by Hall and Soskice. Esping-Andersen (1990) worked out an early version of the varieties of capitalism approach that defines three political economies that he characterises as "three models of welfare capitalism" (Esping-Andersen 1990, 221); the liberal model, the social-democratic model, and the corporatist-statist model.

What Hall and Soskice define with their typology is a distinction between neoliberal capitalism and Keynesian capitalism. But there have also been other forms of capitalism, including right-wing authoritarian and fascist forms of capitalism (such as Nazi-Germany), state capitalism with a socialist ideology such as contemporary China, clientelist versions of capitalism, etc.

Critics stress Hall and Soskice's neglect of statist forms of capitalism, the need of allowing for the conceptual existence of hybrid models, and the functionalist and dualist character of Hall and Soskice's approach (Crouch 2005, chapters 1 and 2; Hancké, Rhodes and Thatcher 2007, 7–8; Schmidt 2002; Streeck 2010). Various authors have identified more than two models of capitalism. Schmidt (2002, chapter 3) defines three models of capitalism: market capitalism, coordinated capitalism, and state capitalism. Whitley (1999, chapter 2) defines six types of capitalism: fragmented capitalism, coordinated industrial district capitalism, compartmentalised capitalism, stateorganised capitalism, collaborative capitalism, highly coordinated capitalism. Amable (2003, chapter 3) speaks of five types of capitalism: market-based capitalism (the Anglo-Saxon model), social-democratic capitalism, Asian capitalism, Continental European capitalism, and South European capitalism. He characterises these models along five dimensions: competition, the wage-labour nexus, the financial sector, social protection, and education. The culture here only plays a role in the form of education, while aspects such as the media system and ideology are missing.

Many varieties of capitalist approaches do not build on Marx. In Hall and Soskice's collected volume Varieties of Capitalism: The Institutional Foundations of Comparative Advantage, which is the most widely read and cited book on the varieties of capitalism-approach, Marx and his works are conspicuous by their absence only. What is missing in the varieties of capitalism-approach is a focus on class relations, class struggle, surplus-value, exploitation, commodity fetishism, and ideology critique. Streeck (2016 chapter 9, 2010, 2009) stresses that the varieties of capitalist approaches put too much emphasis on differences. He argues for the study of the dynamic commonalities of capitalism (see also Pontusson 2005).

Why should national "capitalisms" become and remain different, despite powerful pressures for cross-national convergence emanating from the diffusion of technologies, international competition, border-crossing markets, transnational firms, international organizations, an increasingly global culture, and the like? (Streeck 2010, 17)

Just like globalisation, financialisation and acceleration, consumer culture and commodification, digitalisation is one of the factors that has advanced the convergence of national capitalisms. Digital technologies have the feature to help transcend boundaries, which under capitalist conditions has advanced capitalist societies convergence. In a way, varieties of capitalism approaches share postmodern theory's focus on differences without unity. What is instead needed is more focus on what contemporary societies have in common, a focus on the unity in diversity of societies.

Karl Marx: Capitalism as a Formation of Society (Gesellschaftsformation)

Neither classical nor contemporary bourgeois theorists have given a satisfactory definition of capitalism. They all fall far behind Marx's understanding. We need to start with Marx when we want to understand capitalism. Marx spoke of the "capitalist society" (e.g. Marx 1867, 103, 134, 667, 797, 875, 1063) and "the capitalist mode of production" (e.g. Marx 1867, 90, 95, 98, 125, 278, 341, 345, 382, 645, 711). This means that for Marx capitalism is both a type of the economy (*Produktionsweise*, mode of production) and a type of society (Gesellschaftsformation, a formation of society/societal formation). Other than Sombart, Weber, Schumpeter, and Giddens, Marx does not limit the notion of capitalism to the economy but assumes that it operates as a dialectic of the economy and society. Wolfgang Streeck argues in this context:

How to study contemporary capitalism, then? My first answer is: not as an economy but as a society – as a system of social action – and a set of social institutions. [...] A capitalist society, or a society that is inhabited by a capitalist economy, is one that has on a current basis to work out how its economic social relations, its specific relations of production and exchange, are, to connect to and interact with its *non-economic social relations*. [...] For this reason.alone, capitalism must be studied, not as a static and timeless ideal type of an economic system that exists outside of or apart from society, but as a historical social order that is precisely about the relationship between the social and the economic. (Streeck 2016, 201 & 203)

Streeck (2016, chapter 9) argues that analysing capitalism as a society means analysing it as an economic system, historical social order, culture, polity, and way of life.

Not all Marxist theorists share Marx's view of capitalism as a formation of society. For example, Dobb (1946) sees capitalism as an "economic form" (p. 9), an "economic system" (p. 11), and "a distinctive economic order" (p. 13) where "a leisured class can exploit the surplus labour of others" (p. 17) and that is based on commodity production, labour-power as a commodity, the capitalist class' control of the means of production, and surplus-value (pp. 7–8). Another example is the works of Erik Olin Wright. Wright (2006, 100) defines capitalism as an economic system that combines a) "a class structure characterized by private ownership of the means of production, whereby most people earn their living by selling their labour on a labour market" and b) " economic coordination organized through decentralized market exchange. Capitalism is not simply a 'free market economy'; it is a market economy with a particular form of class relations". Wright (2006, 101) reduces the notion of the capitalist society to "a society with capitalist economic structure", which is not wrong but overlooks that the logic of capitalism is not limited to the economy but also shapes non-economic systems where it takes on emergent properties.

A formation of society (Gesellschaftsformation) is the totality of all dialectics of practices and structures and all dialectics of objects and subjects that humans produce and reproduce and through which humans produce and reproduce their life and relations in a routinised manner in space-time. The formation of society is a fundamental unity and totality of humans' social production processes (see Fuchs 2020a, chapter 5). That such a totality of human life is routinised in space-time means that a formation of society's dialectics of practices and structures are not just produced once, but are again and again recreated (reproduction) based on routines and social roles.

Capitalism as a particular formation of society includes economic relations such as commodity production, markets, capital, labour as well as social, political, legal and cultural relations (Küttler 2008, 238). A formation of society is, according to Marx, a "totality" of "the material conditions of life" (Marx 1859, 262). In society, the material conditions of life is constituted by humans' social production processes; social and societal production and reproduction processes form the materiality of society (see Fuchs 2020a).

For Marx, (1894, 957), a formation of society is "both a production process of the material conditions of existence for human life and a process [...] that produces and reproduces these relations of production themselves". A formation of society is the totality of relations that humans have "towards nature and one another" (p. 957). Social and societal relations and the conditions of human life are the "results and creation" of the social production processes of humans (p. 957). Human production produces and reproduces societal and social relations and human conditions of life (p. 957).

The originality of Marx's notion of *Gesellschaftsformation* is that it is simultaneously both economic and non-economic. Marx analyses the special role of the economy in capitalist society and society in general without reducing the non-economic to the economic whole at the same time ascertaining the trans-economic role of production in all social systems of society so that the economy is in the form of social production sublated in the non-economic spheres, practices and dimensions of society where it takes on emergent qualities.

The concept of the formation of society (Gesellschaftsformation) functions both as a systematic bracket for the analysis of the economy and its effects on all other spheres of life in bourgeois society and as a framework concept for the methodological justification of this procedure in a more general conception of history and society. (Küttler 2001, 591)

Bob Jessop (1997, 2002) takes up Marx's notion of *Vergesellschaftung* (societalisation) for the analysis of capitalism. He argues that the "capitalist economy and its dynamic" are "embedded in a wider nexus of social relations and institutions" and that

capitalism is "a complex economic and extra-economic social relation" (Jessop 1997, 565). Societalisation has to do with the way of how the economic and the noneconomic are related in society and how social relations are organised. "Societalization refers to the production of 'society effects' within a specific 'timespace envelope': society effects have two dimensions - social cohesion and system (or institutional) integration" (Jessop 1997, 579, footnote 7).

Capitalist logic aims at making accumulation society's principle of societalisation, which is a process of struggle, involving domination, struggles, resistance, and hegemony.

What bourgeois societalization really involves is the relative subordination of an entire social order to the logic and reproduction requirements of capital accumulation. [...] here is wide variation in how far capitalist market forces (and the associated logic of profit-seeking) come to dominate the overall organization and dynamics of social formations. This raises questions about the conditions under which accumulation can become the dominant principle of societal organization (or societalization). For there are always interstitial, residual, marginal, irrelevant, recalcitrant and plain contradictory elements that escape subordination to any given principle of societalization and, indeed, serve as reservoirs of flexibility and innovation as well as actual or potential sources of disorder. This implies in turn that there is ample scope for conflict over societal projects that privilege radically different organizational principles as well as for conflict over rival projects based on the same principle. (Jessop 2002, 23, 22)

One should revise Jessops's account with respect to the concept of accumulation. Individuals and groups not just accumulate money, but also decision-power, reputation, symbolic power, etc. The imposition of the logic of accumulation on other realms of society, therefore, does not necessarily imply that private ownership, markets and commodities are introduced, although in neoliberal capitalism this has often been the case.

For Marx, the two key features of the capitalist economy are the general production of commodities and the proletariat's production of surplus-value that is appropriated and owned by the capitalist class and transformed into profit by commodity sales that enable the accumulation of capital and the reinvestment of capital:

Two characteristic traits mark the capitalist mode of production right from the start. Firstly. It produces its products as commodities. The fact that it produces commodities does not in itself distinguish it from other modes of production; but that the dominant and determining character of its product is that it is a commodity certainly does so! [...] The second thing that particularly marks the capitalist mode of production is the production of surplus-value as the direct object and decisive motive of production. (Marx 1894, 1019-1020)

For Marx, class antagonism is a key aspect of the capitalist economy. The working class produces in the unpaid part of the working day surplus-value that is not paid for and is appropriated by capital. "In capitalist society, free time is produced for one class by the conversion of the whole lifetime of the masses into labour-time" (Marx 1867, 667). The members of the working class are via capitalism's dull compulsion of the labour market forced to sell their labour-power and produce capital, commodities, surplus-value, and profits for the capitalist class. The capitalist economy is a class system, in which workers produce commodities with the help of means of production that are the private property of members of the capitalist class. These commodities are sold on commodity markets so that profit is achieved and capital can be accumulated.

Class relations where capital exploits labour are a key feature of the capitalist economy. Workers are alienated from the conditions of production in class society because they do not own the means of production and the products of their labour. The logic of accumulation is not limited to the realm of the economy but extends into the political and cultural realms. We can therefore speak of capitalist society. Capitalism is a type of society where the mass of humans is alienated from the conditions of economic, political and cultural production, which means that they do not control the conditions that shape their lives, which enables privileged groups' accumulation of capital in the economy, decision-power in politics, and reputation, attention and respect in culture. Alienation in the economy means the dominant class' exploitation of the working class' labour. Alienation in non-economic systems means domination, that is, one group's benefits at the expense of other groups via means of control such as state power, ideology, and violence. In capitalism, we find the accumulation of capital in the economy, the accumulation of decision-power and influence in politics, and the accumulation of reputation, attention and respect in culture. The key aspect is not that there is growth, but that there is the attempt of the dominant class and dominant groups to accumulate power at the expense of others who as a consequence have disadvantages. Capitalist society is therefore based on an economic antagonism of exploitation between classes and social antagonisms of domination. Table 1.1 shows the levels and structures of capitalist society.

	Micro-level	Meso-level	Macro-level
Economic structures	Commodity, money	Companies, markets	Capitalist economy
Political structures	Laws	Parties, government	The capitalist state
Cultural structures	ldeology	Ideology-producing organisations	The capitalist ideological system

TABLE 1.1 Levels and structures of capitalist society

Capitalist society is, as Fernand Braudel stresses, "an accumulation of power" (Braudel 1982, 22). It should better be said that capitalism is a system, the totality of the accumulation of power, a "'system' extending over the whole of society" (Braudel 1982, 239). Braudel does, however, not give a clear definition of capitalism and sees no special role of capital and class in contrast to other forms of power in capitalism.

David Harvey's Understanding of Capitalism

My understanding of capitalism resonates with the one by David Harvey. Harvey defines capitalism as a capitalist society, namely as

any social formation in which processes of capital circulation and accumulation are hegemonic and dominant in providing and shaping the material, social and intellectual bases for social life. Capitalism is rife with innumerable contradictions [...] racialisation and gender discriminations have been around for a very long time and there is no question that the history of capitalism is an intensely racialised and gendered history. [...] although they are omnipresent within capitalism they are not specific to the form of circulation and accumulation that constitutes the economic engine of capitalism. This in no way implies that they have no impact on capital accumulation or that capital accumulation does not equally affect ("infect" might be a better word) or make active use of them. Capitalism clearly has in various times and places pushed racialisation, for example, to extremes (including the horrors of genocide and holocausts). Contemporary capitalism plainly feeds off gender discriminations and violence as well as upon the frequent dehumanisation of people of colour. The intersections and interactions between racialisation and capital accumulation are both highly visible and powerfully present. (Harvey 2014, 7–8)

Capitalist Accumulation

For Harvey, capital accumulation is the central feature of capitalist society that shapes all aspects of this society. It is not clear if he by "accumulation" refers to the accumulation of capital only or, as I argue, the logic of accumulation that originated in the economy but diffused into all realms of capitalism. In a capitalist society, the economy plays a special role because all realms of society are conditioned, shaped, and influenced by the logic of accumulation and by class relations.

Table 1.2 shows how we can make sense of accumulation as a general process and in capitalist society. In capitalism, alienation takes on the form of accumulation processes that create classes and inequalities. Capitalism is based on capitalists' accumulation of capital in the economy, bureaucrats' accumulation of decision-power and influence in the political system, and ideologues', influencers' and celebrities' accumulation of reputation, attention, and respect in the cultural system. Capitalism is an antagonistic system. Its antagonisms (see Table 1.2) drive its development and accumulation. Accumulation is an antagonistic relationship that not just constitutes dominant classes and groups but also subordinated, dominated, and exploited groups such as the working class in the capitalist economy dominated citizens in the capitalist political system, and ideologically targeted everyday people in capitalism's cultural system.

Capitalist society's antagonistic relations that drive accumulation are the source of inequalities and crises, which means that capitalism is an inherently negative dialectical system. As a response to crises, the ruling class and ruling groups require mechanisms they use for trying to keep the dominated class and dominated groups in check so that they do not rebel and revolt. Capitalism, therefore, is also an ideological system where dominant groups use the logic of scapegoating for blaming certain

TABLE 1.2 Accumulation as general process in cap	oitalist society
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Realm of society	Central process in general	Central process in capitalist society	Underlying antagonism in capitalist society
Economy	Production of use- values	Capital accumulation	Capitalists vs. workers
Politics	Production of collective decisions	Accumulation of decision- power and influence	Bureaucrats vs. citizens
Culture	Production of meanings	Accumulation of reputation, attention, respect	Ideologues/celebrities/ influencers vs. everyday people

groups for society's ills and problems. Scapegoating entails the logic of the friend/ enemy-scheme. And the friend/enemy-scheme can lead to violence, fascism, racism, anti-semitism, and nationalism. Capitalism has barbaric potentials. Crises of capitalism can be fascism-producing crises that turn barbarism from a potentiality of capitalism into an actuality. Only class and social struggles for socialism and democracy can keep capitalism's negative potentials in check.

In a capitalist society, powerful actors control natural resources, economic property, political decision-making, and cultural meaning-making, which has resulted in the accumulation of power, inequalities, and global problems, including environmental pollution as well as the degradation and depletion of natural resources in the naturesociety-relation, socio-economic inequality in the economic system, dictatorships and war in the political system, ideology and misrecognition in the cultural system.

Undeniably the outlined model of capitalist society has certain parallels to and has to some degree been influenced by Pierre Bourdieu's (1984) work (see Fuchs 2003, 2008). Bourdieu has generalised Marx's approach and stresses the importance of accumulation processes in the creation of inequality. But he went a step too far and overgeneralised the notions of capital and class so that they are not specific to the capitalist economy but features of contemporary society in general. For Bourdieu, there are economic, political/ social, cultural, and symbolic forms of capital and dimensions of class. In my own approach, class and capital are economic categories. I share Bourdieu's insight that accumulation is a key feature of the logic of capitalist society. Bourdieu focused many of his analyses on cultural capital. My approach in contrast is interested in the analysis of society as a capitalist totality, its accumulation processes, antagonisms, and struggles.

Robert L. Heilbroner's Definition of Capitalism

Robert L. Heilbroner (2018; see also 1985) defines capitalism as "a system of social domination" (2018, p. 1380) and a "historical formation with distinctive political and cultural as well as economic properties" (p. 1383) whose "organizing principle is the ceaseless accumulation of capital" (p. 1380) and that is characterised by the accumulation of wealth as commodities that takes on the form of the "never-ending metamorphosis" M-C-M' (p. 1379) (money capital is invested, which results in the production of commodities that are sold so that more money capital M' that contains a surplus-value and profit is produced), the institution of the private property of the means of production (p. 1379), the institution of the wage-labour-contract (p. 1379) and the "propertyless waged labor force" (p. 1380), the capitalist class that is both an economic and a political force (p. 1379), the division between the two realms of the capitalist economy and the state that interact dialectically (pp. 1381-1382), as well as a culture characterised by the "calculating mind-set" (p. 1382) and "the pre-dominance of a prudent, accountant-like comparison of costs and benefits" (p. 1382) and the separation of scientific, political, economic and moral belief systems so that the "ideology of economics" emerged that removes the "problem of good and evil" from political economy and relegates it to the realm of morality (p. 1383). Further immanent features of capitalism that Heilbroner identifies include its "constant revolutionizing of the techniques of production and its continuous commodification of material life" (Heilbroner 2018, 1384), the global expansion of capitalism so that there is a global search for cheap labour-power, cheap raw materials and markets for the sale of commodities (p. 1385), and economic crisis tendencies (p. 1386).

Heilbroner provides a comprehensive understanding of capitalism as a type of society that is first and foremost informed by Marx. A key feature of capitalism is that in the class relation between capital and labour, capital exploits labour so that the latter produces commodities, profit and surplus-value that are the private property of the capitalist class. In his definition of capitalism, Heilbroner does not give much attention to the notions of class and exploitation.

A key feature of capitalism that Heilbroner does not discuss is the political-ideological tendency of the creation and reproduction of scapegoats that are blamed for capitalism's social ills in order to try to distract attention from the systemic causes of societal problems. It is a consequence of what Horkheimer and Adorno (1947/2002) term the dialectic of the Enlightenment as an important feature of capitalist society, i.e. the tendency of the "self-destruction of enlightenment" (Horkheimer and Adorno 1947 [2002], xvi) in and through capitalism that results in "the reversion of enlightened civilization to barbarism" (p. xix). Capitalism's freedom of private ownership comes into conflict with social freedom (everyone's right to lead a good life). There is a capitalist antagonism between economic and social freedom that is at the heart of capitalism's fascist, racist, anti-Semitic, and nationalist potentials. Auschwitz was a culmination of capitalism's barbaric potentials. Capitalist society's antagonisms create crises that increase the likelihood that capitalist barbarism is transformed from potentiality into actuality. In such situations, accumulation turns via crises into annihilation. Crises of capitalism have the potential to be fascism-producing crises. Only social struggles for socialism, humanism, and democracy can keep capitalism's fascism- and Auschwitzproducing potentials in check. In Heilbroner's key book on the analysis of capitalism's logic, The Nature and Logic of Capitalism (Heilbroner 1985), there is no discussion of capitalism's violent, fascist, racist, anti-Semitic, and nationalist potentials and realities. It is important to overcome the *Auschwitz-blindness* of many definitions of capitalism.

Furthermore, one should add to Heilbroner's understanding that in capitalism, individual capitalists are compelled to compete for investment opportunities and the cheapening of resources, that there is a capitalist dialectic of economic competition and monopoly so that competition creates oligopolies and monopolies, and that the political economy of capitalist globalisation not just includes the global search for cheap raw materials, cheap labour and commodity markets but also the global search for opportunities for capital export and investment so that new realms of accumulation are created, and warfare as international and global means for the defence and expansion of capitalism's logic. Furthermore, one should also add to Heilbroner's understanding of capitalism the importance of finance capital that follows the accumulation cycle M-M' in capitalism.

Heilbroner stresses that capitalism is not simply an economic system but a type of society. This is why he speaks of capitalism as a historical formation, social system of domination, "capitalist society" (Heilbroner 2018, 1380), and also as a "social formation" (see Heilbroner 1985, chapter 1). Importantly, Heilbroner stresses that there are economic, political and cultural dimensions of capitalist society. For Heilbroner, the economic logic of capital accumulation determines the roles of the state and of ideology in capitalist society, which means that he reduces politics and culture to the logic of capital accumulation: "All the foregoing aspects of the system can be traced to its inner metabolism, the money-commodity-money circuit" (Heilbroner 2018, 1387). What is missing in Heilbroner's understanding of capitalism is the dialectic of the economic and the non-economic: the logic of accumulation originated in the capitalist economy and has shaped all realms of capitalist society, where the logic of accumulation takes on specific forms that have relative autonomy such as the accumulation of decision-power in capitalist society's state system and the accumulation of reputation and definition-power in capitalist society's cultural system (see Fuchs 2020a).

1.4 What is Digital Capitalism?

The notion of digital capitalism originated in the context of the eulogisation of finance capitalism: The earliest mentioning of the term "digital capitalism" that I was able to trace was in a 1993 article in Forbes magazine, where Forbes then-senior editor Robert Lenzner, a Forbes senior editor, and Forbes reporter William Heuslein wrote the issue's cover story titled "The Age of Digital Capitalism" (Lenzner and Heuslein 1993). The article describes "computerized financial instruments" (Lenzner and Heuslein 1993, 63), derivatives such as options, futures, currency forwards, interest-rates swaps, options on futures and swaps, etc. "Computers make all this magic [of derivatives] possible. [...] Think of all this as an adult Nintendo game with big dollar signs attached" (Lenzner and Heuslein 1993, 63). Digital technologies have played an important role in finance capitalism. Ironically, the financial instruments that Forbes celebrated at the time of the popularisation of the World Wide Web 15 years later played an important role in the global economic crisis that started in 2008.

A bit later, more critical understandings of digital capitalism were developed. Schiller (1999) published the first book that contained the term "digital capitalism" in its title: Digital Capitalism. Networking the Global Market System. He sees the Internet as a means of the globalisation of capitalism:

Networks are directly generalizing the social and cultural range of the capitalist economy as never before. That is why I refer to this new epoch as one of digital capitalism. The arrival of digital capitalism has involved radical social, as well as technological, changes. [...] As it comes under the sway of an expansionary market logic, the Internet is catalyzing an epochal politicaleconomic transition toward what I call digital capitalism - and toward changes that, for much of the population, are unpropitious. (Schiller 1999, xiv, xvii)

A variety of publications analysing digital capitalism has been published (see, e.g., Betancourt 2015, Daum 2017, Meier 2019, Pace 2018, Sadowski 2020, Seidl 2021, Staab 2019, Staab and Nachtwey 2016, Wajcman 2015).

Many of such works understand digital capitalism as an economic order. Here are some examples.

Betancourt (2015, 75) understands digital capitalism as "a new type of automated, immaterial production". Daum (2017) characterises digital capitalism as "a new accumulation model". For Pace (2018), digital capitalism is an "economic system" (p. 259) and economic "mode of production" (p. 259) consisting of the digital mediation of particular forms of property, markets, production styles, accumulation styles, and management styles (p. 260). Seidl (2021, 14) understands digital capitalism as "data-driven, and artificial-intelligence-powered business models". Staab (2019) characterises digital capitalism as privatised mercantilism, a specific "praxis of economic action".

In this respect, many works on digital capitalism stand more in the tradition of Sombart, Schumpeter and Weber than Marx because they just like these three authors define capitalism and digital capitalism as an economic system. In contrast, for Marx capitalism is a Gesellschaftsformation (formation of society, societal formation) and for the present author digital capitalism is a dimension of the capitalist formation of society that emerged in the 20th century and has ever since shaped society. Digital capitalism is not a new totality, not a new formation of society. It is not a new society, but rather a novel feature and dimension of the capitalist formation of society.

Sabine Pfeiffer (2021) understands digital capitalism as a phase of capitalism that she characterises as capitalism of distribution (Distributivkapitalismus, 191). She characterises advertising, marketing, transport, storage, planning, and forecasting as distributive forces.

I define all technological and organisational measures and activities associated with (securing) the realisation of surplus-value as distributive forces. Distributive forces thus aim at value realisation – the successful act of selling – and the optimisation of the associated processes that aim to shorten the time between production and sale and minimise the risk for a sale. (Pfeiffer 2021, 159)¹

According to Pfeiffer, digitalisation has advanced the development of the distributive forces so that capitalism where the distributive forces play a key role has emerged (191). For Pfeiffer, digital capitalism is a capitalism of distribution. Pfeiffer uses the term digital capitalism in a specific economic sense, namely as limited to the economic system and with a focus on the distribution and consumption of commodities. But digitalisation also plays an important role in contemporary capitalism as means of production of surplus-value. Think for example of software such as Microsoft Word and Adobe Photoshop that writers use for creating electronic books and digital images that

¹ Translated from German: "Alle mit der Mehrwertrealisierung verbundenen, technologischen und organisatorischen Maßnahmen und Aktivitäten (zur Sicherung) der Wertrealisierung fasse ich als Distributivkräfte. [...] Die Distributivkräfte zielen also auf die Wertrealisierung – den gelungenen Verkaufsakt – und die Optimierung der damit einhergehenden Prozesse, mit denen die Zeit zwischen der Produktion und dem Verkauf verkürzt und das Risiko für einen Verkauf minimiert werden soll" (Pfeiffer 2021, 159).

are sold as commodities. Adobe and Microsoft sell software licences, which is not an aspect of the distribution of commodities but the production and sale of digital commodities in order to accumulate capital. In 2020, Microsoft was with annual profits of US\$ 46.3 billion the world's 13th largest transnational corporation and Adobe with annual profits of US\$ 21.2 billion the 418th largest one.² What Pfeiffer terms the distributive forces are an important aspect of capitalism, but not the only realm where digitalisation shapes *capitalist society*. Rudi Schmiede (2006, 2015) therefore speaks in the context of digitalisation and capitalism of the informatisation of the economy and society, whereby he understands "the process nature of the penetration of all social dimensions by new contents, forms, and techniques of information" (Schmiede 2006, 352-353).

Speaking of digital capitalism is not a Marxist theory equivalent to analyses of the post-industrial society (Daniel Bell) or the network society (Manuel Castells). The way I conceptualise digital capitalism does not imply that digitalisation is the main feature of contemporary societies. The core characteristic of contemporary societies is that they are capitalist societies. Capitalist society is based on dialectics of many capitalisms, that is of many dimensions of capitalism that develop over time and through restructurations that are implemented as specific responses to crises of capitalist society. Digital capitalism has been a particular dimension of capitalist society in the 20th and 21st centuries.

In the mid-1970s, capitalism experienced a profound multidimensional crisis that resulted in the rise of neoliberal capitalism, a new round of political-economic globalisation, and the advancement of new digital technologies as means of production and communication (Fuchs 2008). The rise of capitalism's digital technological paradigm was a response to the crisis of capitalist society.

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, 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, digital technologies mediate the accumulation of capital and power.

² Data source: Forbes 2000 List of the World's Largest Public Companies, year 2020, https://www.forbes.com/ global2000/#1439081f335d, accessed on 2 May 2021.

One characteristic of networked computing is that it supports the transcendence of boundaries and helps to produce and reproduce relations. For example, the World Wide Web is a network of interlinked texts, sites, and platforms. At the level of social systems and society, digitalisation enables the production and reproduction of relations between objects and human subjects, between structures and human practices. Digital capitalism as a societal formation neither operates just as a practice nor just as a structure. Digital capitalism is not just a digital practice and not just a digital structure, it is the totality of the dialectics of digital practices and digital structures that take place in capitalist society. For example, Facebook's and Google's server farms are technological structures that store massive amounts of big personal data. Google and Facebook are only social and meaningful through the human practices of searching, clicking, liking, commenting, uploading, etc. These practices produce and reproduce data structures that condition – enable and constrain – further digital practices. Google's and Facebook's profits are based on the valorisation of this dialectic of digital structures and practices so that they exploit their users' digital labour (see Fuchs 2021b, especially chapters 4, 5, 6). Digitalisation affects both the productive forces and the relations of production and the dialectic of forces and relations.

Table 1.3 shows the role of capitalist accumulation in digital capitalism's economic, political and cultural realms.

Accumulation in digital capitalism results in particular forms of the social antagonisms characteristic of capitalism. Table 1.4 gives an overview and examples of these antagonisms. Digital capitalism is an antagonistic society, which means it is a digital class society and a digital form of domination.

Let us have a look at an example from the capitalist economy that shows that digital capitalism is just one dimension of capitalism and that capitalism consists of many interacting capitalisms that form a totality. Table 1.5 shows the share of specific

TABLE 1.3 The role of accumulation in digital capitalism

Realm of society	Accumulation in digital capitalism
Economy	Accumulation of digital capital based on digital commodities
Politics	Accumulation of decision-power in respect to the control of digital knowledge and digital networks
Culture	Accumulation of reputation, attention and respect by the spread of ideologies on and of the Internet

TABLE 1.4 The antagonisms of digital capitalism

Realm of society	Underlying antagonism in capitalist society	Antagonisms in digital capitalism	Examples
Economy	Capitalists vs. workers	Digital capital vs. digital labour, digital commodity vs. digital commons	Monopoly power of Google, Facebook, Apple, Amazon, Microsoft, etc.
Politics	Bureaucrats vs. citizens	Digital dictators vs. digital citizens, digital authoritarianism/fascism vs. digital democracy	Donald Trump's use of Twitter and other social media
Culture	Ideologues and celebrities vs. everyday people	Digital ideologues vs. digital humans, digital hatred/division/ ideology vs. digital friendship in culture.	Asymmetrical attention economy in popular culture on social media: the cultural power of online-influencers such as PewDiePie (>100 million followers)

TABLE 1.5 Share of specific industries in the profits, revenues, and assets of the world's largest 2,000 transnational corporations (data source: Forbes 2000 List of the World's Largest Public Companies, year 2018)

Industry	No. of Companies	Share of Sales	Share of Profits	Share of Assets
Conglomerates	36	2.0%	1.1%	0.9%
Culture & Digital	260	14.6%	17.7%	5.1%
Energy & Utilities	199	14.3%	9.8%	5.7%
Fashion	26	1.0%	0.9%	0.0%
FIRE (finance, insurance & real estate)	634	22.5%	33.7%	74.8%
Food	86	3.6%	5.8%	1.2%
Manufacturing & Construction	352	15.2%	13.1%	5.4%
Mobility & Transport	169	11.6%	9.4%	3.6%
Pharmaceutical & Medical	105	7.2%	4.9%	1.9%
Retail	86	6.9%	2.5%	0.9%
Security	1	0.0%	0.0%	0.0%
Various Services	46	1.1%	1.1%	0.4%

capitalist industries' in the world's 2,000 largest transnational corporations' total sales, profits, and capital assets.

The classification of industries used in Table 1.5 is based on the primary products that corporations produce. For example, corporations that are part of the culture and digital industry primarily produce culture, digital goods, or digital services. The culture and digital industry were conceived of consisting of the following sub-industries for which data was available: advertising, broadcasting & cable, business supplies, casinos & gaming, communications equipment, computer & electronics retail, computer hardware, computer services, computer storage devices, consumer electronics, diversified media, electronics, Internet retail, publishing & printing, recreational products, semiconductors, software & programming, and telecommunications services.

In the data presented in Table 1.5, the culture and digital industry account for 17.7% of the world's largest 2000 corporations' profits. Finance capital controls 33.7% of profits, manufacturing and construction capital 13.1%, and mobility and transport capital 9.4%. These data indicate that the capitalist economy is finance capitalism, digital capitalism, industrial capitalism, mobility capitalism, etc. simultaneously. The dimensions of capitalism are not separate but interact. For example, finance capital in the form of venture capital often supports the "start-up" of digital corporations and thereby gains influence on ownership, management, and governance in the digital industry. And if digital companies become large enough, they often become listed on stock markets and thereby part of finance capital. The example shows how finance capitalism and digital capitalism interact in a dialectical manner.

Also, Ulrich Dolata (2019) warns that one should not characterise digital capitalism as a radically new type of economy or capitalism. He argues that the Internet and digitalisation do

not constitute a new demarcated economic sector—they are much too heterogeneous for that – but offer services that can be economically assigned to traditional sectors and markets such as commerce, advertising, and various service sectors. [...] The technical and socio-economic transformations that have been apparent for some years now do not mark, historically speaking, a starting point or a radical new beginning – as is insinuated with the use of somewhat grandiose-sounding concepts such as digital capitalism, platform capitalism, or digital economics – but rather a new phase within the framework of a socio-technical paradigm shift. (Dolata 2019, 185–186, 194–195)

Companies such as Google (advertising), Facebook (advertising), Amazon (commerce), Netflix and Spotify (entertainment) or Uber (transportation) do not constitute novel sectors of the economy but transform existing ones. One should add that the software business where software licences are sold as commodities is relatively new. The world's largest software companies are Microsoft, Oracle, SAP, VMware, Adobe, and Salesforce. In 2020, they were the world's 13th (Microsoft), 94th (Oracle), 150th (SAP), 403rd (VMWare), 418th (Adobe), and 578th (Salesforce) largest transnational companies. The software industry did not exist before computing became commercially viable. These large software companies were created in 1975 (Microsoft), 1977 (Oracle), 1972 (SAP), 1998 (VMWare), 1982 (Adobe), and 1999 (Salesforce). In the long history of capitalism that according to Immanuel Wallerstein goes back to the 16th century when "our modern world-system came into existence as a capitalist world-economy" (Wallerstein 2004, x) and according to Braudel (1980) had its origins in the longue durée (long duration) of commercial capitalism that started in the 12th century in places such as the city-states of Venice, Florence, and Genoa (on the discussion of the history of commercial capitalism, see Banaji 2020 & Melants 2007 & Wood 2002), such companies are relatively novel.

Advertising and entertainment that have been transformed by digital platforms have started to boom in the 20th century as part of Fordist mass production and mass consumption. These industries are a bit older than the software industry, but the culture industry, which Horkheimer and Adorno (1947/2002, 94-136) characterise as the capitalist transformation of culture into exchange-value and ideology, is in the long history of capitalism also still relatively new. What Dolata hints at is that the hype of radical economic novelty that comes along with the rise of digital companies is often ideological in character. It serves as a marketing strategy of large corporations that promise to create a radically new and better society in order to make humans buy their commodities. In reality, digitalisation is based on dialectics of continuity and change in the economy and society.

Shoshana Zuboff (2019, 7) characterises contemporary societies as "surveillance capitalism", a term whereby she understands a "new economic order that claims human experience as free raw material for hidden commercial practices of extraction, prediction, and sales" and a "parasitic economic logic in which the production of goods and services is subordinated to a new global architecture of behavioral modification".

Economic surveillance is certainly an important aspect of the capital accumulation model of many transnational digital corporations such as Facebook. Surveillance scandals such as Edward Snowden's revelations and the Cambridge Analytica scandal have shown how surveillance is an important aspect of the interaction of the power of capitalist corporations that belong to the digital industry and state power. But surveillance is not the only and not the primary feature of capitalism and digital capitalism. There

are also other important information-based processes that are key features of contemporary capitalism:

- exploitation of information-producing and digital labour in the realm of class;
- the governance of information in the realm of political power;
- the creation of false consciousness in the realm of ideology.

Digital/informational/communicative capitalism is a more suited term than surveillance capitalism. Surveillance is one of the means to advance exploitation, control/domination, and manipulation/ideology in capitalism. (Fuchs 2021b, 168)

The notion of digital capitalism better characterises what is going on in contemporary society than the category of surveillance capitalism. Digital capitalism is a still relatively novel dimension of capitalism and capitalist accumulation processes. It is an important topic of research that requires an interdisciplinary critical approach to social research. The book at hand is a contribution to the foundations of the critical analyses of digital capitalism.

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