Marx in the Age of Digital Capitalism

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BRILL

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Towards Marxian Internet Studies

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1   Introduction

The Internet has become an important socio-technical system that shapes and is shaped by life in contemporary capitalism. Internet Studies has become a crucial field that is engaged in thinking about the transformations of society, individuality, politics, economy, culture, and nature (Fuchs 2008).

As some scholars have argued the third world economy crisis that started as housing and financial crisis, but soon became a world crisis of capitalism, has resulted in a renewed interest in approaches that label themselves as explicitly critical and anti-capitalist (for example: Harvey 2010, Žižek 2009, 2010b), it is an important task to reflect on the state of those approaches within Internet Studies that label themselves as being explicitly critical. The task of this chapter is therefore to provide a short overview of approaches to Critical Internet Studies, to point out key concepts of this field, and to reflect on critiques of Critical Internet Studies. The paper is divided into the discussion of the return of Marx (Section 2), Critical Cyberculture Studies (Section 3), Critical Political Economy/Critical Theory of the Internet (Section 4), a comparison of these two approaches (Section 5), a discussion of Critical Internet Studies concepts (Section 6), a discussion of digital labour (Section 7), critiques of Critical Internet Studies (Section 8). Finally, some conclusions are drawn (Section 9).

2   Marx is Back

Eagleton (2011) notes that never a thinker was so travestied as Marx and shows that the contrary of what the common prejudices claim about Marx is the core of his works. Žižek (2010b) argues that the recent world economic crisis has resulted in a renewed interest in the Marxian Critique of the Political Economy. This is shown by the attention recently paid to Marx in the mainstream media. *Time* magazine, for example, had Marx on its cover and asked about the global financial crisis: What would Marx think? (*Time Magazine*, February 2, 2009). Hobsbawm (2011, 12f) argues that for understanding the global dimension of contemporary capitalism, capitalism's contradictions and crises and the existence of socio-economic inequality we "must ask Marx's questions" (13). "Economic

and political liberalism, singly or in combination, cannot provide the solution to the problems of the twenty-first century. Once again the time has come to take Marx seriously" (Hobsbawm 2011, 419).

One interesting thing about Marx is that he keeps coming back at moments, when people least expect it, in the form of various Marxisms that keep haunting capitalism like ghosts, as Derrida (1994) has stressed. It is paradoxical that almost 20 years after the end of the Soviet Union, capitalism seems to have intensified global problems, caused severe poverty and a rise of unequal income distribution, and as a result has brought a return of the economic in the form of a worldwide economic crisis and with it a reactualization of the Marxian critique of capitalism. Although a persistent refrain is "Marx is dead, long live capitalism", Marx is coming back again today.

There are especially six aspects of Marx's works that are relevant for the analysis of contemporary capitalism:

· The globalization of capitalism that is seen as an important characteristic of contemporary society by many social theorists is an important aspect in the works of Marx and Engels (for example: Callinicos 2003). Connected to this topic is also the Marxian theme of international solidarity as form of resistance that seems to be practiced today by the altermondialiste movement.
· The importance of technology, knowledge, and the media in contemporary society was anticipated by the Marxian focus on machinery, means of communication, and the general intellect (see for example: Dyer-Witheford 1999; Fuchs 2008, 2011; Hardt and Negri 2004; McChesney 2007).
· The immizerization caused by neoliberal capitalism suggests a renewed interest in the Marxian category of class (see for example: Harvey 2005).
· The global war against terror after 9/11 and its violent and repressive results like human casualties and intensified surveillance suggest a renewed interest in Marxian theories of imperialism (see for example: Fuchs 2011, Chapter 5; Hardt and Negri 2000; Harvey 2003).
· The ecological crisis reactualizes a theme that runs throughout Marxian works: that there is an antagonism between modern industrialism and nature that results in ecological destruction (see for example: O'Connor 1998).
· The new global economic crisis that started in 2008 has shown that Marxist crisis theory is still important today (Foster and Magdoff 2009, Foster and McChesney 2012, Harvey 2014, Kliman 2012, McNally 2011). Capitalism seems to be inherently crisis-ridden.

Žižek argues that the antagonisms of contemporary capitalism in the context of the ecological crisis, intellectual property, biogenetics, new forms of apartheid

and slums show that we still need the Marxian notion of class and that there is a need to renew Marxism and to defend its lost causes in order to "render problematic the all-too-easy liberal-democratic alternative" (Žižek 2008, 6) that is posed by the new forms of a soft capitalism that promises and in its rhetoric makes use of ideals like participation, self-organization, and co-operation without realizing them. Therborn argues that the "new constellations of power and new possibilities of resistance" in the 21st century require retaining the "Marxian idea that human emancipation from exploitation, oppression, discrimination and the inevitable linkage between privilege and misery can come only from struggle by the exploited and disadvantaged themselves" (Therborn 2008, 61). Jameson argues that global capitalism, "its crises and the catastrophes appropriate to this present" and global unemployment show that "Marx remains as inexhaustible as capital itself" (Jameson 2011, 1) and makes *Capital. Volume 1* (Marx 1867) a most timely book.

The implication for Internet Studies is that it should give specific attention to the analysis of how capitalism shapes and is shaped by the Internet. This means that there is a need for rethinking Internet Studies and reorienting it as a Critique of the Political Economy and Critical Theory of the Internet that takes into account the specific character of Marxian analyses of media, technology, and communication, namely to analyze "how capitalist structures shape the media" (McChesney 2007, 79), the role of communication in the "structure of social relations and [...] social power" with a particular concern for the analysis of that role in the "system of social power called capitalism" (Garnham 1990, 7), and "the analysis of the relationship of media and capitalist society" (Knoche 2005, 105).

In 20th century Marxism, the critical analysis of media, communication, and culture has emerged as a novel quality due to the transformations that capitalism has been undergoing. Early 20th century approaches that gave attention to culture and ideology included the ones by Gramsci, Lukács and Korsch. The latter two thinkers have influenced Frankfurt School Critical Theory (Kellner 1989). Gramsci has had an important influence on British Cultural Studies (Turner 2003). Frankfurt School Theory and British Cultural Studies differ in a lot of respects, but have in common the interest in ideology critique. In addition, authors like Adorno, Horkheimer, Marcuse, Benjamin, Williams, or E.P. Thompson had a profound knowledge of, interest in and made thorough use of Marx's works. Cultural Studies has also been influenced by Althusser's theory of ideology (Turner 2003). The focus on ideology has been challenged by Critical Political Economy scholars like Smythe and Garnham, who stress the economic functions of the media, whereas other political economists like Schiller, Golding, Murdock, Herman, Chomsky, McChesney acknowledge the importance of the economic critique of the media, but have continued to also

stress the role of media as producers of ideology (Mosco, 2009). More recent developments in Marxist theories of culture and communication have for example been approaches to integrate diverse approaches (for example: Kellner 1995), theories of alternative media that have been implicitly or explicitly inspired by Enzensberger's version of Critical Theory (for example: Downing 2001) and the emergence of the importance of Autonomist Marxism (for an overview see: Virno and Hardt 1996). Marxist Studies of the Internet can make use of this rich history of 20th century Marxism.

Critical Studies of the Internet have been influenced by various strands of Marxist Cultural and Media theory, such as Ideology Critique (see for example the concept of Net Critique: Lovink and Schultz 1997), Autonomist Marxism (Dyer-Witheford 1998; Fuchs 2008; Hakken 2003), Critical Political Economy (Andrejevic 2005, 2007, 2009; Fuchs 2009b, 2010a, 2011, 2014a, 2014b, 2014c, 2015, 2016; Hakken 2003), or Critical Theory (Andrejevic 2009; Fuchs 2008, 2011; Taylor 2009).

3   Cyberculture Studies and the Un-/Critical

We can distinguish two broad approaches in Internet Studies that describe themselves as critical. The first have a cultural studies background, the second a political economy background. The theoretical background of the first is, in broad terms, post-structuralist; that of the second is Marxist.

Critical Cyberculture Studies has been positioned explicitly as being an application of Cultural Studies and Postmodernism (Bell 2001, 65–91; Jones 2006, xv–xvi; Sterne 2006). David Bell (2006b) mentions in his introduction to his 4-volume collection Cybercultures. Critical concepts in media and cultural studies (Bell 2006a) 18 influences on Cyberculture Studies. Among them are for example cultural studies, the philosophy of science and technology, feminist studies, and policy studies, whereas approaches such as Critical Theory, Marxism, or critique of the political economy of the media and communication are conspicuous by their absence. The title of Bell's collection promises that one will find "critical concepts" of Internet Studies represented in the 1600 pages of the four volumes, but while reading the 69 chapters, one too often wonders why the critical dimension of the concepts is missing. Exploitation, surplus value, and class on the Internet are marginal issues, whereas topics such as the history of the Internet, research methods, virtual communities, online identities, bodies and minds in cyberspace, and cyborgs are prominently featured. Explicit discussions of Internet capitalism and exploitation, as in the contributions by Dwayne Winseck, Kevin Robins/Frank Webster, or Tiziana Terranova,

are marginalized within this volume. The volume lives up to what Bell promises in the introduction – and does therefore not deserve the subtitle "critical concepts".

David Silver (2006b) characterizes "Critical Cyberculture Studies" as the third stage in Cyberculture Studies that followed after Popular Cyberculture Studies and Cyberculture Studies. He characterizes Critical Cyberculture Studies as:

(1) exploring "the social, cultural and economic interactions that take place online" (Silver, 2006b, 67),
(2) the analysis of discourses about cyberspace,
(3) the analysis of access to the Internet,
(4) focusing on participatory design (Silver 2006b, 67–73).

Silver advances a shallow notion of the critical. The first quality is extensively broad, the vast majority of analyses of the Internet focuses on social, cultural, or economic issues (except political and ecological analyses), so it remains unclear what shall be specifically critical about "Critical" Cyberculture Studies. When discussing the study of "online marginality", Silver stresses the importance of exploring "issues of race, ethnicity and sexuality" (Silver 2006b, 70). The category of class is not mentioned.

David Silver and Adrienne Massanari (2006) present in their collection *Critical cyberculture studies* 25 readings. In the introduction, Silver (2006a, 6f) mentions capitalism as one context of "Critical Cyberculture Studies", but a much stronger focus is on the "cultural differences" of "race and ethnicity, gender, sexuality, age, and disability" (Silver 2006a, 8). This is also reflected in the volume's contributions, where the analysis of class, surplus value, and exploitation on the Internet are marginal issues, whereas topics relating to "cultural difference" in cyberspace occupy a dominant position.

4   Critical Political Economy and Critical Theory in Internet Studies

The second typical approach that can be found in Critical Internet Studies is based on Critical Political Economy and Critical Theory. The sequence of presentation of the following approaches does not reflect an assessment of the importance of approaches, but is based on a chronological order of key works. Included are approaches that use distinctive terms related to critical theory and political economy to characterize themselves.

Geert Lovink and Pit Schultz (1997) argue that "Net Critique" analyzes the organization of power in the immaterial sphere (Lovink and Schultz 1997, 6) as

well as imperialism and ideology on the Internet (Lovink and Schultz 1997, 11). The goal of Net Critique is free access to all media and all content (Lovink 1997). Net Critique would not be a theory, but a theory-praxis that stands for radical criticism within an exploding electronic public (Lovink and Schultz 1997). Since the *Call for Net Critique* (Lovink and Schultz 1997) has been published in 1997, a multitude of publications has emerged from the Net Critique Approach (for example: Lovink 2002; Lovink and Scholz 2005; Lovink and Zehle 2005; Jacobs, Janssen and Pasquinelli 2007; Lovink and Rossiter 2007; Rossiter 2006), which has more recently also included a critique of web 2.0 (for example: Lovink 2008; Lovink and Niederer 2008; Rossiter 2006). The Net Critique approach of Lovink and others does not understand itself as a systematic critical theory, but as a very practical form of critique that is therefore also closely related to media activism and media art.

Geert Lovink (2013) stresses in the introduction to the reader *Unlike Us: Social media monopolies and their alternatives* (Lovink and Rasch 2013) that in "contrast with social science scholars around Christian Fuchs discussing the (Marxist) political economy of social media, Unlike Us is primarily interested in a broad arts and humanities angle also called web aesthetics (as described by Vito Campanelli), activist use, and the need to discuss both big and small alternatives, and does not limit itself to academic research. We see critique and alternatives as intrinsically related and both guided by an aesthetic agenda" (Lovink 2013, 14). It is definitely the case that Geert Lovink's main achievement is that he has advanced the critical analysis of the Internet and social media with an aesthetic and arts-based focus. It is also understandable that he does not consider himself to be a social scientist and is not interested in using social science methods. But the separation between a social scientific Marxist political economy of social media on the one hand and a humanities-based critique on the other hand is artificial: Marxist political economy uses dialectical, philosophical and theoretical concepts that could be seen as the humanities side of political economy. The social sciences have in the form of social theory a humanities side themselves. In critical social sciences, critical social theories represent this dimension. Critical political economy also has a practical-political dimension and uses methods for critical empirical research.

In the formulation of the Unlike Us research agenda, Geert Lovink and Korinna Patelis (2013, 367) argue that what is "missing from the discourse is a rigorous discussion of the political economy of [...] social media monopolies". This means that a political economy agenda that Lovink (2013) positions in the book introduction as outside the Unlike Us universe has in the first instance been defined as part of the framework. The political economy framework propagated by the Unlike Us research agenda (Lovink and Patelis 2013) is of course

somewhat crude and focuses on the power of monopolies without asking research questions about the exploitation of digital labour, the international and gender division of labour in the ICT/Internet/social media sector, value and surplus value, class, etc (the terms monopolies and monopoly are mentioned 7 times, terms such as class, surplus and value 0 times). So the logic of the argument is political economy yes and no, not if it is Marx or Fuchs, not if it is social science, yes if it is not-Marx and not-Fuchs and not-social science, etc. The whole argument is more than artificial and tries to construct a separation between two critical networks (the Unlike Us Network and the ICTs and Society-Network) that are in fact quite complementary and have no need to compete. I refuse to see these approaches and networks as competing and as being radically different. I am not interested in the politics of splintering typical for left-wing dogmatism that leave out seeing the power of the common enemy and that benefits can arise from synergies between networks and critical approaches.

Otherwise we might just end up the way Monty Python describe the paralysis of the left in *Life of Brian*: Reg: Right. You're in. Listen. The only people we hate more than the Romans are the fucking Judean People's Front. P.F.J.: Yeah… Judith: Splitters…P.F.J.: Splitters…Francis: And the Judean Popular People's Front. P.F.J.: Yeah. Oh, yeah. Splitters. Splitters…Loretta: And the People's Front of Judea…P.F.J.: Yeah. Splitters. Splitters…Reg: What? Loretta: The People's Front of Judea. Splitters. Reg: We're the People's Front of Judea! Loretta: Oh. I thought we were the Popular Front.

Nick Dyer-Witheford (1999) has suggested reinventing Marxism for the analysis of 21st century techno-capitalism. He terms this project cyber-Marxism. Dyer-Witheford's applies the approach of autonomist Marxism that is represented by scholars like Antonio Negri, Michael Hardt, Paolo Virno, Maurizzio Lazaratto, and others, to Internet Studies. Dyer-Witheford sees Autonomist Cyber-Marxism as an alternative to the techno-determinism of scientific socialism, the neo-Luddism of the Braverman-inspired technology-as-domination theories, and the techno-euphoria of many theorizations of post-Fordism (Dyer-Witheford 1999, 38–61).

Greg Elmer (2002) sees three characteristics of Critical Internet Studies:

(1) the refutation and questioning of ideologies that claim the Internet is revolutionary,
(2) the analysis of the "process of Internet corporatization and portalization" (Elmer 2002, x),
(3) the focus on radical possibilities of the critical Internet community especially the cracks, fissures, and holes in the forms of domination that characterize the Internet.

David Hakken (2003) argues for a knowledge theory of value that is grounded in Marxian theory. He sees cyberspace as being shaped by "vast contradictions" (Hakken 2003, 393). New information- and communication technologies "are better viewed as terrains of contestation than as ineluctable independent forces. Technologies do have politics, but like all politics, they manifest multiple, contradictory tendencies" (Hakken 2003, 366).

Fuchs (2008, 2009a, b; 2010a, b; 2011; 2014a, b, c; 2015) speaks of Critical Internet Theory/Studies and the Critique of the Political Economy of the Internet. He argues that these approaches are grounded in more general approaches, especially Frankfurt School Critical Theory and Marx's Critique of the Political Economy that are both foundations for Critical Media and Information Studies (Fuchs 2011). He thereby undertakes an ontological and epistemological grounding of the critical analysis of the Internet by basing it:

(1)   on a general social theory level,
(2)   on the analysis of capitalism,
(3)   on the critical analysis of media, technology, and communication, and
(4)   on the specific analysis of the Internet in a critical inquiry that yields emergent qualities.

Fuchs defines Critical Internet Theory/Studies and the Critique of the Political Economy of the Internet as an approach that engages in "identifying and analysing antagonisms in the relationship of the Internet and society; it shows how the Internet is shaped and shapes the colliding forces of competition and cooperation; it is oriented towards showing how domination and exploitation are structured and structuring the Internet and on how class formation and potential class struggles are technologically mediated; it identifies Internet-supported, not yet realized potentials of societal development and radically questions structures that restrain human and societal potentials for cooperation, self-determination, participation, happiness and self-management" (Fuchs 2009b, 75). Fuchs (2011) defines this approach as a unity of philosophically grounded critical theory, empirical research, and praxis-oriented critical ethics.

For Mark Andrejevic (2009), "critical media studies 2.0" challenge the uncritical celebration of the empowering and democratizing character of contemporary media by showing how new media are embedded in old forms of domination. "Thus, when it comes to the revolutionary promise of participatory media, the challenge faced by the proponents and practitioners of a Critical Media Studies 2.0 is not to assert (in all too familiar rhetoric) that, 'everything has changed,' but rather to explain why, even in the face of dramatic technological transformation, social relations remain

largely unaltered. To put it bluntly, Critical Media Studies is not interested in media for their own sake, but for society's sake" (Andrejevic 2009, 35). In an approach comparable to the one of Andrejevic, Paul A. Taylor (2009) speaks of Critical Theory 2.0 in order to "describe the manner in which traditional Critical Theory's (1.0) key insights remain fundamentally unaltered" (Taylor 2009, 93), which would be necessary for challenging web 2.0 optimism.

These approaches mainly differ in their understanding of theory, the role that is given to empirical research, the employment of different research methods (such as qualitative interviews, quantitative surveys, content analyses, statistical analyses, critical discourse analyses, or ethnography). For example Dyer-Witheford's cyber-Marxist approach is purely theoretical and based on a reconstruction of Marxian theory for cyberspace. Net Critique tends to discuss examples that are critically reflected upon from theory-inspired positions that are deliberately eclectic and sometimes personal or journalistic and do not form a systematic theoretical whole as in Adorno's prismatic method of exposition. Fuchs on the one hand is keen on basing his approach on a systematic Hegelian dialectical philosophy, in which every category has a clear place in the theoretical system and categories are dialectically developed from the abstract to the concrete level. On the other hand he applies dialectical philosophy at a concrete level as a foundation for empirical studies that make use of a whole range of methods.

Although there are vast theoretical, methodological, epistemological, and ontological differences between various approaches that advance a Critical Theory or the Critical Political Economy of the Internet, there are also commonalities that are especially relating to the normative understanding of criticism. One important commonality is the *normative understanding of critique*. Critical Internet scholars thereby reflect the old debate between the understanding of critique as epistemological/methodological and as normative procedure. This issue was already at the heart of the positivism debate in German sociology in 1961. Karl R. Popper (1962) argued that the method of the social consists of gaining and differentiating knowledge by testing solutions to problems. Popper considered this method as critical because scholars question the works of others in order to improve knowledge in trial and error processes. For Popper, critique was an epistemological method that shows logical contradictions. Theodor W. Adorno (1962) argued in contrast to Popper that contradictions are not only epistemological (in the relation of subject-object), but can be inherent in objects themselves so that they cannot be resolved by acquiring new knowledge (Adorno 1962, 551). Adorno stressed that Popper's ideal of value-free academia is shaped by the bourgeois concept of value as exchange

value (Adorno 1962, 560). He said that positivism is only oriented on appearance, whereas critical theory stresses the difference between essence and appearance (Adorno 1969, 291). He pointed out that Popper's notion of critique is subjective and cognitive (Adorno 1969, 304). There is a fundamental difference between epistemological critique (Popper) and the critique of society (Adorno). Critical Internet scholars question the empiricist application of methods to studying the Internet without grounding the analyses in a thorough analysis in society and in a critical theory of society. This includes some who question all empirical research because they think that the normative falsehood of domination cannot be empirically tested, but only argued for. They all share Adorno's focus on the critique of society.

A second feature that Critical Internet Studies approaches share is the consideration of conventional Internet Studies that dominate the field as forms of instrumental and technological rationality that help legitimize and reproduce capitalism and other forms of domination within capitalism. Instrumental reason means that "ideas have become automatic, instrumentalized" that are not seen as "thoughts with a meaning of their own. They are considered things, machines" for the achievement of the reproduction and deepening of domination (Horkheimer 1974/1947, 15). Technological rationality is another term for instrumental reason, which stresses "elements of thought which adjust the rules of thought to the rules of control and domination" (Marcuse 1964b, 138). Technological rationality denies that reality could be other than it is today. It neglects alternative potentials for development. It aims at "liquidating the oppositional and transcending elements" (Marcuse 1964, 56). Technological rationality causes a one-dimensional thinking, in which "ideas, aspirations, and objectives that, by their content, transcend the established universe of discourse and action are either repelled or reduced to terms of this universe" (Marcuse 1964, 12). Critical Internet scholars consider conventional Internet Studies as ideological because they analyze the Internet as it is, without embedding the analysis into an analysis of structures of domination and without engaging in the struggle for a better world that abolishes domination.

A third commonality concerns the normative and practical levels. Critical Internet Study approaches criticize phenomena that they describe as exploitation, domination, oppression, or exertion of power and structural violence and seek to help advance practices that result in the liberation from these phenomena. Maria Bakardjieva (2010, 61) argues that Critical Internet Studies in contrast to statistical and interpretative approaches seeks answers to normative questions relating to the Internet's role in empowerment, oppression, emancipation, alienation and exploitation. Critical studies relate the analysis of the Internet to both domination and liberation. To a larger or lesser degree this

involves explicitly the establishment of a post-capitalist society that is for example described as grassroots socialism, communism, participatory democracy, or sustainable information society. The normative dimension is described by such approaches as their emancipatory character.

The critical normative orientation is the central characteristic of Critical Internet Studies. It reflects Horkheimer's insight that critical theory aims at "a state of affairs in which there will be no exploitation or oppression" (Horkheimer 1937/2002, 241). Horkheimer in his essay on *Traditional and critical theory* reflects Karl Marx's critique of capitalism and reformulated Marxian theory as critical theory of society. One may therefore say that Critical Internet Studies is not only indebted to the Frankfurt School's understanding of critique, but also that the root of this understanding is the theory of Karl Marx. Marx summarized the normative dimension of critical analysis by saying that it grasps "the root of the matter", is based on "the teaching that *man is the highest essence for man*" and therefore ends "with the *categoric imperative to overthrow all relations* in which man is a debased, enslaved, abandoned, despicable essence" (MEW Vol. 1, 385). If we understand Marxian critique as the critique of all forms of domination and all dominative relationships, then all critical studies are Marxian-inspired. My argument is that this heritage should not be denied, but taken seriously and positively acknowledged.

The critical normative dimension Critical Internet Studies means that it does not operate in a vacuum, but is on a more general level related to various approaches in the analysis of media, communication, technology, culture, and information that also stress the normative critique of domination and the goal of emancipation. It is in this respect especially related to analyses of the critique of the political economy of media and communication, critical theory, and critical information systems research. The Critique of the Political Economy of the Media and Communication[1] studies the "the power relations,

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[1] Representatives of this approach, such as Peter Golding, Robert McChesney, or Graham Murdock, speak of a political economy approach, which is somewhat misleading because political economy is not necessarily critical as indicated by the subtitle of Marx's (1867) main work Capital: A Critique of Political Economy. Marx characterized uncritical political economy as approaches that systematize capitalism "in a pedantic way" by proclaiming capitalism and its constituents for "everlasting truths" (Marx 1867, 174–175). As those approaches that are normally discussed in the Anglo-American context under the heading of "political economy of the media and communication" do normally not naturalise and fetishise the specific capitalist form of the media and communicaiton, a self-description as critique of the political economy of the media and communication is in my view more appropriate. At the same time one has to see that terms such as "political economy" and "critical theory" are also useful terms in order to avoid being discriminated because of taking

that mutually constitute the production, distribution, and consumption of resources, including communication resources" (Mosco 2009, 2). This approach addresses "how the media system" interacts with and affects "the overall disposition of power in society" (McChesney 2007, 77), and asks "basic moral questions of justice, equity and the public good" (Murdock and Golding 2005, 61). A critical theory of media and technology analyzes "society as a terrain of domination and resistance and engages in critique of domination and of the ways that media culture engages in reproducing relationships of domination and oppression" (Kellner 1995, 4). It is "informed by a critique of domination and a theory of liberation" (Kellner 1989, 1; see also Feenberg 2002). Critical information systems research produces "knowledge with the aim of revealing and explaining how information systems are (mis)used to enhance control, domination and oppression, and thereby to inform and inspire transformative social practices that realize the liberating and emancipatory potential of information systems" (Cecez-Kecmanovic 2005, 19). Its task is the analysis of the role of information systems in disempowerment and empowerment and to help "overcome injustice and alienation" (Stahl 2008, 9).

5   Critical Cyberculture Studies and Critical Political Economy/ Critical Theory of the Internet

The main difference that can be found in Critical Internet Studies is the one between Critical Cyberculture Studies and the Critical Political Economy of the Internet. The first approach focuses more on issues relating to the marginalization of identities online, whereas the second has a focus on issues relating to class, exploitation, and capitalism.

When reading "Critical" Cyberculture Studies books and collections, one should remember Nicholas Garnham's insights that "modern forms of racial domination are founded on economic domination" and that "forms of patriarchy have been profoundly marked by the way in which the capitalist mode of production has divided the domestic economy from production as a site of wage labor and capital formation" (Garnham 1998, 610). Critical Political Economy "sees class – the structure of access to the means of production and the structure of the distribution of the economic surplus – as the key to the structure of domination, while cultural studies sees gender and race, along with other potential markers of difference, as alternative structures of domination in

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a Marxist approach, which unfortunately is a not infrequent reality in contemporary academia, politics, and society.

no way determined by class" (Garnham 1998, 609). The same difference can be found in Critical Internet Studies. The approach of "Critical" Cyberculture Studies tends to see gender and race in cyberspace as not being necessarily shaped by class. It tends to not see class as the key to understanding domination in cyberspace that has crucial influence on gender, race, and other lines of difference. It tends to ignore topics of class, capitalism, and exploitation. "Critical" Cyberculture Studies is therefore an approach that in its postmodern vein is unsuited for explaining the role of the Internet and communications in the current times of capitalist crisis. The crisis itself evidences the central role of the capitalist economy in contemporary society and that the critical analysis of capitalism and socio-economic class should therefore be the central issue for Critical Internet Studies.

Ernesto Laclau has in a trialogue with Judith Butler and Slavoj Žižek admitted that in postmodern approaches it is a common language game to "transform 'class' into one more link in an enumerative chain [...] "race, gender, ethnicity, etc. – *and* class" (Butler, Laclau and Žižek 2000, 297) and to put class deliberately as last element in the chain in order to stress its unimportance – Laclau speaks of "deconstructing classes" (Butler, Laclau and Žižek 2000, 296). Slavoj Žižek has in this context in my opinion correctly said that Postmodernism, Cultural Studies, and post-Marxism have by assuming an "irreducible plurality of struggles" accepted "capitalism as 'the only game in town'" and have renounced "any real attempt to overcome the existing capitalist liberal regime" (Butler, Laclau and Žižek 2000, 95). Subordinating or equalizing the category of class to other antagonistic categories (gender, ethnicity, age, capabilities, etc) poses the danger of burying the project and demand to establish participatory alternatives to the capitalist totality. The Butler-Laclau-Žižek debate implies for "Critical" Cyberculture Studies that its tendency of neglecting class, exploitation, and capitalism means that it will necessarily have a reformist political agenda and will not be able to conceptualize alternatives to a capitalist Internet in a capitalist society (Fuchs 2011).

All non-class antagonisms are articulated with class, whereas not all non-class antagonisms are articulated with each other. All antagonisms of contemporary society have class aspects and are conditioned by class. Class is the antagonism that binds all other antagonisms together; it prefigures, conditions, enables and constrains, and exerts pressure on possibilities for other antagonisms (Fuchs 2008). At the same time, non-class antagonisms influence the class antagonism so that complex dynamic relationships are present. If class is the super-antagonism of capitalism that does not determine or overdetermine, but condition other antagonisms, then it is important to give specific attention to this category.

According to its own self-descriptions, "Critical" Cyberculture Studies wants to help overcome "online marginalization". It does however very well in marginalizing critiques of how capitalism, class, and exploitation are related to the Internet. It therefore does not deserve the name "critical". "Critical" Cyberculture scholars should take very seriously Douglas Kellner's warning: "Neglecting political economy, celebrating the audience and the pleasures of the popular, overlooking social class and ideology, and failing to analyze or criticize the politics of cultural texts will make media/cultural studies merely another academic subdivision, harmless and ultimately of benefit primarily to the culture industry itself" (Kellner 2009, 19–20). It is time for cyberculture scholars to stop purely focusing on their heroes like Donna Haraway, Sherry Turkle, Howard Rheingold, Manuel Castells, and various postmodernists (Bell 2001, 74–88; Bell 2007; Silver 2006b, 65; Silver 2006a, 3) and to substantiate these approaches by reading and interpreting Karl Marx's works.

The number of and interest in analyses of the Internet that are focusing more on class and exploitation have been growing. In the current times of capitalist crisis and the end of postmodernism and culturalism, this development is likely to continue. My argument is that it is time to engage with pleasure in conducting Marxist Internet Studies. We have rather entered times, where it becomes increasingly a matter of explanation why you are not a Marxian scholar.

Truly critical Internet Studies have in common their opposition to positivistic Internet Studies, instrumental/technological rationality, the critique of domination, the struggle for emancipation, and the shared normative grounding in Marxian analysis and various critical analyses of the media, communication, technology, and information. My argument is not only that Internet Studies is in need of Marxian theory, but also that Internet Studies to a certain degree already makes use of Marxian categories and should therefore acknowledge its own Marxian roots.

The next section will focus on the analysis of specific Marxian categories of Critical Internet Studies.

6   Karl Marx and Critical Internet Studies Concepts

Critical Internet Studies to a certain degree already makes use of Marxian categories and should therefore acknowledge its own Marxian roots. With the help of examples this circumstance will now be shown especially for eleven Marxian concepts:

(1)   dialectics
(2)   capitalism
(3)   commodity/commodification
(4)   surplus value, exploitation, alienation, class
(5)   globalization
(6)   ideology/ideology critique
(7)   class struggle
(8)   commons
(9)   public sphere
(10)   communism
(11)   aesthetics

Vincent Mosco stresses that Marxian political economy decentres the media by "placing in the foreground the analysis of capitalism, including the development of the forces and relations of production, commodification and the production of surplus value, social class divisions and struggles, contradictions and oppositional movements" (Mosco 2009, 94). To this analysis, six additional crucial Marxian concepts are added: globalization, ideology, commons, public sphere, communism, and aesthetics.

The first relevant Marxian concept is *dialectics*. Marx applied the Hegelian method of dialectical thinking to the analysis of capitalism. Dialectics is "in its very essence critical and revolutionary" because "it regards every historically developed form as being in a fluid state, in motion, and therefore grasps its transient aspect as well. [...] the movement of capitalist society is full of contradictions" (Marx 1867, 103). Fuchs's approach has an epistemological and ontological focus on dialectical philosophy in order to conceptualize the relationship Internet/web 2.0 and society not as one-dimensional and techno-deterministic, but as complex, dynamic, and contradictory (Fuchs 2009b; Fuchs 2011, Chapters 2+3). Peter Lunenfeld (1999) and Michael Heim (1999) have spoken of the digital dialectic. Such approaches are related to the dialectical insight of the critical theory of technology that technology is "an 'ambivalent' process of development suspended between different possibilities" (Feenberg 2002, 15).

Marcuse (1941) wanted to avoid deterministic dialectics and to bring about a transition from a structural-functionalist dialectic towards a human-centred dialectic. Therefore he argued that capitalism is dialectical because of its objective antagonistic structures and that the negation of this negativity can only be achieved by human praxis. The Internet or specific Internet platforms have multiple, at least two, potential effects on society and social systems that can co-exist or stand in contradiction to each other (Fuchs 2008, 2011). Which

potentials are realized is based on how society, interests, power structures, and struggles shape the design and usage of technology in multiple ways that are also potentially contradictory. One should therefore think about the Internet dialectically just like Marx thought about technology in capitalism as being shaped by an antagonism between productive forces and relations of production. Networked productive forces are in capitalism "antithetical forms", which are at the same time 'mines to explode' capitalism (Marx 1857/1858, 159) and governed by class relations that are 'no longer productive but destructive forces' (Marx and Engels 1846, 60). So for example the services created by Google anticipate a commons-based public Internet from which all benefit and create new potentials for human co-operation, whereas the freedom (free service access) that it provides is now enabled by online surveillance and user commodification that threatens consumer privacy and results in the economic exploitation of users. The solution is not to call for the abolition or replacement of Google, but to argue for its transformation into a publicly organized and controlled search engine (that could for example be run as collaborative project by public universities). The Internet holds at the same time potential for "capitalist spectacle and commodification" and the construction of "cyber-situations" that are "aimed at progressive change and alternative cultural and social forms" (Best and Kellner 2001, 237–238).

The second cluster of Marxian concepts that is reflected in Critical Internet Studies is *capitalism/capitalist mode of production/capitalist society*. For Marx, capitalism is a system of capital accumulation, in which the worker "has permission to work for his own subsistence, that is, to live only insofar as he works for a certain time gratis for the capitalist (and hence also for the latter's co-consumers of surplus value)" so that "the whole capitalist system of production turns on increasing this gratis labour" (Marx 1875, 310). Therefore this system "is a system of slavery" (Marx 1875, 310). The notion of capitalism/capitalist mode of production is reflected in Critical Internet Studies within concepts such as communicative capitalism, informational capitalism, the antagonism of the networked digital productive forces and the relations of production, digital capitalism, hypercapitalism, or new media capitalism.

The third important Marxian category is that of *commodity/commodification*. Marx argues that the fundamental element of capitalism is the commodity, a good that is exchanged in a certain quantitative relationship with money: x amount of commodity A = y units of money. "A given commodity, a quarter of wheat for example, is exchanged for x boot-polish, y silk or z gold, etc. In short, it is exchanged for other commodities in the most diverse proportions" (Marx 1867, 127). The commodity is for Marx the cell form of capitalism: "The

wealth of societies in which the capitalist mode of production prevails appears as an 'immense collection of commodities'; the individual commodity appears as its elementary form" (Marx 1867, 125). Commodification is the transformation of a social relationship into an exchange relationship between buyer and seller. The notion of commodification has been used in Critical Internet Studies for example as the commodification of the Internet, the commodification of online privacy, the commodification of community in cyberspace, and the concept of profiling as online commodification machine of personal information.

Fourth, one finds the concepts of *class, surplus value, exploitation, and alienation* in Critical Internet Studies. These notions are inherently related for Marx. Their connection is neatly summarized in the following passage: "On the one hand, the process of production incessantly converts material wealth into capital, into means of creating more wealth and means of enjoyment for the capitalist. On the other hand, the labourer, on quitting the process, is what he was on entering it, a source of wealth, but devoid of all means of making that wealth his own. Since, before entering on the process, his own labour has already been alienated from himself by the sale of his labour-power, has been appropriated by the capitalist and incorporated with capital, it must, during the process, be realised in a product that does not belong to him. Since the process of production is also the process by which the capitalist consumes labour-power, the product of the labourer is incessantly converted, not only into commodities, but into capital, into value that sucks up the value-creating power, into means of subsistence that buy the person of the labourer, into means of production that command the producers. The labourer therefore constantly produces material, objective wealth, but in the form of capital, of an alien power that dominates and exploits him; and the capitalist as constantly produces labour-power, but in the form of a subjective source of wealth, separated from the objects in and by which it can alone be realised; in short he produces the labourer, but as a wage labourer. This incessant reproduction, this perpetuation of the labourer, is the sine quâ non of capitalist production" (Marx 1867, 716).

Examples for the usage of these Marxian categories in Internet Studies can be given. Fuchs (2010b) argues that capital accumulation is in the corporate 2.0 based on the infinite exploitation of prosumers, who are sold as Internet prosumer commodity to advertising clients. He sees users of the corporate web 2.0 as part of the proletarian class that is exploited by capital (Fuchs 2010b). He bases his analysis on Marx's surplus value concept and Dallas Smythe's notion of the audience commodity. Mark Andrejevic (2002) argues that the work of being watched in respect to the media is a form of exploitation and productive

labour. Discussions about value creation on digital media have become important. Andrejecvic speaks of "the interactive capability of new media to exploit the work of being watched" (Andrejevic 2002, 239). Andrejevic (2009) employs the term exploitation 2.0 in order to stress that exploitation remains a fundamental characteristic of the web 2.0 environment. In another work, Andrejevic (2007) has connected the notion of the work of being watched to the category of the digital enclosure. Terranova (2004) has advanced the concept of the exploitation of free labour on the Internet. Digital labour-conferences like "Digital labour: Workers, authors, citizens" (University of Western Ontario, October 2009; see Burston, Dyer-Witheford and Hearn 2010), "The Internet as Playground and Factory" (New School, November 2009; see the book Scholz 2012) and "*Towards Critical Theories of Social Media.* The Fourth ICTs and Society-Conference" (Uppsala University, Sweden. May 2nd–4th, 2012, see the collected volume Fuchs and Sandoval 2014) have achieved extraordinary interest in terms of contributions and attendance. A related question is the one of how class relations have changed in the context of culture, the Internet, networks and information.

The fifth concept is that of *globalization*. Marx stressed that capitalism has an inherent tendency to globalize because of "the entanglement of all peoples in the net of the world-market" and "the international character of the capitalistic regime" (Marx 1867, 929). The world market, capital export and the global organization of companies are aspects of this capitalist globalization process. Kellner (2002) stresses the importance of Marx's dialectical and critical theory in contemporary "technocapitalism" for understanding that globalization and the Internet are contested terrains composed of oppositions. Harvey (1990), reflecting Marx's insight that "capital by its nature drives beyond every spatial barrier" and that "the means of communication and transport" are connected to "the annihilation of space by time" (Marx 1857/1858, 524), says that the rise of a flexible regime of accumulation in combination with new communication technologies has brought about a new phase of time-space compression of capitalism. The Internet has not caused, but enhanced the globalisation of capitalist production, distribution and circulation. Communication technologies like the Internet are the medium and at the same time outcome of the globalization tendency of capitalism (Fuchs 2008, 110).

The sixth concept is the one of *ideology/ideology critique*. For Marx, ideology is inverted consciousness, consciousness that is manipulated so that it sees reality other than it is. "In all ideology men and their circumstances appear upside-down as in a camera obscura" (MECW Vol. 5, 14). It is "an inverted consciousness of the world" (MECW Vol. 3, 175). In *Capital*, Marx (1867) described ideology as the fetishism of commodities that makes social relations appear as

characteristics of things and thereby creates "misty realms" of consciousness (Marx 1867, 165). In the 1990s, Internet ideology often presented the Internet as a new frontier for creating jobs, a prospering economy and enhancing democracy. The 2000 new economy crisis, in which a lot of high-risk venture capital based Internet companies went bankrupt, shattered these hopes. Around 2005, a new version of this ideology emerged: The assumption was now that "web 2.0" and "social media" advance creativity age, economic democracy and participatory culture because they allow users to share, engage and connect. However, corporate social media are based on the exploitation of digital labour and are therefore incompatible with economic democracy and participation (Fuchs 2014a, b). Eran Fisher (2010a, b) argues in this context that web 2.0 is shaped by a discourse that legitimates capitalism that he characterizes as the new spirit of networks. The rise of new technologies often creates an "eruption of feeling that briefly overwhelms reason" (Mosco 2004, 22). Technological determinism ignores the political economy of events. Social media determinism is an expression of the digital sublime, the development that "cyberspace has become the latest icon of the technological and electronic sublime, praised for its epochal and transcendent characteristics and demonized for the depth of the evil it can conjure" (Mosco 2004, 24).

The seventh Marxian category is *class struggle*. "The history of all hitherto existing society is the history of class struggle. Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight" (Marx and Engels 1968, 35–36). In Critical Internet Studies, the notion of class struggle is for example reflected in the concept of anti-capitalist Internet play struggles that help to "hack" capitalism or the notion of Internet as means for the circulation of class struggles. Related concepts are the electronic fabric of struggle and electronic civil disobedience. Hardt and Negri's (2004) concept of the struggle of the multitude has become of importance in such approaches. The multitude consists of "singularities that act in common" (Hardt and Negri 2004, 105), "all those who work under the rule of capital" (ibid., 106). It is shaped by immaterial labour, that is labour "that creates immaterial products, such as knowledge, information, communication, a relationship, or an emotional response" (ibid., 108).

The eighth Marxist category is that of *commons*. Commons are resources that are essential and basic for the survival of a society, that all need, and that are produced by all. Marx has stressed the common character of knowledge with his concept of the "General Intellect", which is the "power of knowledge, objectified", "general social knowledge" that becomes "a direct force of production" (Marx 1857/1858, 706). He pointed out that knowledge is "brought about

partly by the cooperation of men now living, but partly also by building on earlier work" (Marx 1894, 199). Its common character is due to "communal labour, [that] however, simply involves the direct cooperation of individuals" (Marx 1894, 199). The concept of the commons has been applied to the context of knowledge on the Internet that is collectively produced and shared and appropriated by capital. *Discussions of Internet commons relate especially to free software, Wikipedia, and filesharing.*

The concepts of class struggle and the commons are in contemporary Marxism and in critical studies of the Internet especially grounded in Autonomist Marxism, a perspective that Žižek (2008, 354) criticizes (mainly in respect to Hardt and Negri) as celebrating the informational revolution as "the unique chance for overcoming capitalism" and as thereby ignoring the rise of a new frictionless soft capitalism that enabled by IT makes use of a rhetoric consisting of ideals like participation, self-organization, and co-operation without realizing them. Žižek however agrees with Hardt and Negri (2009) that the exploitation of the commons of society (such as knowledge on the Internet, education and culture) justifies at the political level as a form of resistance "the resuscitation of the notion of communism" (Žižek 2008, 429).

The ninth concept is the *public sphere*. Marx imagined alternatives to the bourgeois state that serves class interests when he described the Paris Commune as a specific kind of public sphere: The commune superseded class rule (Marx 1871, 274), it "was formed of the municipal councillors, chosen by universal suffrage in the various wards of the town, responsible and revocable at short terms" (Marx 1871, 274). "Public functions ceased to be the private property of the tools of the Central Committee. Not only municipal administration, but the whole initiative hitherto exercised by the State was laid into the hands of the Commune" (Marx 1871, 274). The Commune was "the self-government of the producers" (ibid., 275), who "administer their common affairs by an assembly of delegates" (ibid., 275), abolished "that class-property which makes the labour of the many the wealth of the few" (ibid., 277), and transformed "the means of production, land and capital, now chiefly the means of enslaving and exploiting labour, into mere instruments of free and associated labour" (ibid., 277) so that a "united co-operative" society (ibid., 277) emerges. Marx asks about such a true public sphere: "what else, gentlemen, would it be but Communism" (ibid., 277)? Habermas' original concept of the public sphere is grounded in this Marxian understanding (see: Habermas 1991, 122–129). Marx saw the bourgeois public sphere ironically (Habermas 1991, 123). "Marx denounced public opinion as false consciousness: it hid before itself its own true character as a mask of bourgeois class interests" (Habermas 1991, 124). Marx's "critique demolished all fictions to which the idea of the public sphere

of civil society appealed. In the first place, the social preconditions for the equality of opportunity were obviously lacking, namely: that any person with skill and 'luck' could attain the status of property owner and thus the qualifications of a private person granted access to the public sphere, property and education. The public sphere with which Marx saw himself confronted contradicted its own principle of universal accessibility" (Habermas 1991, 124).

A number of authors has discussed how to apply the notion of the public sphere to the Internet and thereby has also taken into account Habermas' Marxist grounding by describing how the political economy of capitalism can colonize and thereby limit the potential of the Internet to act as a tool that advances the transformation towards a public sphere. However, many authors have ignored Marx's concept of the public sphere as communism that transcends the private control of the means of production and the acknowledgement of this dimension by Habermas. Taking both Marx's and young Habermas's concepts of the public sphere seriously must mean for Critical Internet Studies to discuss what a communist Internet is all about (Fuchs 2011). According to Habermas, the public sphere is not only a normative ideal, but also a concept that allows criticizing the political reality of the media. He has stressed in this context that the liberal public sphere limits its own value of freedom of speech and public opinion because citizens in capitalism do not have same formal education and material resources for participating in the public sphere (Habermas 1991, 227) and that it limits its own value of freedom of association and assembly because big political and economic organizations "enjoy an oligopoly of the publicistically effective and politically relevant formation of assemblies and associations" (Habermas 1991, 228). Critical Internet Studies should especially take a look at how freedom of speech and freedom of assembly are limited by unequal conditions of access (money, education, age, etc) and the domination of visibility and attention by big economic and political organizations.

The tenth concept considered here is *communism*. Marx and Engels did not mean by the term communism a totalitarian society that monitors all human beings, operates forced labour camps, represses human individuality, installs conditions of general shortage, limits the freedom of movement, etc. For them, communism is a society that strengthens common co-operative production, common ownership of the means of production, and enriches the individual sphere of activities and thereby individuality. The new crisis of capitalism has brought about an interest in the idea of communism (see for example: Žižek and Douzinas 2010). Marx spoke of "an association of free men, working with the means of production held in common, and expending their many different forms of labour-power in full self-awareness as one single social labour force"

(Marx 1867, 171). Communism is "a society in which the full and free development of every individual forms the ruling principle" (Marx 1867, 739). In Critical Internet Studies, scholars have for example spoken about the goal of a communist Internet in a communist society (Fuchs 2011), 21st century communism (Dyer-Witheford 1999, 4), cybernetic communism (Barbrook 2007), or dot. communism (Moglen 2003), an alternative Internet (Atton 2004), a public-service Net (Patelis 2000, 99) or public service and commons-based social media (Fuchs 2014d). The notion of communism has for Internet Studies special relevance for the question to which extent the common sharing (like on file sharing platforms) and co-operative production of knowledge (like on Wikipedia or in the Free and Open Source Software movement) constitutes foundations of a communist mode of production. Marx has stressed the common character of knowledge with his concept of the "General Intellect", which is the "power of knowledge, objectified", "general social knowledge" that becomes "a direct force of production" (Marx 1857/1858, 706). He pointed out that knowledge is "brought about partly by the cooperation of men now living, but partly also by building on earlier work" (Marx 1894, 199). Its common character is due to "communal labour, [that] however, simply involves the direct cooperation of individuals" (Marx 1894, 199). The concept of the commons has also been applied to the context of knowledge on the Internet that is collectively produced and shared and appropriated by capital (see for example: Dyer-Witheford 1999, 4, 219ff; Fuchs 2010b, 2011; Hardt and Negri 2009, 282; Žižek 2010a).

The eleventh concept is *aesthetics*. Marx pointed out that art should not be organized as surplus-value generating labour, but in capitalism can be transformed into this kind of work and thereby can become an object of commodification (Marx 1863, 401). For Marx, communism meant the end of the division of labour, so that all people could engage in artistic activities. "In a communist society there are no painters but only people who engage in painting among other activities" (Marx and Engels 1846, 418). Adorno pointed out based on Marx the relationship of art, capitalism, and communism by arguing that authentic art is non-identical with the logic of capitalism, it neglects instrumental reason: "the function of art in the totally functional world is its functionlessness" (Adorno 1997, 320). In recent years, discussion abouts Marxist aesthetics have been applied to the realm of the Internet, online play, and computer games (see for example: Kline, Dyer-Witheford and De Peuter 2003, Andrejevic 2006, Dyer-Witheford and De Peuter 2009).

The eleven concepts discussed are some of the most frequently invoked Marxian notions in Internet Studies. Others could be added and the discussion extended, but the limited space of this article does not allow discussing these

issues at length. The examples given are, however, suggestive of the importance of Marxian theory for critical analysis of the Internet. Certainly such concepts are not only welcomed, but are also opposed. This phenomenon is discussed in the next section.

7   Digital Labour

The rise of "social media" that are based on targeted advertising combined with the rising interest in Marx's works in the course of the new world economic crisis has resulted in discussions about the political economy of the Internet and how Marx's works can be used in this context. In this context, especially the concept of digital labour has gained importance. New debates have emerged around the question if and how to use Marx for understanding digital media.

Authors have for example discussed the usefulness of Karl Marx's labour theory of value (Fuchs 2010b, Arvidsson and Colleoni 2012, Fuchs 2012), how the notion of alienation shall be used in the context of digital labour (Andrejevic 2012, Fisher 2012), or if and how Dallas Smythe's notion of audience labour can be used for understanding digital labour (for an overview discussion see my contribution in the companying volume "Marx and the Political Economy of Communication" to this book). My books *Social Media: A Critical Introduction* (Fuchs 2014b), *Digital Labour and Karl Marx* (Fuchs 2014a) and *Culture and Economy in the Age of Social Media* (Fuchs 2015) provide an introduction to as well as more advanced discussions of many of the involved issues. The general task has been how to best understand and conceptualise that users under real-time far-reaching conditions of commercial surveillance create a data commodity that is sold to advertising clients and who exactly creates the value that manifests itself in social media corporations' profits.

The digital labour debate has been accompanied by the question how feasible Karl Marx's labour theory of value is for understanding digital labour. This theory argues that the value of a commodity measured as the average number of hours it takes to produce it is a crucial economic category for the critical analysis of capitalism. It is connected to questions of productive and unproductive labour, surplus-value, exploitation and class. I have held and continue to hold the position that a digital labour theory of value is feasible and necessary. Some commentators have remarked that Marx's theory is out of date in the 21st century and that today value is determined by affects and reputation. They advocate a turn from Marx's objective concept of value to a subjective concept of value, much comparable to the neoclassical concept of

value that postulates that "value depends entirely upon utility" and oppose the view that makes "labour rather than utility the origin of value; and there are even those who distinctly assert that labour is the cause of value" (Jevons 1871, 1). The claim that the labour theory of value is no longer valid implies that time plays no role in the contemporary capitalist economy. Attention and reputation can be accumulated and getting attention for social media does not happen simply by putting the information there – it requires the work of creating attention. The groups on Facebook and Twitter with the largest number of followers and likes are the ones of entertainers and companies who employ people such as social media strategists to take care of their social media presence. It is no accident that new job profiles such as social media editor, social media strategist, social media manager, social media consultant, social media community executive and social media analyst have recently emerged. Companies are willing to pay employees in order to invest time for creating and maintaining social media profiles. So we need to conceptualize value with a theory of time and need theories of time in society, capitalism and the media economy and the media.

For Marx, the creators of commodity values are productive workers exploited by capital. An important question that has arisen in the digital labour debate is who creates the value that materializes itself in the profits made by Facebook, Google and comparable companies. The crucial question is if the users of commercial social media are generating value and are exploited. One argument in the debate is that only wageworkers can create value and that Facebook users therefore are not exploited. Facebook would rather consume the value generated by the paid workers who are employed by those companies advertising on Facebook. Facebook would therefore not contribute to the exploitation of users, but the exploitation of wageworkers of companies that purchase social media ads. Some scholars make the related argument that Facebook rents out advertising space and that its profits therefore are a form of rent derived from ad clients' profits. Depending on the version of the digital rent argument, Facebook users are then considered as not being exploited or as being exposed to a secondary form of exploitation that is subsumed under the exploitation of wageworkers.

Most of these claims result in the assumption that wage-work is the crucial or only form of productive labour. The consequence of this argument is however not only that Facebook users are seen as unproductive and unexploited, but that also other forms of unpaid work constitutive for capitalism and precapitalist modes of production, especially housework and slave work, are unexploited and unproductive. They reproduce an argument against which Marxist feminism has struggled since decades, namely that only wageworkers

are exploited by capital. Mariarosa Dalla Costa and Selma James (1972, 30) challenged the orthodox Marxist assumption that reproductive work is "outside social productivity". In contrast a socialist feminist position argues that "domestic work produces not merely use values, but is essential to the production of surplus value" and that the "productivity of wage slavery" is "based on unwaged slavery" in the form of productive "social services which capitalist organization transforms into privatized activity, putting them on the backs of housewives" (Dalla Costa and James 1972, 31). Zillah Eisenstein (1979, 31) argues that the gender division of labour guarantees "a free labour pool" and "a cheap labour pool". Maria Mies (1986, 37) says that women are exploited in a triple sense: "they are exploited [...] by men and they are exploited as housewives by capital. If they are wage-workers they are also exploited as wage-workers". The question who is a productive worker is not just a theory question, but a crucial political question because it is about the question who is an important political subject in the struggle against capitalism. Focusing only on wageworkers has patriarchal and racist implications.

An important question that has arisen within the digital labour debate is if it suffices to focus on the social media world and to limit the notion of digital labour to paid or unpaid work in the online realm (or even narrower to limit the term to users' unpaid labour on social media). We access social media on laptops and mobile phones that tend to be assembled in China. Hon Hai Precision (also known as Foxconn) is a Taiwanese company that was the 139th largest company in the world in 2014 (Forbes 2000, 2014 list[2]). In 2011, Foxconn had enlarged its Chinese workforce to a million, with a majority being young migrant workers who come from the countryside (SACOM 2011). Foxconn assembles e.g. the iPad, iMac, iPhone, Kindle, various consoles (by Sony, Nintendo, Microsoft). When 17 Foxconn workers attempted to commit suicide between January and August 2010 (most of them "successfully"), the topic of bad working conditions in the ICT assemblage industry became widely known. This circumstance was followed up with a number of academic works that show that workers' everyday reality at Foxconn includes low wages, working long hours, frequent work shift changes, regular working time of over 10 hours per day, a lack of breaks, monotonous work, physical harm caused by chemicals such as benzene or solder paste, lack of protective gear and equipment, forced use of students from vocational schools as interns (in agreement with the school boards) that conduct regular assembly work that does not help their studies, prison-like accommodations with 6–22 workers per room, yellow unions that are managed by company officials and whom the workers do not

2   http://www.forbes.com/global2000/list/, accessed on June 3, 2014.

trust, harsh management methods, a lack of breaks, prohibitions that workers move, talk or stretch their bodies, workers that had to stand during production, punishments, beatings and harassments by security guards, disgusting food (Chan 2013; Chan, Pun and Selden 2013; Pun and Chan 2012, Qiu 2012, Sandoval 2013). The Foxconn example shows that the existence and usage of digital media not just depends on the labour of software engineers and content producers. Digital labour covers a broad range of labour working under different conditions, including slave miners working in African conflict mines, smelters, hardware assemblers, software engineers, digital media content producers, eWaste workers, or users of commercial digital media.

Given the complex, networked and transnational reality of labour required for the existence and usage of digital media, a concept of digital labour is needed that can reflect these realities. One needs to go beyond cultural-idealist approaches that only focus on user-generated content and see how content production is grounded in industrial and agricultural labour and how the appropriation of nature in this respect interacts with culture. For adequately studying digital labour and digital media in general, a cultural-materialist approach is needed (Fuchs 2015).

Given these preliminary assumptions, one can provide a definition of digital work and digital labour:

- "Digital work is a specific form of work that makes use of the body, mind or machines or a combination of all or some of these elements as an instrument of work in order to organize nature, resources extracted from nature, or culture and human experiences, in such a way that digital media are produced and used. The products of digital work are depending on the type of work: minerals, components, digital media tools or digitally mediated symbolic representations, social relations, artefacts, social systems and communities. Digital work includes all activities that create use-values that are objectified in digital media technologies, contents and products generated by applying digital media" (Fuchs 2014a, 352).
- "Digital labour is alienated digital work: it is alienated from itself, from the instruments and objects of labour and from the products of labour. Alienation is alienation of the subject from itself (labour-power is put to use for and is controlled by capital), alienation from the object (the objects of labour and the instruments of labour) and the subject-object (the products of labour). Digital work and digital labour are broad categories that involve all activities in the production of digital media technologies and contents. This means that in the capitalist media industry, different forms of alienation and exploitation can be encountered. Examples are slave workers in mineral

extraction, Taylorist hardware assemblers, software engineers, professional online content creators (e.g. online journalists), call centre agents and social media prosumers" (Fuchs 2014a, 351–352).

The digital labour debate has been accompanied a resurgent interest in Dallas Smythe's concept of audience labour and audience commodification for explaining the role of targeted advertising on social media. In this context notions such as prosumers labour have been used.

Prosumer labour on social media differs in a number of respects from audience labour in broadcasting:

- *Creativity and social relations*: Broadcasting audiences produce meanings of programmes, whereas social media prosumers not just produce meanings, but also content, communications with other users and social relations.
- *Surveillance*: Broadcasting requires audience measurements, which are approximations, in order to sell audiences as commodities. Social media corporations monitor, store and assess all online activities of users on their platforms and also on other platforms. They have very detailed profiles of users' activities, interests, communications and social relations. Constant real-time surveillance of users is an inherent feature of prosumers labour on capitalist social media. Personal data is sold as a commodity. Measuring audiences has in broadcasting and print traditionally been based on studies with small samples of audience members. Measuring and monitoring user behaviour on social media is constant, total and algorithmic.
- *Targeted and personalised advertising*: Advertising on capitalist social media can therefore more easily target user interests and personalise ads, whereas this is more difficult in commercial broadcasting.
- *Algorithmic auctions*: Algorithms organise the pricing of the user data commodity in the form of auctions for online advertising spaces on the screens of a specific number of users. The ad prices on social media vary depending on the number of auctioneers, whereas the ad prices in newspapers and on radio and TV are set in a relatively fixed manner and are publicly advertised. User measurement uses predictive algorithms (if you like A, you may also like B because 100 000 people who like A also like B).

The digital labour debate has been accompanied by the question how feasible Karl Marx's labour theory of value is for understanding digital labour. And often-overlooked aspect is that this theory is a theory of time in capitalism and that digital labour needs therefore to be situated in the temporalities of capitalism. One criticism brought forward against those who argue that users

of corporate social media platforms that use targeted advertising are exploited has been that advertising as part of the sphere of circulation that only realises, but does not create value, and that users' activities are one or several of the following (see for example: Bolaño and Vieira 2014, Comor 2014, Huws 2014, Reveley 2013, Rigi and Prey 2014): unproductive, no labour at all, less productive, a consumption of value generated by paid employees in sectors and companies that advertise on social media, the realisation of value generated by paid employees of social media corporations, or an expression of a system where what appears as profits are rents derived from the profits of advertisers. These opinions are not new, but just a reformulation of Lebowitz's (1986) criticism of Smythe.

The crucial category used in such discussions is Marx's notion of productive labour. There are passages, where Marx argues that only wageworkers who produce surplus-value and capital that is accumulated is productive labour. For example: "Every productive worker is a wage-labourer, but not every wage-labourer is a productive worker. Whenever labour is purchased to be consumed as a use-value, as a service and not to replace the value of variable capital with its own vitality and be incorporated into the capitalist process of production – whenever that happens, labour is not productive and the wage-labourer is no productive worker" (Marx 1867, 1041). Or: "Productive labour, therefore, can be so described when it is directly exchanged for money as capital, or, which is only a more concise way of putting it, is exchanged directly for capital, that is, for money which in its essence is capital, which is destined to function as capital, or confronts labour-power as capital. The phrase: labour which is directly exchanged for capital, implies that labour is exchanged for money as capital and actually transforms it into capital" (Marx 1863, 396–367).

Marx's thoughts on this topic are however inconsistent, so there cannot be one "true" interpretation of what productive and unproductive labour is. The interpretation of productive labour that I follow is one that stresses the notion of the *Gesamtarbeiter* (collective worker).

Marx stresses that work is not an individual process. The more co-operative and networked work becomes, which is the consequence of the technification of capitalism and the rise of knowledge in production, the more relevant becomes Marx's third understanding of productive labour: productive labour as labour of the collective worker. The notion of the collective worker becomes ever more important with the development of fixed constant capital and productivity (Marx 1857/58, 707). Marx has set out this concept both in *Capital, Volume 1*, and the *Results of the Immediate Production Process*:

- "With the progressive accentuation of the co-operative character of the labour process, there necessarily occurs a progressive extension of the concept

of productive labour, and of the concept of the bearer of that labour, the productive worker. In order to work productively, it is no longer necessary for the individual himself to put his hand to the object; it is sufficient for him to be an organ of the collective labourer, and to perform any one of its subordinate functions. The definition of productive labour given above, the original definition, is derived from the nature of material production itself, and it remains correct for the collective labourer, considered as a whole. But it no longer holds good for each member taken individually" (Marx 1867, 643–644).

· "First, with the development of the real subsumption of labour under capital, or the specifically capitalist mode of production, the real lever of the overall labour process is increasingly not the individual worker. Instead, labour-power socially combined and the various competing labour-powers which together form the entire production machine participate in very different ways in the immediate process of making commodities, or, more accurately in this context, creating the product. Some work better with their hands, others with their heads, one as a manager, engineer, technologist, etc., the other as overseer, the third as manual labourer or even drudge. An ever increasing number of types of labour are included in the immediate concept of productive labour, and those who perform it are classed as productive workers, workers directly exploited by capital and subordinated to its process of production and expansion. If we consider the aggregate worker, i.e. if we take all the members comprising the workshop together, then we see that their combined activity results materially in an aggregate product which is at the same time a quantity of goods. And here it is quite immaterial whether the job of a particular worker, who is merely a limb of this aggregate worker, is at a greater or smaller distance from the actual manual labour. But then: the activity of this aggregate labour-power is its immediate productive consumption by capital, i.e. it is the self-valorization process of capital, and hence, as we shall demonstrate, the immediate production of surplus-value, the immediate conversion of this latter into capital" (Marx 1867, 1039–1040).

Figure 2.1 visualises the economic relationships of Facebook (and other corporate social media platforms using targeted advertising) and its advertising clients.

A commodity has a use-value, value and symbolic value. A company's production workers create the basic use-value that satisfies human needs. These activities take an average combined number of labour hours. Labour is the substance of value, labour time its measure and magnitude. In order to sell its
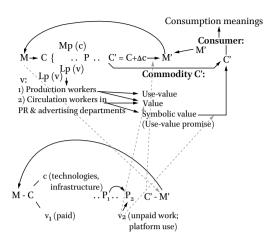
Consumption meanings

Mp (c)

Consumer:
M'

$M \rightarrow C \{ \quad .. \ P \ .. \quad C' = C+\Delta c \rightarrow M'$
C'

Lp (v)

Lp (v)

Commodity C':

v:
1) Production workers
2) Circulation workers in
PR & advertising departments

Use-value
Value
Symbolic value
(Use-value promise)

c (technologies,
infrastructure)

$M - C \quad .. \ P_1 .. \ P_2 \quad C' - M'$

v_1 (paid)

v_2 (unpaid work;
platform use)

FIGURE 2.1 *The economic relationship of Facebook and its advertising clients*

commodity, a company tries to give positive meanings to it and to communicate these meanings to the public's members whom it tries to convince that this goods or service can enhance their lives and that they should therefore buy this commodity and not a comparable one offered by another company. Most commodities have independent from their physical or informational nature a cultural component that is created by cultural labour. The cultural dimension of a commodity is necessary ideological: it appeals to consumers' imagination and wants to make them connote positive images and feelings with the idea of consuming this commodity.

The creation of a commodity's symbolic ideology is a value-creating activity, but not a use-value generating activity. The use-value of a commodity can be physical and/or informational: we have cars for satisfying the need of driving from A to B, we listen to music for satisfying our aesthetic desires, etc. The exchange-value of a commodity is the relationship in which it is exchanged with another commodity, normally money: x commodity A = y commodity B (money). Symbolic value establishes a link and mediates between use-value and exchange-value, it helps accomplishing the exchange, in which consumers obtain use-values and capitalists money. Wolfgang Fritz Haug (1986) speaks in this context of the commodity's use-value promise: The sales and advertising ideology associated with a commodity promises specific positive life enhancement functions that the commodity brings with it and thereby conceals the commodity's exchange-value behind promises. The symbolic commodity ideology promises a use-value beyond actual consumption, an imaginary surplus and surplus enjoyment. These promises are detached from the actual use-value and are therefore a fictitious form of value.

Saying that the cultural labour of branding, public relations and creating commodity advertisements creates symbolic value is not detached from the notion of economic value. Rather value here precisely means that for the creation of this symbolic dimension of the commodity labour time is invested. It is therefore no wonder that almost all larger companies have their own public relations departments or outsource public relations and advertising to other companies. Paying the circulation workers employed in such departments or companies needs to be planned and calculated into the price of commodities.

Consumers give specific meanings to the commodities they buy and consume. They thereby construct consumption meaning and in doing so can react to use-value promises in different ways:

(1)   They can share these ideologies and buy the commodities because they hope the promise is an actual use value;
(2)   they can deconstruct the use-value promise as ideology and refuse buying the commodity;
(3)   they can deconstruct the use-value, but nonetheless buy the commodity for other reasons.

For communicating commodity ideologies to consumers, companies need to buy advertisement spaces in commercial media. Commercial media link commodity ideologies to consumers, they "transport" ideologies to consumers, although it is unclear and not determined how the latter react and if the confrontation with commodity ideologies results in actual purchases. Facebook and other corporate social media are advertising companies that sell advertising space and user data as commodities to clients who want to present commodity ideologies to users and hope that the latter buy their commodities. Facebook has paid employees that organise the development, maintenance and provision of its software platform. On December 31, 2012, Facebook had 4619 paid employees.[3] But Facebook cannot sell advertising space without its users. Without them, it would be a dead platform that would immediately cease to exist. On June 3, 2013, 42.513% of all Internet users had accessed Facebook within the preceding 3 months.[4] These were more than 1 billion people in the world.[5]

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3   Facebook Inc., SEC Filings, Form 10-K 2012, http://www.sec.gov/Archives/edgar/data/1326801/000132680113000003/fb-12312012x10k.htm.
4   Data source: http://www.alexa.com.
5   According to http://www.Internetworldstats.com/stats.htm, the latest available world population count was 2 405 518 376 on June 3rd, 2013.

But are Facebook users productive workers? They are certainly not less important for Facebook's capital accumulation than its paid employees because without users Facebook would immediately stop making profits and producing commodities. Facebook's commodity is not its platform that can be used without charges. It rather sells advertising space in combination with access to users. An algorithm selects users and allows individually targeting ads based on keywords and search criteria that Facebook's clients identify. Facebook's commodity is a portion/space of a user's screen/profile that is filled with ad clients' commodity ideologies. The commodity is presented to users and sold to ad clients either when the ad is presented (pay-per-view) or when the ad is clicked (pay-per-click). The user gives attention to his/her profile, wall and other users' profiles and walls. For specific time periods parts of his/her screen are filled with advertising ideologies that are with the help of algorithms targeted to his/her interests. The prosumer commodity is an ad space that is highly targeted to user activities and interests. The users' constant online activity is necessary for running the targeting algorithms and for generating viewing possibilities and attention for ads. The ad space can therefore only exist based on user activities that are the labour that create the social media prosumer commodity.

Facebook clients run ads based on specific targeting criteria, e.g. 25–35 year old men in the USA who are interested in literature and reading. What exactly is the commodity in this example? It is the ad space that is created on a specific 25–35 year old man's screen interested in e.g. Shakespeare while he browses Facebook book pages or other pages. The ad is potentially presented to all Facebook users who fall into this category, which were 27 172 420 on June 3rd, 2013. What is the value of the single ad presented to a user? It is the average labour=usage time needed for the production of the ad presentation. Let's assume these 27 172 420 million users are on average 60 minutes per day on Facebook and in these 60 minutes 60 ads are presented to them on average. All time they spend online is used for generating targeted ads. It is labour time that generates targeted ad presentations. We can therefore say that the value of a single ad presented to a user is in the presented example 1 minute of labour/usage/prosumption time.

So Facebook usage is labour. But is it productive labour? Marx sees transportation labour that moves a commodity in space-time from location A to location B, which takes a certain labour time x, as productive labour: What "the transport industry sells is the actual change of place itself" (Marx 1885, 135). "The productive capital invested in this industry thus adds value to the products transported, partly through the value carried over from the means of transport, partly through the value added by the work of transport" (Marx 1885, 226–227).

The value generated by transporting a commodity from A to B is therefore x hours. The symbolic ideology of a commodity first needs to be produced by special ad and public relations employees and is in a second step communicated to potential buyers. *Advertising therefore involves production and transportation labour.* Advertising production does not create a physical commodity, but an ideological dimension of a commodity – a use-value promise that is attached to a commodity as meaning. Advertising transport workers do not transport a commodity in physical space from A to B, they rather organise a communication space that allows advertisers to communicate their use-value promises to potential customers. Facebook's paid employees and users are therefore 21st century equivalents of what Marx considered as transport workers in classical industry. They are productive workers whose activities are necessary for "transporting" use-value promises from companies to potential customers. Marx associated transport with communication as comparable forms of work. On Facebook and other social media platforms, transportation labour is communication labour.

Dallas W. Smythe argued that it is a specific feature of audience labour that audiences "work to market […] things to themselves" (Smythe 1981, 4). Facebook users constantly work and constantly market things to themselves. Their usage behaviour constantly generates data that is used for targeting ads. All Facebook usage is productive labour, with the exception of those cases, where users block advertising with the help of ad block software, which probably only a minority does. Facebook usage labour ads value to the commodity that is sold by Facebook's ad clients. Practically this means that a lot of companies want to advertise on Facebook and calculate social media advertising costs into their commodity prices. Nielsen (2013) conducted a survey among advertisers and advertising agencies. 75% of the advertisers and 81% of the agencies that participated in the survey indicated that they buy targeted ads on social media. This shows the importance of social media for advertising today.

The production workers of Facebook's clients produce use-value and value. Their PR & advertising employees (or the workers in the companies to which this labour is outsourced) produce value and a use-value promise as symbolic value. Facebook's users produce the value and the communication of this use-value to themselves. They are productive workers. That they create value means that their labour time objectifies itself in commodities: the ad clients' employees objectify their labour in the commodity that is marketed to Facebook users, whereas Facebook users objectify their labour in the prosumer commodity that is sold to Facebook's clients. User labour is thereby also objectified in the commodity that is marketed and potentially sold to users themselves.

8 A Critique of the Critique of Critical Internet Studies

The use of Marxian concepts in Critical Internet Studies is opposed by two main strategies: (1) anti-Marxism, (2) the subsumption of Marxian concepts under the dominant ideology. Both aim at delegitimizing alternatives to the corporate control of the Internet.

The anti-communist strategy is represented by Andrew Keen and Josh Lanier. Andrew Keen, author of the book *The Cult of the Amateur: How Today's Internet is Killing Our Culture* (Keen 2007), argues that web 2.0 rhetoric has a political agenda and shares Marxist political goals (Keen 2006). Keen sees web 2.0 as a dangerous development and argues that a new web 2.0 communism will put an end to traditional culture and society. "Without an elite mainstream media, we will lose our memory for things learnt, read, experienced, or heard" (Keen 2006). The fear that haunts him seems to be the fear that capitalism and corporate interests are challenged and could somehow cease to exist. Josh Lanier (2006) argues that web 2.0 results in "digital Maoism", a form of collectivism that is as totalitarian as Maoism and negates individuality.

Such approaches advance the idea that Marxism is dangerous and anti-individualistic, which is an error. Whereas the individual was indeed not greatly valued by Mao or Stalin, it was highly important for Marx, who saw communism as the sublation of the class individual and the rise of the well-rounded individual. Communism is for Marx not the collectivization of life, but the creation of a highly productive post-scarcity economy that is based on wealth for all, the minimization of estranged labour, and the maximization of freely chosen labour. Maximizing self-determined labour has potentials for releasing creative capacities and fostering the maximization of the development powers of all humans. The precondition for Marx is the sublation of the private property of the means of production. "In the real community the individuals obtain their freedom in and through their association" (Marx and Engels 1846, 87). This real community would be the "re-integration or return of man to himself, the transcendence of human self-estrangement" (Marx 1844, 101f), "the *positive* transcendence of *private property* as *human self-estrangement,* and therefore as the real *appropriation* of the *human* essence by and for man" (Marx 1844, 102), and "the complete return of man to himself as a *social* (i.e., human) being" (Marx 1844, 102). Communist society enables the "all-round development of individuals, precisely because the existing form of intercourse and the existing productive forces are all-embracing and only individuals that are developing in an all-round fashion can appropriate them, i.e., can turn them into free manifestations of their lives" (Marx and Engels 1846, 464). For Marx, capitalism limits the development potentials of humans because the

lack of material resources does not allows them to fully develop their capacities. In communism, there is "the development of individuals into complete individuals" (Marx and Engels 1846, 97). "The approporiation of a totality of instruments of production is, for this very reason, the development of a totality of capacities in the individuals themselves" (Marx and Engels 1846, 96).

For Marx, a communist society or socialist mode of production is based on the principle: "From each according to his abilities, to each according to his needs!" (Marx 1875, 306). This means that in a communist society all goods and services are for free and human activities are self-chosen. The precondition is that "the productive forces have also increased with the all-round development of the individual" and that "all the springs of common wealth flow more abundantly" (Marx 1875, 306). Computer technology plays an important role in achieving a communist society: it allows increasing productivity so that overall wealth can be increased. If class relations are substituted by co-operative relations, these material conditions allow post-scarcity and wealth for all as a basis for free labour (in the self of self-determined, not unpaid!) and free goods and services (in the sense of gratis for all). A communist Internet is only possible in such a communist society. In a communist society, digital goods and services will be created in voluntary co-operative labour and will be available to all for free. Digital commodities and commodities in general cease to exist. Self-determined activities online and offline will create a well-rounded individuality that is not a form of digital Maoism, but a true form of freedom realized in a dynamic and self-enhancing dialectic of individuality and collectivism.

The second strategy (ideological subsumption) is represented by Kevin Kelly, who preached the neoliberal credos of liberalization, privatization, and commercialization in relation to IT in the 1990s (see for example: Kelly 1998), argues that the "new web", where people "work toward a common goal and share their products in common, [...] contribute labour without wages and enjoy the fruits free of charge" (Kelly 2009, 118) constitutes a "new socialism" – "digital socialism". The new socialism is for Kelly a socialism, in which workers do not control and manage organizations and the material output they generate. Therefore this notion of socialism should be questioned. For Kelly, socialism lies in collective production, not in democratic economic ownership. If "socialism seeks to replace capitalism by a system in which the public interest takes precedence over the interest of private profit", "is incompatible with the concentration of economic power in the hands of a few", and "requires effective democratic control of the economy" (*Frankfurt Declaration of the Socialist International*; Socialist International 1951), then Kelly's notion of socialism that is perfectly compatible with the existence of Microsoft, Google, Yahoo, and other web corporations (as indicated by the fact that he lists Google, Amazon, Facebook, and

YouTube in his history of socialism), is not at all a notion of socialism, but one of capitalism disguised as socialism. For Rosa Luxemburg, socialism was "a society that is not governed by the profit motive but aims at saving human labour" (Luxemburg 1913/2003, 301). She argued that the "aim of socialism is not accumulation but the satisfaction of toiling humanity's wants by developing the productive forces of the entire globe" (Luxemburg 1913/2003, 447).

Kelly's notion of socialism is incompatible with theoretical concepts of socialism, it is theoretically ungrounded and can be considered as the ideological attempt to redefine capitalism and capitalist exploitation as socialism.

9　　　Conclusion

The analysis of approaches in this chapter showed that there are methodological, ontological, and epistemological differences within Critical Internet Studies. Critical Cyberculture Studies is influenced by Cultural Studies, it rather ignores aspects of class and exploitation, and should therefore better be termed "Cyberculture Studies". Critical Theory and Critical Political Economy of the Internet are based on the insight that class is crucial for understanding the structures of exploitation and domination that express themselves on the Internet and in other media and that in capitalism, all forms of domination are related to and conditioned by forms of exploitation. Either implicitly or explicitly, a lot of Marxian concepts have been reflected in Critical Internet Studies: dialectics, capitalism, commodification, surplus value/exploitation/alienation/ class, globalization, ideology, class struggle, commons, public sphere, communism, aesthetics. Anti-Marxism and subsumption are two strategies that attempt to neutralize the critical role of Marxian concepts in Internet Studies.

The outlined eleven Marxian concepts allow formulating an incomplete research agenda for Critical Internet Studies that includes the following questions:

(1) How can the creation, development and the contradictions of the Internet be understood by a dialectical and historical critical theory?
(2) What exactly is the role of the Internet in capitalism? How can this role be theorized and empirically measured? Which Internet-based capital accumulation models are there?
(3) Which forms of commodification do we find on the Internet and how do they work?
(4) Which different forms of surplus value creation are there on the Internet, how do they work? What do users think about them?
(5) How does the Internet interact with globalization processes?

(6)   Which myths and ideologies are there about the Internet? How can they be uncovered, analyzed, and criticized?
(7)   What is the role of the Internet in class struggles? What are the potentials, realities and limits of struggles for an alternative Internet?
(8)   What are Internet commons? How does the commodification of the Internet commons work? Which models for strengthening the Internet commons are there?
(9)   What are the potentials and limits of the Internet for bringing about a public sphere?
(10) What is a commons-based Internet? Which forms and models of a commons-based Internet are there? How can the establishment of a commons-based Internet be strengthened?
(11) How does the Internet change art and aesthetics? Are there potentials of online art and online aesthetics for challenging the logic of capitalism and to help advancing a different logic?

This chapter has attempted to show the importance of Marx for Critical Internet Studies. The results confirm the views of a number of critical media/technology studies and information science scholars, who stress the importance of Marx for studying communication (see especially: Fuchs 2010a). Dallas Smythe called for a "Marxist theory of communication" (Smythe 1994, 258). Murdock and Golding (2005, 61) say that "Critical Political Economy of Communications" is "broadly marxisant". Andrew Feenberg has stressed that the critical theory of technology "originates with Marx" (Feenberg 2002, vii) and that Marx provided the first critical theory of technology (Feenberg 2002, 47). Robert McChesney has argued that Marx is of fundamental importance for communication science because he provided intellectual tools that allow:

1.   the critique of capital accumulation in the culture industry,
2.   the critique of commodity fetishism,
3.   the critique of ideologies that legitimate domination (McChesney 2007, 53–55). Furthermore 4. Marx's own journalistic practice would be a model for critical, independent quality journalism (McChesney, 2007 55–57).

Edward Herman (1998) has stressed that the following elements of Marx's analysis are important for an inquiry of contemporary capitalism and communication:

1.   the profit and accumulation drive,
2.   the role of technological change,

3. the creation of a reserve army,
4. globalization,
5. instability and crises,
6. the control of the state by dominating classes.

Gerald Sussmann (1999, 86) has emphasized in a special issue of the *Journal of Media Economics* on the topic of "Political Economy of Communication" that critical communication science is based on Marxian thinking: "Marx, one of the first to recognize modern communications and transportation as pillars of the corporate industrial infrastructure". Bernd Carsten Stahl (2008, 10, 32) has argued that Marx is the root of the critical intention of critical information systems research and critical studies in general.

If Internet Studies is a distinct highly interdisciplinary field (Ess 2011), then Critical Internet Studies can be characterized as a subfield of Internet Studies, which focuses on the analysis of dominative structures and practices on the Internet, Internet-based struggles against domination, and seeks to find ways of using the Internet for liberating humans from oppression, inequality, and exploitation. I have argued in this chapter that in the contemporary situation of capitalist crisis it is specifically important that Critical Internet Studies focuses on the analysis of the role of the Internet in capitalism and draws upon the Marxian roots of all critical studies. Some scholars in Critical Internet Studies acknowledge explicitly the importance of Marxian analysis for studying the Internet critically, whereas others refer implicitly to Marx. Authors in Critical Cyberculture Studies tend to bracket issues relating to class and capitalism. It is time to actively remember that Karl Marx is the founding figure of Critical Media and Information Studies and Critical Internet Studies (Fuchs, 2010a, 2011) and that Marxian analyses are crucial for understanding the contemporary role of the Internet and the media in society (see also: Fuchs and Winseck 2011).

Steve Macek (2006) has distinguished between two forms of digital media studies: (1) analyses "typically informed by Marxism, materialist feminism, radical political economy, critical sociology, and social movement theory", (2) "postmodernist and poststructuralist media scholarship" (Macek 2006, 1031–1032). The first approach is certainly "vastly superior to the other" (Macek 2006, 1038; see also the analyses in Artz, Macek and Cloud 2006). In addition, it needs to be stressed that the second approach is completely out of joint with the capitalist crisis times we have entered. Marx is back, capitalism is in crisis – therefore we require Marxist Internet Studies if we want to understand the role of the Internet in domination and exploitation and its potential for liberation.

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