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## **Cognitive Capitalism or Informational Capitalism? The Role of Class in the Information Economy**

Christian Fuchs

### **Introduction**

This chapter poses the question of class in the information age. It wants to contribute to the renewal of class analysis in the 21<sup>st</sup> century and wants to show that class is a central concept for analyzing contemporary society and the role of information in contemporary society.

The two main approaches on class in the social sciences are the Marxian and the Weberian concepts of class (Wright, 2005). Whereas the Marxian class concept stresses exploitation, the Weberian concept takes class as a group of people who have certain life chances in the market in common. These chances would have to do with the possession of goods and opportunities for earning income, and would be represented under the conditions of the commodity or labour market (Weber, 1978, p. 926). The Marxian concept of class “figures centrally in a political project of emancipatory social change” (Wright, 2005, 718). The Marxian notion is dynamic, historical, and relational—class is a historical social relationship between antagonistic, opposing classes that have conflicting interests (Thompson, 1960b, p. 24; Thompson, 1968, pp. 8-10).

<76>: If one assumes that we can speak of informational capitalism today, it is important to pose the question of class in the digital age and to discuss its continuities and discontinuities. For Manuel Castells, the economy consists of an interrelation between a mode of production (capitalism) and a mode of development (informationalism) (Castells, 2000, p. 14). He argues that informationalism is a new mode of development that has been accelerated, channelled, and shaped by “the process of capitalist restructuring undertaken since the 1980s, so that the new techno-economic system can be adequately characterized as informational capitalism” (Castells, 2000, p. 18). The informational productive forces are dialectically connected to class relationships. This dialectic produces the dynamic and antagonisms of the contemporary capitalist economy (Fuchs, 2008b). The informational productive forces are medium and outcome of capitalist interests, strategies, and restructuring—technology is shaped by and shapes society in complex ways. A historical novelty of contemporary society is not that there are networks in society, but that processes of production, power, exploitation, hegemony, and struggles take on the form of transnational networks that are mediated by networked information and communication technologies and knowledge processes (Fuchs, 2008b). Informational capitalism is based on a transnational organizational model, organizations cross national boundaries, the novel aspect is that organizations and social networks are increasingly globally distributed, that actors and substructures are located globally and change dynamically (new nodes can be continuously added and removed), and that the flows of capital, power, money, commodities, people, and information are processed globally at high-speed. Global informational network capitalism is a nomadic dynamic system in the sense that it and its parts permanently reorganize by changing their boundaries and

including or excluding various systems by establishing links, unions, and alliances or getting rid of or ignoring those actors that do not serve or contribute to the aim of capital accumulation. Informational capitalism is a category that is used for describing those parts of contemporary societies that are basing their operations predominantly on information, which is understood as processes of cognition, communication, and co-operation, and on information technologies (Fuchs, 2007, 2008b, 2009).

The central concept of this book is the one of cognitive capitalism. I will therefore argue in section 2 of this chapter why I prefer the notion of informational capitalism to the one of cognitive capitalism, and that in any case care must be taken in making claims about informatization. In section 3, foundations of Marxian <77>: class analysis are introduced. In section 4, I discuss the connection of class, information labour, and digital media. Finally, some conclusions are drawn in section 5.

**Information society theory and informational capitalism**

Discussions about the concept of cognitive capitalism are situated in the information society debate. This discourse can be theoretically categorized by distinguishing two axes that characterize information society theories: the first axis distinguishes aspects of societal change, the second one the informational qualities of these changes. There are theories that conceive the transformations of the past decades as constituting radical societal change. These are discontinuous theories. Other theories more stress the continuities of modern society. Subjective social theories stress the importance of human individuals and their thinking and actions in society, whereas objective social theories stress structures that transcend single individuals (Giddens, 1984, p. xx). Subjective information society theories stress the importance of human knowledge (thought, mental activities) in contemporary society, whereas objective information society theories emphasize the role of information technologies such as the mass media, the computer, the Internet, or the mobile phone. Figure 1 shows a typology of information society theories.

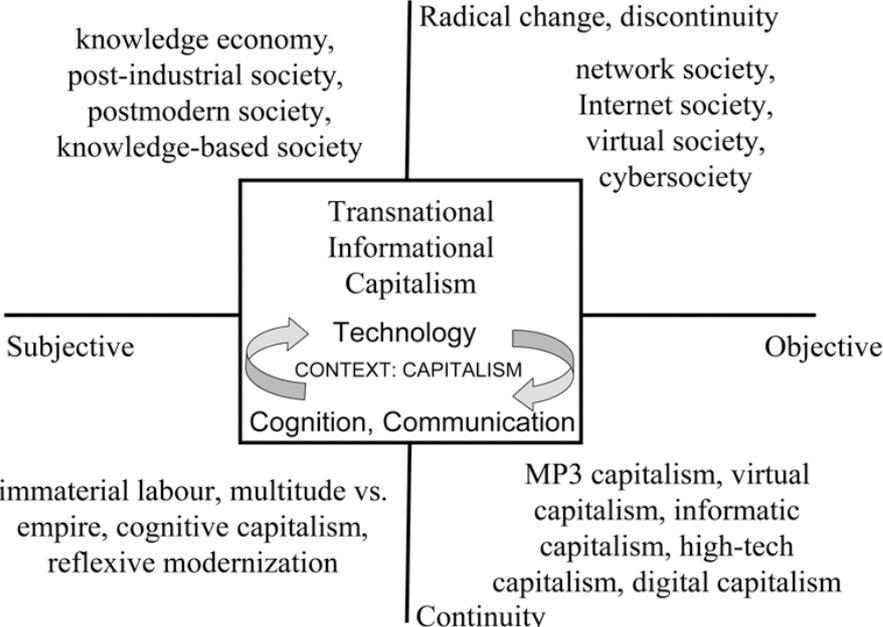


Figure 1: A typology of information society theories

<78>: Discontinuous subjective concepts are for example the knowledge economy (Machlup, 1962; Drucker, 1969; Porat, 1977), the post-industrial society (Bell, 1976; Touraine, 1971), the postmodern society (Lyotard, 1984), or the knowledge-based society (Stehr, 2002). Objective discontinuous notions that stress the importance of information technologies are for example the network society (Castells, 2000; van Dijk, 2006), the virtual society (Bühl, 2000; Woolgar, 2002), cybersociety (Jones, 1998), or the Internet society (Bakardjieva 2005).

Discontinuous information society theories prefix certain terms to macro-sociological categories such as society or economy, which implies that they assume that society or the economy has undergone a radical transformation in the past decades and that we now live in a new society or economy. These approaches stress discontinuity, as if contemporary society had nothing in common with society as it was 100 or 150 years ago. “If there is just more information then it is hard to understand why anyone should suggest that we have before us something radically new” (Webster, 2002a, p. 259). Nicholas Garnham (2004) therefore characterizes information society theory as ideology. Such assumptions have ideological character because they fit with the view that we can do nothing about change, and have to adapt to existing political realities (Webster, 2002b, p. 267). Peter Golding argues that information society discourse is an ideology that “anticipates and celebrates the privatization of information, and the incorporation of ICT developments into the expansion of the free market” (2000, p. 170). The danger in sociology’s fascination of the new would be that it would be distracted from the focus on radical potentials and the critique of how these potentials are suppressed (Golding, 2000, p. 171).

I agree with these critiques, that discontinuous information society theories occlude viewing the continuity of capitalist structures. But such critiques tend to assume that the capitalist character of contemporary society is self-evident and therefore do not or hardly ground their criticism of discontinuous information society theories in empirical data. Qualities of society can only be presented in a convincing manner if theoretical assumptions are supported by data. It therefore needs to be shown that we have been living in a capitalist society in the past 50 decades and that therefore there is a continuity of capitalist structures.

Karl Marx characterized capitalism with the following words: “The driving notion and determining purpose of capitalist production is the self-valorization of capital to the greatest possible extent, i.e. the greatest possible production of surplus-value, hence the greatest possible exploitation of labour-power by the capitalist” (Marx, 1867, p. 449). Capitalism is a dynamic economic system that is based on the <79>: need for permanent capital accumulation in order to continue to exist. Capital can only be increased by the extraction of unpaid labour from workers that is transformed into money profit. “The employment of surplus-value as capital, or its reconversion into capital, is called accumulation of capital” (Marx, 1867, p. 725). A central characteristic of capitalism, therefore, is the class relationship between capitalists and workers, in which surplus value is produced that is objectified in commodities that are sold on markets, so that surplus value is transformed into profit and the initial capital is increased and reinvested. This is dynamic process. In order to show the continuity of capitalism, we therefore need to analyze the development of capital and labour in time.

Figure 2 shows the development of the worldwide gross domestic product (GDP) in the years 1961-2008. GDP growth seems to develop in cycles that include upswings and downswings. The combination of these cycles can result in longer waves of GDP growth or sudden phases of stagnation/crisis. Except for the year 2008, there was an overall growth of the world GDP, which is an indication for continuous capital accumulation in the outlined period. But GDP is

an indicator that contains both wages and profits, and therefore obscures the class relations that are at the heart of capitalism. In order to analyze the development of class relations, we therefore need to refer to other data.

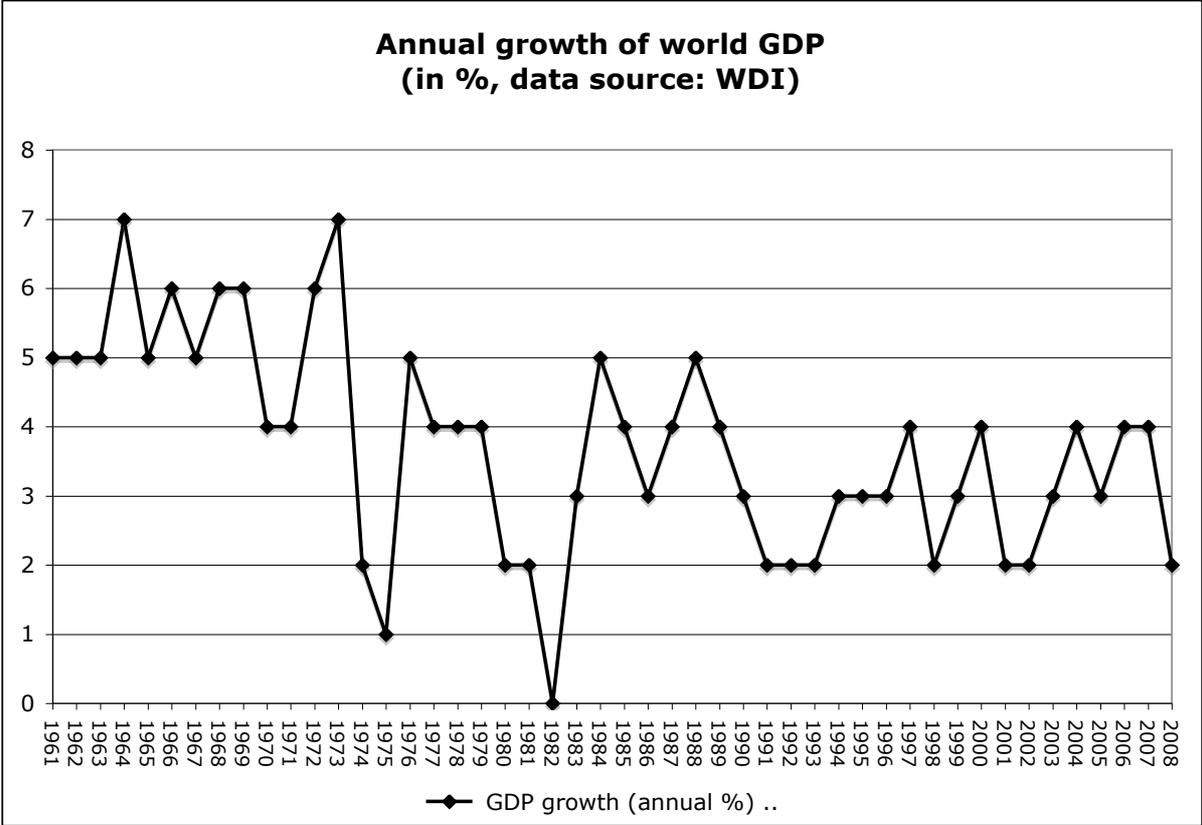


Figure 2

<80>: Figure 3 shows the development of the wage shares for the EU15 countries, the United States, and Japan in the years 1960-2009. The wage share measures the share of total wages in the gross domestic product. The wage share decreased from 65-75% in the mid-1970s to 55-60% at the end of the first decade of the new millennium. This means that wages have relatively decreased in relationship to profits: lowering wages has radically increased profits. Capitalism in the past 35 years has been characterized by an intensification of class struggle from above: corporations have combated labour by relatively lowering wages. They have been supported in this endeavour by state policies that deregulated markets, labour laws, and decreased corporate taxes. Capital accumulation has therefore remained continuously at high levels for most of the time in the years 1960-2008. An indication for this circumstance is that world cross capital formation, which measures the total value of additions to fixed assets, has remained at more than 20% in all of these years (figure 4). The combined value of all stocks has remained continuously at rates above 40% of world GDP in the years 1960-2008 (figure 5). Figure 6 shows the growth of total capital assets in the EU15 countries and the United States for the years 1960-2008. The continuous growth of capital assets shows that capital accumulation has continuously yielded profits in the past decades. The continuous growth of world GDP, capital assets, cross capital formation, and stock market values in the past decades is an indication that we live in a capitalist economy. The tendency for the growth of profits by decreasing the wage share is an indication for an intensification of class struggle by capital in the past decades, which shows the continuous class character of the contemporary economy.

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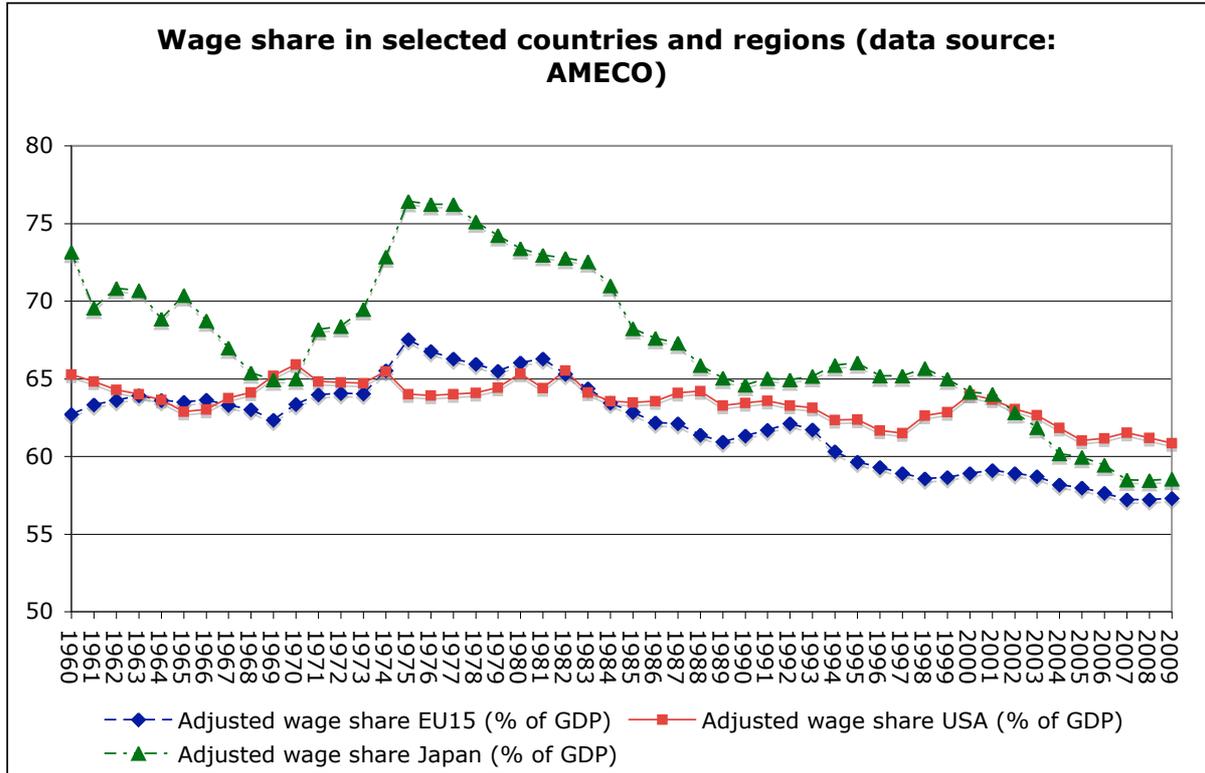


Figure 3

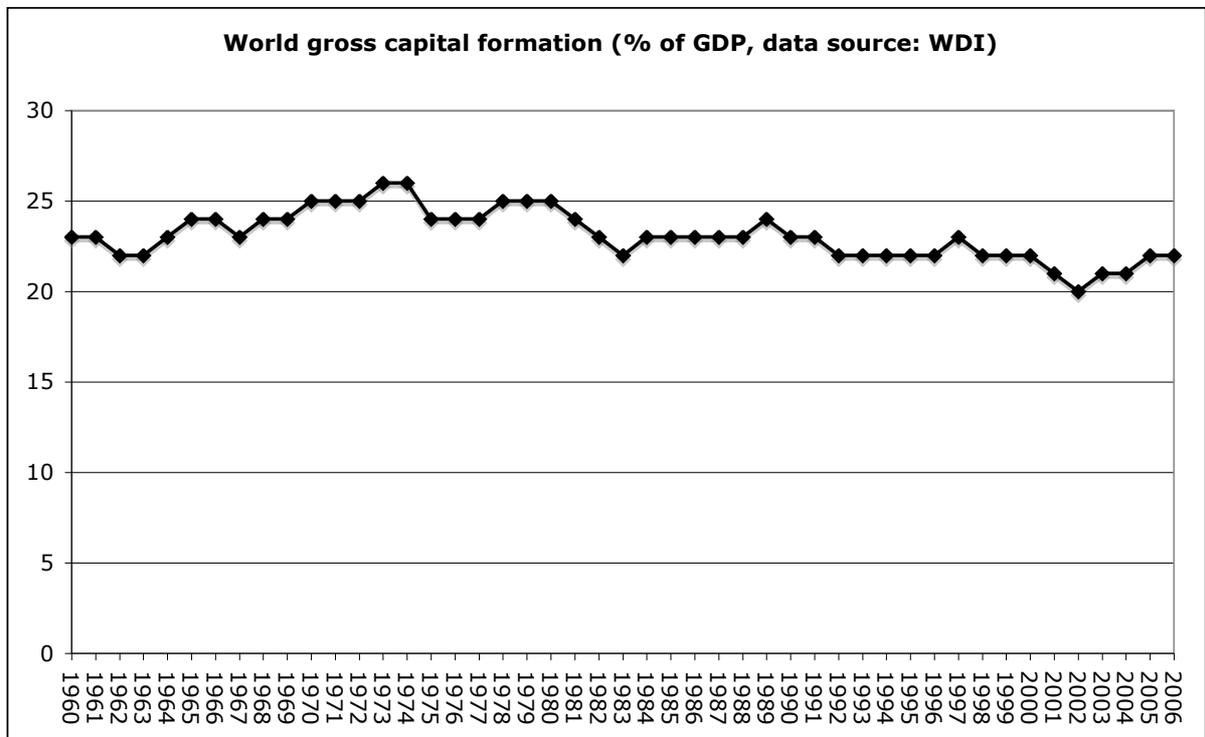


Figure 4

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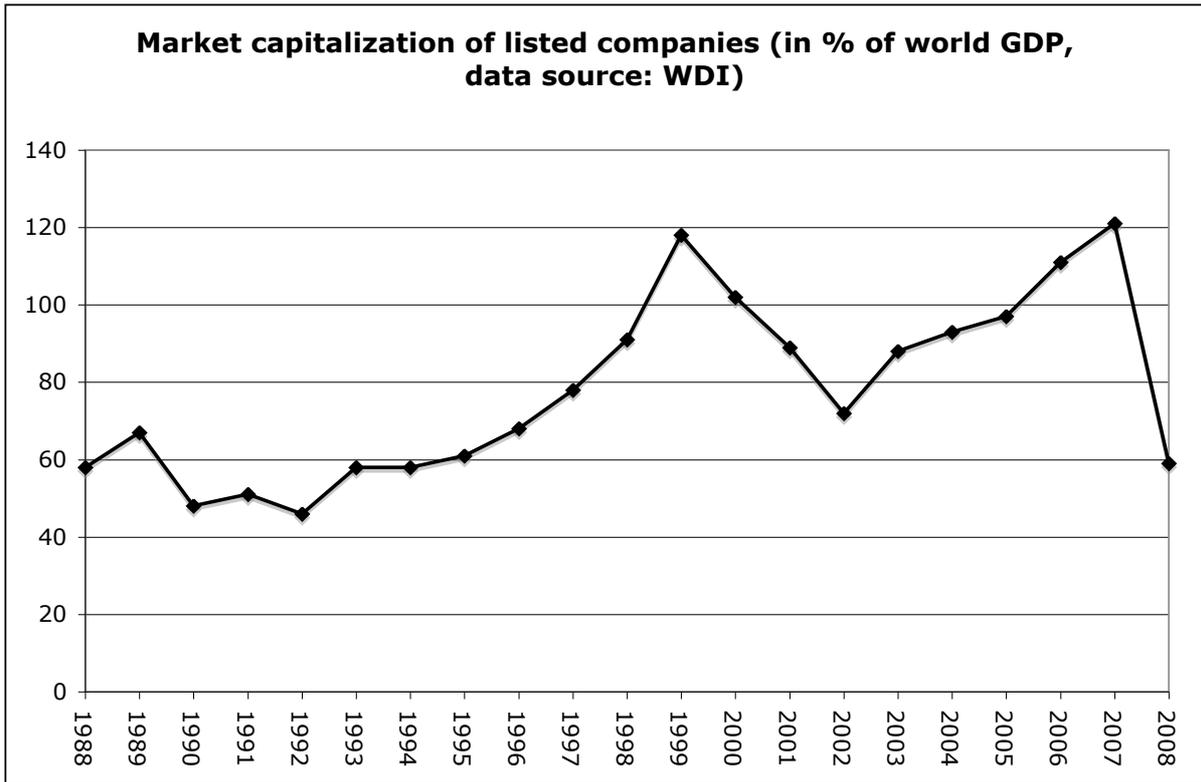


Figure 5

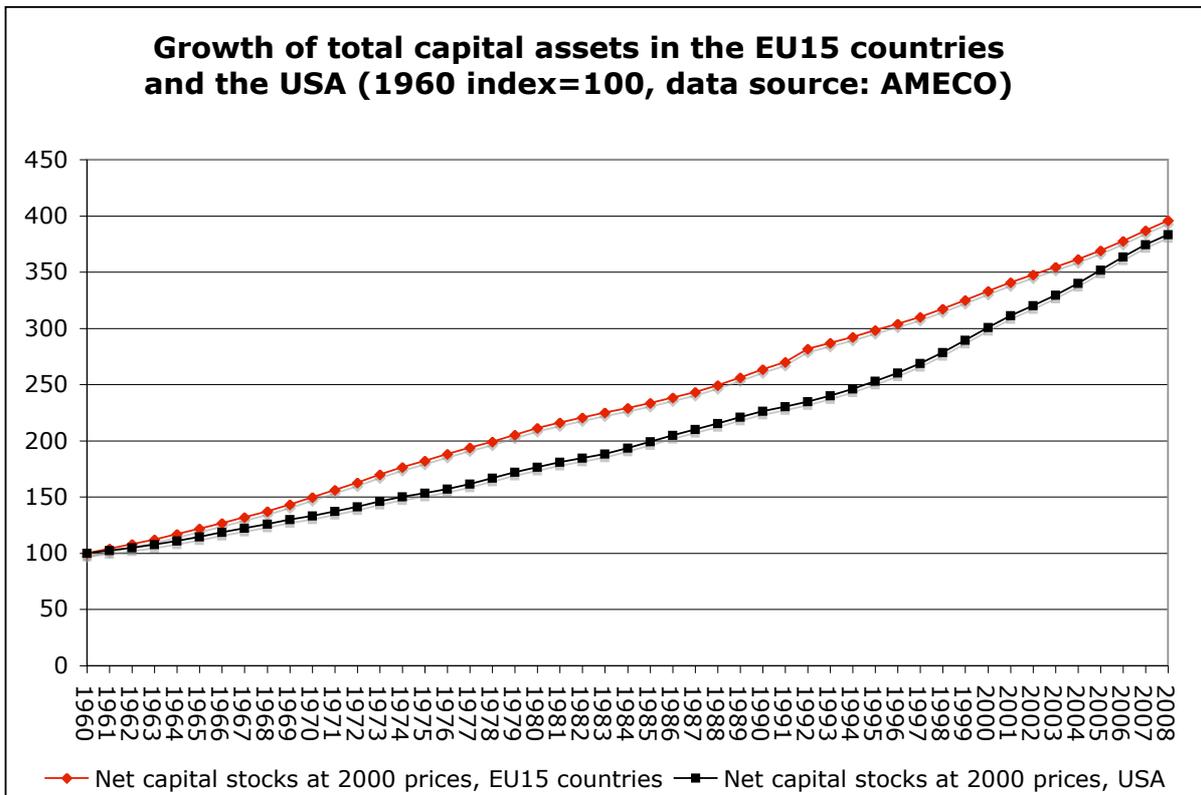


Figure 6

<83>: Continuous information society theories stress that we still live in a modern capitalist society, but that certain changes of the forms that express basic capitalist structures have taken place. Subjective continuous information society concepts are, for example, reflexive modernization (Beck, Giddens and Lash, 1994), cognitive capitalism (Vercellone, 2007),

semio-capitalism (Berardi, 2009a, 2009b), general intellect and immaterial labour (Hardt and Negri, 2000, 2004; Virno, 2004). They stress the importance of mental labour for capital accumulation in contemporary capitalism. Objective continuous information society concepts include for example digital capitalism (Glantz, 1999; Schiller, 2000), virtual capitalism (Dawson and Foster, 1998), high-tech capitalism (Haug, 2003), MP3 capitalism (Sennett, 2006), and informatic capitalism (Fitzpatrick, 2002).

Based on Negri's and Hardt's (2000, 2004) focus on immaterial labor, there are some Marxist approaches that frame the current transformation not as objective approaches as a technological transformation, but as a subjective turn. Maurizio Lazzarato introduced the term *immaterial labour*, by which he means "labor that produces the informational and cultural content of the commodity" (Lazzarato, 1996, p. 133). Michael Hardt and Antonio Negri have popularized the term, and define immaterial labour as labour "that creates immaterial products, such as knowledge, information, communication, a relationship, or an emotional response" (Hardt and Negri, 2004, p. 108).

Franco Berardi stresses the subjective character of what he terms semio-capitalism: "Semio-capital, in fact, is not about the production of material goods, but about the production of psychic stimulation" (Berardi, 2009a, p. 45). The "intellectual becomes a mass social subject that tends to become an integral part of the general productive process" (Berardi, 2009a, p. 63). Semio-capitalism means for Berardi the "integration of language in the valorization process" (2009a, p. 149). Semiocapitalism "takes the mind, language and creativity as its primary tools for the production of value" (Berardi, 2009b, p. 21), Berardi says that semiocapitalism puts the soul at work: "Not the body but the soul becomes the subject of techno-social domination" (2009b, p. 200).

Christian Marazzi and Paolo Virno say that contemporary capitalism is shaped by the general intellect, which they conceive (other than Marx) as a purely subjective concept. Christian Marazzi writes that in "post-Fordism the general intellect is not fixed in machines, but in the bodies of workers" (2008, p. 44). The "primary productive resource of contemporary capitalism lies in the linguistic-relational abilities of humankind, in the complex of communicative and cognitive faculties <84> dynamis, powers) which distinguish humans" (Virno, 2004, p. 98). The notion of general intellect refers for Virno to the mind and linguistic-cognitive faculties of the human (2004, p. 42). Virno says that today general intellect "instead of being incarnated" into "the system of machines, exists as attribute of living labor" (2004, p. 65). He uses the notion of the intellectuality of the masses for "the whole of post-Ford era living labor...in that it is a depository of cognitive and communicative skills which cannot be objectified within the system of machines" (2004, p. 107).

Negri uses the term cognitive capitalism for stressing that "the production of value depends increasingly on creative intellectual activity which, apart from placing itself beyond any valorization related to scarcity, also places itself beyond mass accumulation, factory accumulation and the like" (Negri, 2008, p. 64). Nick Dyer-Witheford (2005) sees cognitive capitalism as "the commercial appropriation of general intellect", but also stresses that one "of the defining features of cognitive capitalism is its elaboration of high technology communications systems, of which the most famous is the Internet". Carlo Vercellone (2007) sees the transformation of capitalism as a subjective turn and hence speaks of "cognitive capitalism" as a formation that is characterized by "the hegemony of knowledges, by a diffuse intellectuality, and by the driving role of the production of knowledges by means of knowledges connected to the increasingly immaterial and cognitive character of labor" (Vercellone, 2007, p. 16). There would be a "preponderance of the knowledges of living labor

over knowledges incorporated in fixed capital and in corporate organization” (Vercellone, 2007, p. 32). The emerging antagonism between the living knowledge of labour and the dead knowledge of fixed constant capital would cause a crisis of the law of value, and an antagonism between capital’s attempt to enforce the law of value artificially (e.g. by intellectual property rights) and the socialization of knowledge by its incorporation in the brains of the collective workers of the general intellect. Paolo Virno (2004) formulates this assumption as his thesis no. 7: that in Post-Fordism, the general intellect does not coincide with fixed capital, but manifests itself principally as a linguistic reiteration of living labour.

That the role of technology does not vanish as claimed by Negri, Vercellone, Virno and others can, for example, be seen by the fact that among the worldwide largest corporations (measured by a composite index of sales, market value, assets and profits, for example the Forbes Global 2000 list from 2009) there are not only financial, banking, insurance institutions and oil corporations, but increasingly also information technology-producers like AT&T, Verizon Communications, IBM, <85> Telefónica, Hewlett-Packard, Deutsche Telekom, Nippon, or Microsoft. The notion of cognitive capitalism ignores that human knowledge not only is a productive force, but that knowledge is also stored, shared, communicated, and networked with the help of information technologies such as the computer, the Internet, and the mobile phone. Informational productive forces involve both human knowledge and information technologies. Humans make use of technologies for diffusing, using, sharing, and storing data. Knowledge becomes networked with the help of technologies. Notions such as immaterial labour and cognitive capitalism are subjectivistic and idealistic, they ignore the technical features of contemporary society that mediate human cognition, communication, and co-operation.

If one applies a dialectical methodology, the rise of transnational informational capitalism is neither only a subjective, nor only an objective transformation, but based on a subject-object-dialectic. Objective approaches are techno-deterministic and neglect how forms of labour and agency have changed, subjective approaches neglect that technology is a force that shapes and is shaped by agency. Hence both the technology-oriented objective and the subjective knowledge-oriented Marxist approaches are insufficient. But at the same time they are right in stressing one pole of a dialectic of a larger framework: The notion of transnational informational capitalism sublates both lines of thinking dialectically because information and networks have both an objective and a subjective aspect; they transform the means of production and the relations of production. The search of capital for new strategies and forms of capital accumulation transforms labour in such a way that cognitive, communicative, and cooperative labour forms a significant amount of overall labour time (a development enforced by the rise of the ideology of self-discipline of ‘participatory management’), but at the same time this labour is heavily mediated by information technologies and produces to a certain extent tangible informational goods (as well as intangible informational services) (Fuchs, 2008b). The notion of transnational informational capitalism grasps this subject-object-dialectic, it conceptualizes contemporary capitalism based on the rise of cognitive, communicative, and co-operative labour that is interconnected with the rise of technologies of and goods that objectify human cognition, communication, and co-operation. Informational capitalism is based on the dialectical interconnection of subjective knowledge and knowledge objectified in information. The reason why I think that this approach is better grounded, is that dialectics allow for the conception of reality as complex and dynamic, which questions one-dimensional and static-ideological accounts of reality.

<86>: Transnational informational capitalism is the result of the dialectic of continuity and discontinuity that shapes capitalist development. Surplus value, exchange value, capital,

commodities and competition are basic aspects of capitalism, how such forms are exactly produced, objectified, accumulated, and circulated is contingent and historical. They manifest themselves differently in different capitalist modes of development. In the informational mode of development surplus value production and capital accumulation manifest themselves increasingly in symbolic, “immaterial”, informational commodities and cognitive, communicative, and cooperative labour. The accumulation of capital, power, and definition-capacities on a transnational scale is strongly mediated by new media. Roy Bhaskar (1993, p. 12) has distinguished between real negation  $\geq$  transformative negation  $\geq$  radical negation in order to stress the non-deterministic and complex character of sublation. Not all negations of negations are at the fundamental level, there are also partial sublations that are transformative, but not radical. The emergence of transnational informational capitalism is a transformational sublation, but not a radical one.

After the second world economic crisis in the mid 1970s there was a transition from the Fordist mode of development to the Post-Fordist mode of capitalist development. In order to increase profits new strategies and a flexible regime of accumulation and domination (Harvey, 1989) emerged, the main idea is to increase profits by putting pressure on nation states to lower wages and by decentralizing and globalizing the production process in order to reduce wage costs and investment and reproduction costs of capital so that variable and constant capital decrease which results in an increased production of surplus value and hence in rising profits.

The increasing importance of computer networks and global network organizations is an instrumental result of capitalist development. Computer technology and the Internet were not invented and introduced in an economic, but in a military context. But the societal diffusion of these technologies is due to the role they have played primarily for the economic restructuring of capitalism. Computer networks are the technological foundation that has allowed the emergence of global network capitalism, i.e. regimes of accumulation, regulation, and discipline that are helping to increasingly base the accumulation of economic, political, and cultural capital on transnational network organizations that make use of cyberspace and other new technologies for global coordination and communication.

Globalization can generally be defined as the stretching of social relationships, i.e. communication networks, in space-time, a globalizing social system **<87>**: enlarges its border in space-time, as a result social relationships can be maintained across larger temporal and spatial distances. In modern society, processes of globalization are based on the logic of accumulation of natural resources, tools, money capital, power, and hegemony. The main problem that modern society tries to solve is how to accumulate ever more capital. Whenever an existing regime/mode of accumulation reaches its inherent limits and enters crisis, new strategies and areas of accumulation are needed in order to revert to ordered processes of accumulation. Hence globalization is in modern society inherently driven by the logic of capital accumulation that results in the appropriation and production of new spaces and systems of accumulation. The antagonism between structures and actors characteristic for modern society (social structures are alienated from their producers, i.e. they are controlled by certain groups that exclude others from control) results in a clash of estrangement and self-determination that is characteristic for all subsystems of modern society. The basic conflict is that many people cannot cope with the increased complexity of the world because their lives are increasingly shaped by global alienated structures that are out of their reach and that they cannot participate in.

Contemporary capitalism is based on a transnational organizational model: Organizations cross national boundaries, the novel aspect is that organizations and social networks are increasingly globally distributed, that actors and substructures are located globally and change dynamically (new nodes can be continuously added and removed), and that the flows of capital, power, money, commodities, people, and information are processed globally at high-speed. Global network capitalism is a nomadic dynamic system in the sense that it and its parts permanently reorganize by changing their boundaries and including or excluding various systems by establishing links, unions, and alliances or getting rid of or ignoring those actors that don't serve or contribute to the overall aim of capital accumulation.

Network technologies like the Internet—due to their global reach, decentralized structure, and high speed—support communication and social relations across spatial and temporal distances. Phil Graham (2006, pp. 1, 72) sees the high speed and extent of communication as the central characteristic of what he terms hypercapitalism. High speed is just one quantitative feature of a new quality of capitalism, a networked transnationalism regime of rule. It might be better to focus on qualities and not on quantities in choosing a key concept because in dialectical thinking the transformations that emerge from the overturn on quantitative features are <88>: decisive. A global space is constituted by the interaction of global technological systems and transnational (economic, political, cultural) organizations and institutions. This space is a space of global flows of capital, power, and ideology that create and permanently recreate a new transnational regime of domination.

The accumulation of money capital, power, and cultural definition-capacities, i.e. exploitation, domination, and ideological legitimization, have become more transnational and are influenced by knowledge production (subjective aspect) and networked digital information and communication technologies (objective aspect). Transnational network capitalism has an antagonistic character, knowledge and new technologies don't have one-sided effects, but should be analyzed dialectically: They are embedded into a fundamental antagonism of capitalism, the one between cooperation and competition, that has specific manifestations in the various subsystems of society. The computer is a universal machine that is simultaneously a means of production, circulation, and consumption. This feature combined with networking has resulted in the emergence of the figure of the prosumer that on the one hand promises a new model of co-operative production and socialization of the means of production, but on the other hand is antagonistically subsumed under the rule of capital.

FDI flows have increased from approximately 0.5% of world GDP at the beginning of the 1970s to a share between 2% and 4.5% since the end of the millennium (data source: UNCTAD). FDI stocks have increased from a level of about 5% of world GDP at the beginning of the 1980s to 25% of world GDP in 2006. In 2006, the top 100 transnational corporations (TNCs) listed in the World Investment Report had an average transnationality index (a composite index that measures the degree to which asset, sales, employees are operating outside the home base of a TNC) of 61.6% (World Investment Report, 2008, p. 28), which shows that large multi- and transnationals indeed do have transnational value-sources. world exports and world imports have increased from approximately 10% of the world GDP in 1965 to more than 25% in 2007. These are empirical indicators that contemporary capitalism is more global in character than Fordist capitalism. Global capitalism is therefore a term that denotes an extension and intensification of the globalization of contemporary capitalism in comparison to Fordist capitalism (1945-1975).

<89>: But can we indeed maintain that transnational capitalism is informational in character?

If one defines information as cognitive and communicative process (Fuchs, 2008b), then one can see the information sector of the economy as being comprised of the generation, distribution, and consumption of informational goods and services (affective labour, production of information technologies, communication equipment, media infrastructure, media content, research, education, recreation, culture, entertainment). The United Nations (UN) International Standard Industrial Classification of All Economic Activities (ISIC Rev 3.1) distinguishes various economic activities that can be mapped to four economic sectors: the primary (agriculture and mining), the secondary (traditional manufacturing), the tertiary (non-informational services), and the quaternary (informational goods and services) sector (see Fuchs, 2008b, 194ff).

The information economy constitutes the quaternary sector. Statistical analysis (based on data from the Organisation for Economic Co-operation and Development (OECD) Database for Structural Analysis (STAN)) allows analysis of how value added and employees are distributed within various countries across these four sectors. Tables 1 and 2 show the results for a number of countries. The selected advanced countries display uniform structural patterns: the informational economy is the dominant employment sector in all selected countries (Italy excepted). The secondary sector is the dominant locus of value production in all selected countries. In all of the selected countries, the informational sector is the second largest locus of value production. These statistics allow analyzing the role of information in national economies. Structural analysis shows that information is important in the economies of some of the dominant countries, although it is only dominant in the employment structure and not in value production. What is the role of information in transnational economic relationships? Does it play an important or a rather minor role in foreign investments, transnational business operations, and world trade? It is one of the tasks of this chapter to answer these questions by treating the topic of the information economy within the context of the debate on the new imperialism and global capitalism.

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<b>Economic Sector</b>	<b>U.S.</b>	<b>Germany</b>	<b>Norway</b>	<b>France</b>	<b>Austria</b>	<b>Finland</b>	<b>Italy</b>
1 <sup>st</sup>	2.0%	2.3%	4.8%	3.5%	12.0%	5.3%	4.3%
2 <sup>nd</sup>	15.9%	23.7%	17.5%	19.2%	20.7%	22.8%	27.1%
3 <sup>rd</sup>	34.2%	32.2%	29.2%	28.7%	31.8%	26.0%	34.4%
4 <sup>th</sup>	47.9%	41.7%	48.5%	48.7%	35.4%	46.0%	34.1%

*Table 1: Distribution of employees in four economic sectors (2006 data for total employment, data source: author's calculations based on data from OECD Database for Structural Analysis)*

<b>Economic Sector</b>	<b>U.S.</b>	<b>Germany</b>	<b>Norway</b>	<b>France</b>	<b>Austria</b>	<b>Finland</b>	<b>Italy</b>
1 <sup>st</sup>	3.0%	1.1%	29.3%	2.1%	2.2%	2.9%	2.5%
2 <sup>nd</sup>	40.5%	42.9%	32.8%	38.2%	51.3%	44.6%	46.8%
3 <sup>rd</sup>	25.2%	27.8%	14.7%	28.7%	20.4%	19.6%	24.0%
4 <sup>th</sup>	31.2%	28.3%	23.2%	31.0%	26.1%	33.0%	26.8%

*Table 2: Distribution of value added in four economic sectors (2006 data: value added at current prices, data source: author's calculations based on data from OECD Database for Structural Analysis)*

Figure 7 shows an analysis of the distribution of the capital assets of the world's largest 2,000 corporations between various economic sectors. Finance capital is the dominant fraction of capital today, which shows that an important characteristic of imperialistic capitalism is

present today. Fossil fuels are also still very important in the contemporary economy. This is an indication that industrial society is not over, and that we have entered a hyper-industrial era, in which information production, selling, and consumption becomes an important factor of the overall economy, but does not substitute for the economic importance of finance capital and fossil fuels. Financialization, hyper-industrialism, and informatization characterize contemporary imperialist capitalism. Information companies are important in the global capitalist economy, which reflects a trend towards informatization, that is, the rise of the importance of information in economy, but they are far less important than finance and the oil and gas industry.

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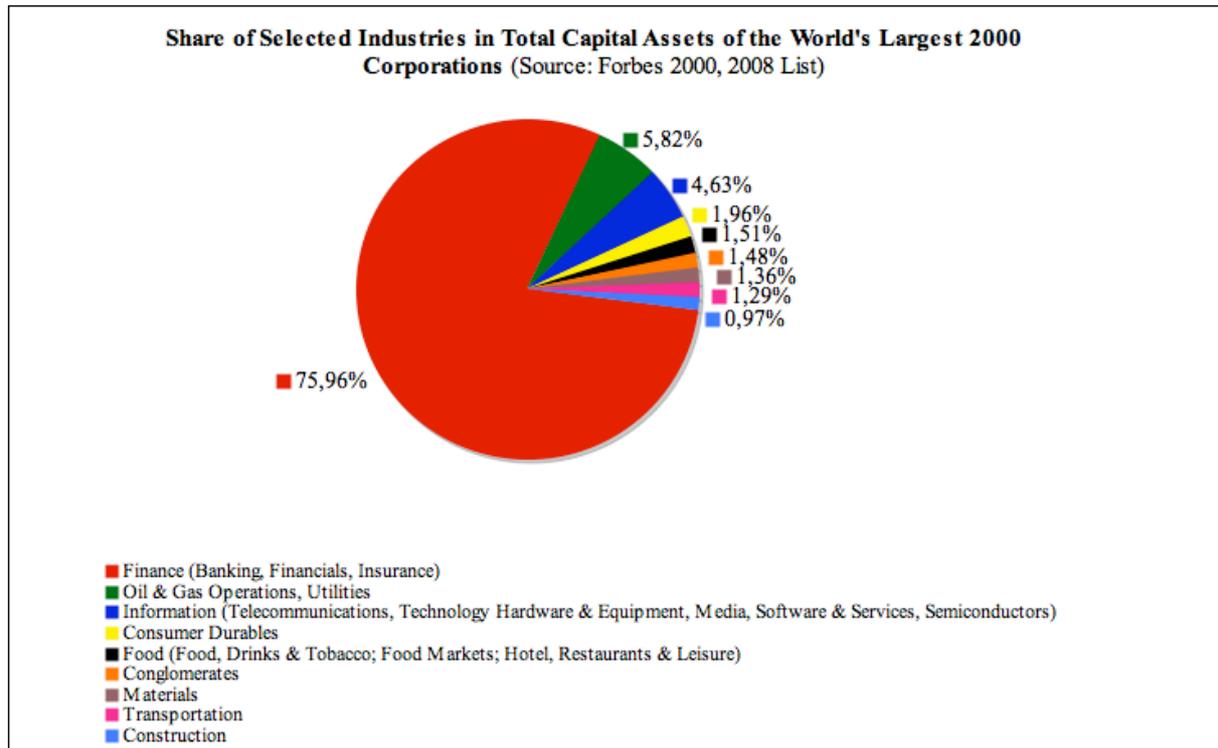


Figure 7: Share of selected industries in total capital assets of the world's largest 2000 corporations in 2008 (data source: Forbes, 2000, 2009, list)

Data for the employment structure, value added, and capital assets show that depending on which indicator we use, we will achieve different results to the question to which extent contemporary capitalism is informational. Furthermore these data show that contemporary capitalism is not only informational, but also imperialistic and hyper-industrial (Fuchs, 2010a, 2010b, 2011). I therefore use the notion of informational capitalism not for designating that information, knowledge, or information technologies are the central aspects of contemporary society or economy, but argue in a more pragmatic way that informational capitalism should be used as a term that characterizes all those parts of the economy that create informational goods or services. To which extent the capitalist economy is information-based can only be determined by empirical research.

I have already mentioned that class is a central characteristic of capitalism. For constructing a theory of informational capitalism, it is therefore necessary to discuss the notion of informational labour in relation to class analysis. In section 3, foundations of Marxian class analysis are introduced. In section 4, Marxian class analysis is related to informational labour.

<92> **Class analysis**

Marx and Engels defined class in the following way: “By bourgeoisie is meant the class of modern capitalists, owners of the means of social production and employers of wage labour. By proletariat, the class of modern wage labourers, who, having no means of production of their own, are reduced to selling their labour power in order to live” (Marx and Engels, 1848, p. 35).

In contemporary society, also large groups that are outside of traditional wage-labour work live under precarious conditions. In the EU25 countries, the combined unemployment rate has always been above 7% in the past ten years, reaching 9% in 2002 and 2003 (Eurostat, online). In many of these countries (like Bulgaria, France, Greece, Italy, Latvia, Lithuania, Poland, Slovakia, Spain) an unemployment rate well above 10 or even 15% has not been an exception from the rule (Eurostat, online). The peak between the years 1996-2007 was a rate of 20.0% in 2002 in Poland (Eurostat, online). In the course of the new global economic crisis, the unemployment rate rose from 7.0% in June 2008 to 9.0% in May 2009 in the EU25 countries. The national rates reached peak levels in countries like Spain (18.7%), Latvia (16.3%), Estonia (15.6%), Lithuania (14.3%), Ireland (11.7%), Slovakia (11.1%), and Hungary (10.2%). These data are an indication that unemployment (and its consequences like increased poverty) is a pressing structural problem of contemporary society. Self-employed persons in Europe have an in-work poverty risk that is 2.5 times greater than the one of regular employees. 16% of the self-employed in the EU15 countries have an in-work poverty risk, compared to 6% of dependent employees (European Foundation for the Improvement of Living and Working Conditions, 2007). These data are an indication that many people outside of regular employment relations are facing precarious living and working conditions. Nonetheless, their material situation is comparable to many people who are wage labourers. Therefore it would be an analytical and political error to not include these people into the category of the proletariat. The data are an indication that today the category of the proletariat should not be limited to industrial wage labour. These days the definition of the proletariat as “the class of modern wage labourers” is not suitable anymore.

But there is a second line of thought in Marx’s class theory that is more appropriate under contemporary conditions. Marx highlights exploitation as the fundamental aspect of class in another passage where he says that “the driving motive and determining purpose of capitalist production” is “the greatest possible exploitation <92> of labour-power by the capitalist” (Marx, 1867, p. 449). Antagonistic class relations arise due to exploitation: “The control exercised by the capitalist is not only a special function arising from the nature of the social labour process, and peculiar to that process, but it is at the same time a function of the exploitation of a social labour process, and is consequently conditioned by the unavoidable antagonism between the exploiter and the raw material of his exploitation” (Marx, 1867, p. 449).

The exploited class is “free from, unencumbered by, any means of production of their own”, which would mean the “complete separation between the workers and the ownership of the conditions or the realization of their labour” (Marx, 1867, p. 874). The proletariat is “a machine for the production of surplus-value”, capitalists are “a machine for the transformation of this surplus-value into surplus capital” (Marx, 1867, p. 742). In his analysis, Marx had to limit the class concept to wage labour under the conditions of 19th century industrialism.

In the three volumes of *Capital*, Marx analyzes the accumulation process of capital. This process, as described by Marx, is visualized in figure 8. The introduction of some important categories that Marx employs can summarize this account.

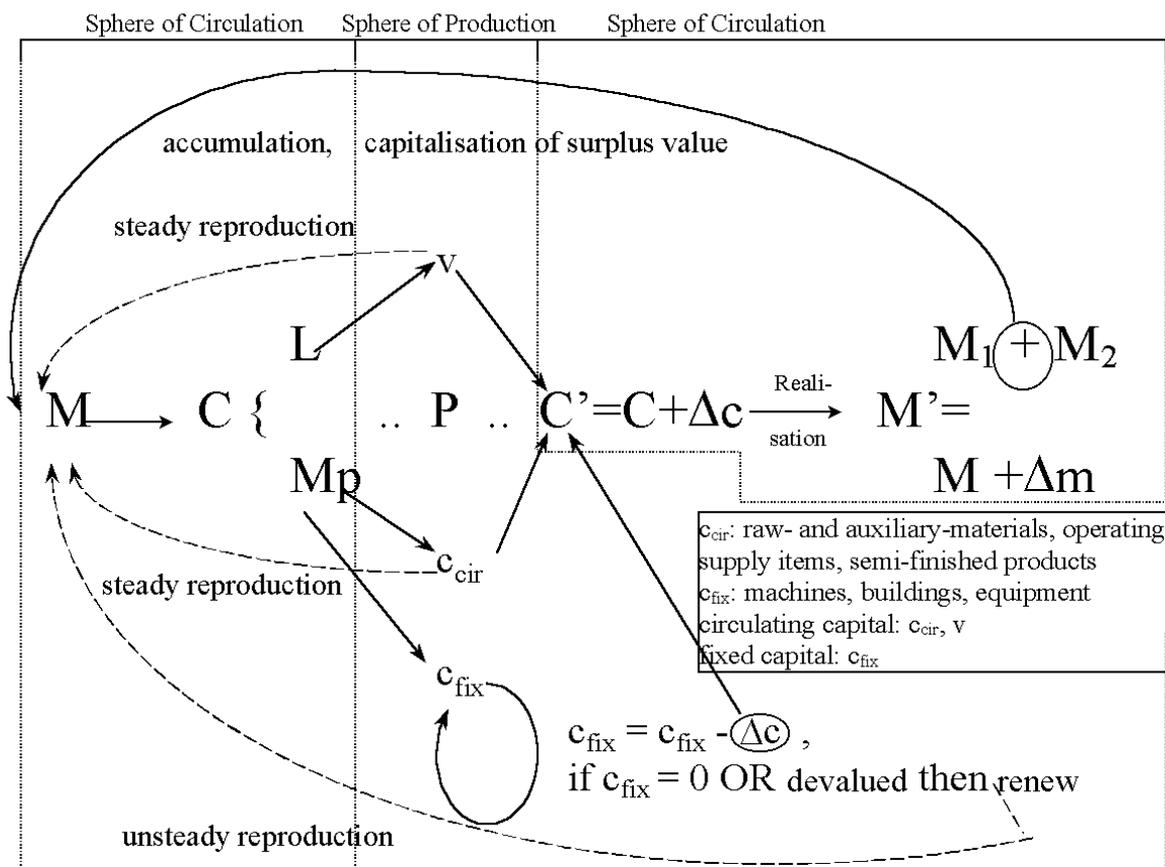


Figure 8: The accumulation/expanded reproduction of capital

Marx's theory is a labour theory of value, which is a theory that draws conclusion from the analysis of the total labour time that is needed for the production of goods. It is also a critique of value, which means that the forms that value takes in capitalism and the practices and ideologies that are based on this form are questioned. The value of a good is the total time that is needed for its production. The more value a good has, the longer its production takes. At the level of prices, this can be observed by the fact that labour-intensive goods are frequently more expensive than goods with low labour intensity. Marx argues that the cell form of capitalism is the commodity, goods that are exchanged in a certain quantitative relationship with money ( $x$  amount of commodity A =  $y$  units of money). He says that in societies that are based on the economic principle of exchange, goods have a use value and an exchange value. The use value is the qualitative aspect of a good; it is a utility that satisfies certain human needs. In exchange-based societies, humans can only get hold of such goods by exchanging other goods (such as money or their labour power) with the needed goods in certain quantitative relationships ( $x$  commodity A =  $y$  commodity B). Concrete labour is a category that is used for describing the creation of the use value of a good by humans. Abstract labour is a category employed for signifying the creation of the value of a good, i.e. the objectified labour time needed for its production. Marx sees money as the general equivalent of exchange; it simplifies the exchange of commodities and is therefore a general commodity.

In the accumulation of capital, capitalists buy labour power and means of production (raw materials, technologies, etc) in order to produce new commodities that are sold with the expectation to make money profit that is partly reinvested. Marx distinguishes two spheres of capital accumulation: the circulation sphere and the sphere of production. In the circulation sphere, capital transforms its value form: First money  $M$  is transformed into commodities (from the standpoint of the capitalist as buyer), the capitalist purchases the commodities

labour power  $L$  and means of production  $M_p$ .  $M-C$  is based on the two purchases  $M-L$  and  $M-M_p$ . In capitalism, labour power is separated from the means of production, “the mass of the people, the workers, [...] come face to face with the non-workers, the former as non-owners, the latter as the owners, of these means of production” (Marx, 1885, p. 116). This means that due to private property structures, workers do not own the means of production, the products they produce, and the profit they generate. Capitalists own these resources.

In the sphere of production, a new good is produced: the value of labour power and the value of the means of production are added to the product. Value takes on the form of productive capital  $P$ . The value form of labour is variable capital  $v$  (which can be observed as wages), the value form of the means of production constant capital  $c$  (which can be observed as the total price of the means of production/producer goods).

<95>: That part of capital, therefore, which is turned into means of production, i.e. the raw material, the auxiliary material and the instruments of labour, does not undergo any quantitative alteration of value in the process of production. For this reason, I call it the constant part of capital, or more briefly, constant capital. On the other hand, that part of capital which is turned into labour-power does undergo an alteration of value in the process of production. It both reproduces the equivalent of its own value and produces an excess, a surplus-value, which may itself vary, and be more or less according to circumstances. This part of capital is continually being transformed from a constant into a variable magnitude. I therefore call it the variable part of capital, or more briefly, variable capital. (Marx, 1867, p. 317)

Constant capital consists of two parts: circulating constant capital  $c_{cir}$  (the value of the utilized raw materials, auxiliary materials, operating supply items and semi-finished products) and fixed constant capital  $c_{fix}$  (the value of the utilized machines, buildings and equipment) (Marx 1885, chapter 8).  $c_{cir}$  and  $v$  together form circulating capital: They transfuse their value totally to the product and must be constantly renewed.  $c_{fix}$  remains fixed in the production process for many turnovers of capital. The turnover time of capital is the sum of its circulation time and its production time (Marx, 1885, p. 236). Circulation time is the time that capital takes to be transformed from its commodity form into the money form and later from its money form to its commodity form. Production time is the time that capital takes in the sphere of production.

Fixed constant capital decreases its value in each turnover of capital. Its value is decreased by the amount of  $\Delta c$ , which is a flexible value. Fixed constant capital like machinery does not create value and its value is never entirely transfused to capital at once. It is depreciated by wear and tear, non-usage, and moral depreciation (i.e. the emergence of new machinery with increased productivity).

A part of the capital value advanced is fixed in this form, which is determined by the function of the means of labour in the process. As a means of labour functions and is used up, one part of its value passes over to the product, while another part remains fixed in the means of labour and hence in the production process. The value fixed in this way steadily declines, until the means of labour is worn out and has therefore distributed its value, in a longer or shorter period, over the volume of products that has emerged from a series of continually repeated labour processes. (Marx, 1885, p. 237f).

In the sphere of production, capital stops its metamorphosis so that capital circulation comes to a halt. New value  $V'$  of the commodity is produced,  $V'$  contains <96>: the value of the necessary constant and variable capital and surplus value  $\Delta s$  of the surplus product. Surplus

value is generated by unpaid labour. Capitalists do not pay for the production of surplus, therefore the production of surplus value can be considered as a process of exploitation. The value  $V'$  of the new commodity after production is  $V' = c + v + s$ . The commodity then leaves the sphere of production and again enters the circulation sphere, in which capital conducts its next metamorphosis: By being sold on the market it is transformed from the commodity form back into the money form. Surplus value is realized in the form of money value. The initial money capital  $M$  now takes on the form  $M' = M + \Delta m$ , it has been increased by an increment  $\Delta m$ . Accumulation of capital means that the produced surplus value is (partly) reinvested/capitalized. The end point of one process  $M'$  becomes the starting point of a new accumulation process. One part of  $M'$ ,  $M_1$ , is reinvested. Accumulation means the aggregation of capital by investment and exploitation in the capital circuit  $M-C..P..C'-M'$ , in which the end product  $M'$  becomes a new starting point  $M$ . The total process makes up the dynamic character of capital. Capital is money that is permanently increasing due to the exploitation of surplus value.

Commodities are sold at prices that are higher than the investment costs so that money profit is generated. For Marx, one decisive quality of capital accumulation is that profit is an emergent property of production that is produced by labour, but owned by the capitalists. Without labour no profit could be made. Workers are forced to enter class relations and to produce profit in order to survive, which enables capital to appropriate surplus. The notion of exploited surplus value is the main concept of Marx's theory, by which he intends to show that capitalism is a class society. "The theory of surplus value is in consequence immediately the theory of exploitation" (Negri, 1991, p. 74) and, one can add, the theory of class and as a consequence the political demand for a classless society.

Enrique Dussel argues that in his work on the *Grundrisse*, Marx had "for the first time in his work...discovered the category of surplus value" (Dussel, 2008, p. 77) in December, 1857. "if the worker needs only half a working day in order to live a whole day, then, in order to keep alive as a worker, he needs to work only half a day. The second half of the day is forced labour; surplus labour" (Marx, 1857/58, p. 324). Surplus value also means that workers are compelled to work more than necessary for satisfying their immediate needs, they produce an excess for free that is appropriated by capitalists: "What appears as surplus value on capital's side appears identically on the worker's side as surplus labour in excess of his requirements as worker, hence in excess of his immediate requirements for keeping himself alive" (Marx, 1857/58, p. 324f).

The surplus value which capital obtains through the production process consists only of the excess of surplus labour over necessary labour. The increase in productive force can increase surplus labour—i.e. the excess of labour objectified in capital as product over the labour objectified in the exchange value of the working day—only to the extent that it diminishes the relation of necessary labour to surplus labour, and only in the proportion in which it diminishes this relation. Surplus value is exactly equal to surplus labour; the increase of one [is] exactly measured by the diminution of necessary labour. (Marx 1857/58, 339).

The capitalist "wants to produce a commodity greater in value than the sum of the values of the commodities used to produce it, namely the means of production and the labour-power he purchased with his good money on the open market. His aim is to produce not only a use-value, but a commodity; not only use-value, but value; and not just value, but also surplus value [...] The cotton originally bought for £100 is for example re-sold at £100 + £10, i.e. £110. The complete form of this process is therefore  $M-C-M'$ , where  $M' = M + \Delta M$ , i.e. the

original sum advanced plus an increment. This increment or excess over the original value I call 'surplus-value'" (Marx, 1867, pp. 293, 251).

Capital is not money, but money that is increased through accumulation, "money which begets money" (Marx, 1867, p. 256). Marx argues that the value of labour power is the average amount of time that is needed for the production of goods that are necessary for survival (necessary labour time), which in capitalism is paid for by workers with their wages. Surplus labour time is all labour time that exceeds necessary labour time, remains unpaid, is appropriated for free by capitalists, and transformed into money profit.

Surplus value "is in substance the materialization of unpaid labour-time. The secret of the self-valorization of capital resolves itself into the fact that it has at its disposal a definite quantity of the unpaid labour of other people" (Marx, 1867, p. 672). Surplus value "costs the worker labour but the capitalist nothing", but "none the less becomes the legitimate property of the capitalist" (Marx, 1867, p. 672). "Capital also developed into a coercive relation, and this compels the working class to do more work than would be required by the narrow circle of its own needs. As an agent in producing the activity of others, as an extractor of surplus labour and an exploiter of labour-power, it surpasses all earlier systems of production, which <98>: were based on directly compulsory labour, in its energy and its quality of unbounded and ruthless activity" (Marx, 1867, p. 425). Surplus value also means that workers are compelled to work more than necessary for satisfying their immediate needs, they produce an excess for free that is appropriated by capitalists: "What appears as surplus value on capital's side appears identically on the worker's side as surplus labour in excess of his requirements as worker, hence in excess of his immediate requirements for keeping himself alive" (Marx, 1857/58, p. 324f).

Marx argues that capitalists are unproductive, they do not produce value, and that profit stems from the production of value by workers that is exploited and appropriated by capitalists. He uses the term productive labour in this context: Productive labour "produces surplus-value for the capitalist, or in other words contributes towards the self-valorization of capital" (Marx, 1867, p. 644). For Marx, capitalism is based on the permanent theft of unpaid labour from workers by capitalists. This is the reason why he characterizes capital as vampire and werewolf. "Capital is dead labour which, vampire-like, lives only by sucking living labour, and lives the more, the more labour it sucks" (Marx, 1867, p. 342). The production of surplus value "forms the specific content and purpose of capitalist production" (Marx, 1867, p. 411), it is "the *differentia specifica* of capitalist production", "the absolute law of this mode of production" (Marx, 1867, p. 769), the "driving force and the final result of the capitalist process of production" (Marx, 1867, p. 976).

The production and exploitation of surplus value is according to Marx the heart of class structuration and capitalism. Therefore we today have to deal with the question who the producers of surplus value are in an information age.

### **Informational Labour and Class**

If one defines economic exploitation as the existence of an exploiting class that deprives at least one exploited class of its resources, excludes it from ownership, and appropriates resources produced by the exploited, one stays within a Marxist framework of class, but must not necessarily exclude the "underclasses" from this concept if one considers knowledge labour as central to contemporary society. Knowledge labour is labour that produces and distributes information, communication, social relationships, affects, and information and

communication technologies. It is a direct and indirect aspect of the accumulation of capital in informational capitalism: there are direct knowledge workers (either employed as wage labour in firms <99>: or outsourced, self-employed labour) that produce knowledge goods and services that are sold as commodities on the market (for example software, data, statistics, expertise, consultancy, advertisements, media content, films, music, etc) and indirect knowledge workers that produce and reproduce the social conditions of the existence of capital and wage labour such as education, social relationships, affects, communication, sex, housework, common knowledge in everyday life, natural resources, nurture, care, etc. These are forms of unpaid labour that are necessary for the existence of society, they are performed not exclusively, but to a certain extent by those who do not have regular wage labour – houseworkers, the unemployed, retirees, students, precarious and informal workers, underpaid workers in temporal or part-time jobs, and migrants. This unpaid labour is reproductive in the sense that it reproduces and enables the existence of capital and wage labour that consume the goods and services of unpaid reproductive workers for free. Therefore both capital and wage labour exploit reproductive workers—which is just another term for indirect knowledge workers. Capital could not be accumulated without activities in a common societal infrastructure in the areas of education, spare time, health and social care, natural resources, culture, art, sexuality, friendship, science, media, morals, sports, housework, etc. that are taken for granted and do not have to be paid for by capital (in the form of shares of its profits). Marx remarks in this context that the rise in the rate of profit in one line of industry depends on the development of the productive power of labour in another sector of the economy (1894, p. 175). This can also mean that accumulation in the wage labour economy is not only based on its own advances but also on the non-wage labour economy. “What the capitalist makes use of here are the benefits of the entire system of the social division of labour” (Marx, 1894, p. 175). This system of the division of labour also includes a non-wage economy that is dialectically separated from and connected to the wage economy and is exploited by capital.

By consuming reproductive labour and public goods and services, wage labour is reproducing itself. Wage labourers exploit reproductive workers in order to be able to be exploited by capital. Therefore we can define the multitude, the contemporary proletariat, as the class of those who produce material or knowledge goods and services directly or indirectly for capital and are deprived and expropriated of resources by capital. Such exploited resources are consumed by capital for free. In informational capitalism, knowledge has become a productive force, but knowledge is not only produced in corporations in the form of knowledge goods, but also in everyday life, for example by parents who educate their children, citizens who <100>: engage in everyday politics, consumers of media who produce social meaning and hence are prosumers, users of MySpace, YouTube, Facebook, etc. who produce informational content that is appropriated by capital, radio listeners and television viewers who call in live on air in order to discuss with studio guests and convey their ideas that are instantly commodified in the real-time economy, etc. The production process of knowledge is a social, common process, but knowledge is appropriated by capital. By this appropriation, the producers of knowledge become just like traditional industrial labour an exploited class that can with reference to Hardt and Negri (2000, 2004) be termed the multitude. The multitude is an expanded notion of class that goes beyond manual wage labour and takes into account that labour has become more common.

Hardt and Negri (2000, 2004, 2009) never outlined the subclasses of the multitude. The multitude, as the class of all those who are in some sense exploited, in my opinion consists of the following class fractions:

1. Traditional industrial workers, who are wage labourers and produce physical goods. Capital appropriates the physical goods of these workers and the surplus value contained in them.
2. Knowledge workers, who are wage labourers and produce knowledge goods and services in wage-relationships or self-employed labour relations. Capital appropriates the knowledge goods and services of these workers and the surplus value contained in them. One must note that public servants in areas such as health, education, transport, social care, housing, energy, and so on, are not under the direct command of capital. Most of them are waged knowledge workers who produce parts of the commons that are a necessary condition for the existence of society and capital. The latter exploits these public goods in an indirect way.
3. Houseworkers: These workers – who are still predominantly female – produce knowledge in the broad sense of communication, affects, sexuality, domestic goods and services that are not sold as commodities, but consumed by capitalists and wage labourers for free in order to reproduce manpower.
4. The unemployed: This class is deprived of job assets by capital and wage labour. It is the result of the tendency of the organic composition of capital to rise (the relationship of constant and variable capital), which is due to technological progress. The unemployed are, just like houseworkers, involved in unpaid reproductive knowledge labour that is a necessary condition for the existence of capital. Furthermore, the unemployed are frequently forced to take on very low-paid and often precarious or illegal jobs and hence are also subjected to extreme economic appropriation. Unemployed persons are in numerous instances forced by the state to perform extremely low-paid, compulsory, over-exploited work.
5. Migrants and workers in developing countries: Migrants are frequently subjected to extreme economic exploitation in racist relations of production as illegal, over-exploited workers. They are exploited by capital. A certain share of wage labourers who hope to increase their wages and to reach better positions if migrants can be forced to do unpaid or extremely low-paid unskilled work, ideologically supports this exploitation. Developing countries are either completely excluded from exploitation or they are considered as a sphere of cheap, unskilled wage labour that is over-exploited by capital by paying extremely low wages and ignoring labour rights and standards.
6. Retirees: Retirees are exploited to the extent that they act as unpaid reproductive workers in spheres such as the family, social care, home care, and education.
7. Students: Students are exploited in the sense that they produce and reproduce intellectual knowledge and skills that are appropriated by capital for free as part of the commons. Students are furthermore frequently over-exploited as precarious workers, a phenomenon for which terms such as “precariat”, “generation internship”, or “praktikariat” (from the German term “Praktikum”, which means internship, combined with the term “precariat”) can be employed.
8. Precarious and informal workers: Part-time workers, temporary workers, the fractionally employed, contract labour, bogus self-employment, etc., are work relations that are temporary, insecure, and low-paid. Hence these workers are over-exploited by capital in the sense that such jobs would cost much more for capital if they were performed by regularly employed workers. The same situation can be found in the case of racist labour relations and compulsory work performed by unemployed persons. Self-employed persons who do not employ others themselves are forced to sell their own labour power by contracts. They control their means of production, but produce surplus for others who control capital and use the appropriated labour for achieving profit.

<102> I have used the term over-exploitation here several times. Capital can gain extra surplus value by over-exploitation. Extra surplus value is a term coined by Marx for describing relations of production, in which goods are produced in a way that the “individual value of these articles is now below their social value” (Marx, 1867, p. 434). By employing illegal migrants, unemployed compulsory or illegal workers, students, precarious and informal workers, capital can produce goods at a value that is lower than the average social value because its wage costs are lower than in a regular employment relationship. As a result the commodities produced contain less variable capital, but are nonetheless sold at regular prices so that an extra profit can be obtained. By employing or outsourcing labour to over-exploited workers, the wage costs for capital are lower than in the case that the same work is conducted by regularly paid wage labour. As a result, more profit can be achieved. The total value of a commodity is  $V = c + v + s$  (constant capital + variable capital + surplus value). By over-exploitation, variable capital and the total value of the commodity are lowered, the commodity can be sold at regular market prices and thus extra profit can be achieved. Those who are outside of regular employment, such as students, pensioners, the unemployed, and illegal immigrants, are particularly active in reproductive labour that produces the social, educational, and knowledge commons of society. All of these activities indirectly benefit capital accumulation. If capital had to pay for this labour, its profits would probably decrease drastically. Therefore it can be argued that capital accumulation is advanced by outsourcing reproductive labour from corporations to the private and public realm, where especially groups like young people, parents, teachers, the unemployed, pensioners, and illegal immigrants engage in producing the commons of society that are a necessary condition for the existence of the capitalist economy. This process of outsourcing is free for capital, the informal workers are over-exploited to an extreme extent (if they receive no money at all, the rate of exploitation is infinite). Capital makes use of gratis labour, which is just another formulation for saying that capital exploits all members of society except for itself.

Rosa Luxemburg (1913/2003) argued that capital accumulation feeds on the exploitation of milieus that are drawn into the capitalist system: “capital feeds on the ruins of such organisations, and, although this non-capitalist milieu is indispensable for accumulation, the latter proceeds, at the cost of this medium nevertheless, by eating it up” (1913/2003, p. 363). This idea was used for explaining the existence of colonies of imperialism by Luxemburg and was applied by Marxist Feminism in order to argue that unpaid reproductive labour can be considered as an inner colony <103>: and milieu of primitive accumulation of capitalism (Mies, Bennholdt-Thomsen and Werlhof, 1988; Mies, 1986; Werlhof, 1991). Non-wage labour “ensures the reproduction of labour power and living conditions” (Mies et al., 1988, p. 18). It is labour spent “in the production of life, or subsistence production” (Mies et al., 1988, p. 70). Primitive accumulation “is overt violence, with the aim of robbery wherever, whenever, and against whomever this is ‘economically’ necessary, politically possible and technically feasible” (Mies et al., 1988, p. 102). In Post-Fordist capitalism, the inner colonies of capitalism are expanded so that profits rise by generating milieus of low-paid and unpaid labour. The formation of these colonies is a form of ongoing primitive accumulation that uses violence for expropriating labour. “Women, colonies and nature” are “the main targets of this process of ongoing primitive accumulation” (Mies et al., 1988, p. 6). This phenomenon has been termed “housewifization” (Mies et al., 1988; Mies, 1986): more and more people live and work under precarious conditions that have traditionally been characteristic for patriarchal relations. People working under such conditions are, like housewives, a source of uncontrolled and unlimited exploitation. Housewifization transforms labour so that it “bears the characteristics of housework, namely, labour not protected by trade unions or labour laws, that is available at any time, for any price, that is not recognized as ‘labour’ but as an ‘activity’, as in the ‘income generating activities’, meaning isolated and unorganized and so

on” (Mies, Benholdt-Thomsen and Werlhof, 1988, p. 10). Housewifized labour is characterized by “no job permanency, the lowest wages, longest working hours, most monotonous work, no trade unions, no opportunity to obtain higher qualifications, no promotion, no rights and no social security” (Mies et al., 1988, p. 169). Such informal work is “a source of unchecked, unlimited exploitation” (Mies, 1986, p. 16). Housewifized labour is “superexploitation of non-wage labourers... upon which wage labour exploitation then is possible” (Mies, 1986, p. 48) because it involves the “externalization, or ex-territorialization of costs which otherwise would have to be covered by the capitalists” (Mies, 1986, p. 110).

Toni Negri uses the term “social worker” for arguing that there is a broadening of the proletariat that is “now extended throughout the entire span of production and reproduction” (Negri, 1982, p. 209). The concept of the social worker has been combined with the one of immaterial labour in the category of the multitude. According to Hardt and Negri, relationships, communication, and knowledge are goods that are produced in common, but appropriated by capital for economic ends. Hence, exploitation today is “the expropriation of the common” (Hardt and Negri, 2004, p. 150). Exploitation today is also the exploitation of human creative capacities. The multitude or proletariat is formed by “all those who labour and produce under the rule of capital” (Hardt and Negri, 2004, p. 106), “all those whose labour is directly or indirectly exploited by and subjected to capitalist norms of production and reproduction” (Hardt and Negri, 2000, p. 52), the “entire cooperating multitude” (Hardt and Negri, 2000, p. 402). The formation of the multitude can be seen as the colonization and housewifization of all of society. Marxist feminism and autonomist Marxism share the view that the exploitation of non-wage labour is a crucial feature of class in capitalism.

Rosa Luxemburg’s work showed that capital generates new spheres of exploitation. Marxist feminist analyses applied these accounts to housework. We can base our analyses on these insights, but need to go beyond them because these accounts did not discuss the role of knowledge and new media in capitalism. Hardt and Negri can be read as expanded concretization of Luxemburg and the notion of reproductive labour. Their category of immaterial labour broaches the issue of knowledge labour in capitalism, but still remains at a level of high abstraction so that their account does not identify which groups exactly belong to the multitude and lacks a theoretical class model. It is therefore necessary to build on and go beyond these approaches.

Class relationships have become generalized. The production of surplus value and hence exploitation are not limited to wage-labour, but reach society as a whole. Houseworkers, the unemployed, migrants, developing countries, retirees working in reproduction, students, precarious and informal workers should, besides wage labour, be considered as exploited classes that form part of the multitude. The latter is antagonistic in character and traversed by inner lines of exploitation, oppression, and domination that segment the multitude and create inner classes and class fractions. Nonetheless, the multitude is objectively united by the fact that it consists of all those individuals and groups that are exploited by the capital, live and produce directly and indirectly for the capital that expropriates and appropriates resources (commodities, labour power, the commons, knowledge, nature, public infrastructures and services) that are produced and reproduced by the multitude in common.

The growing number of those who produce the commons and are exploited outside of regular wage relationships can be included in a class model as exploited classes (see figure 7.1). In this model, wage labour is subdivided by the amount of skills and authority that it possesses in the production process (Wright, 1997). Note that **<105>**: an individual can be positioned in

more than one class at a time. Class positions are not fixed, but dynamic, meaning that in informational capitalism people have a fluid and transit class status. So, for example, female wage workers are frequently at the same time houseworkers, many students are also precarious workers, many precarious workers form a type of self-employed labour, and so on. That class positions are antagonistic also means that there is no clear-cut separation between the multitude and the capitalist class, so, for example managers can be considered to have a contradictory class position: they work for a wage, but at the same time execute the command over workers in the name of capital.

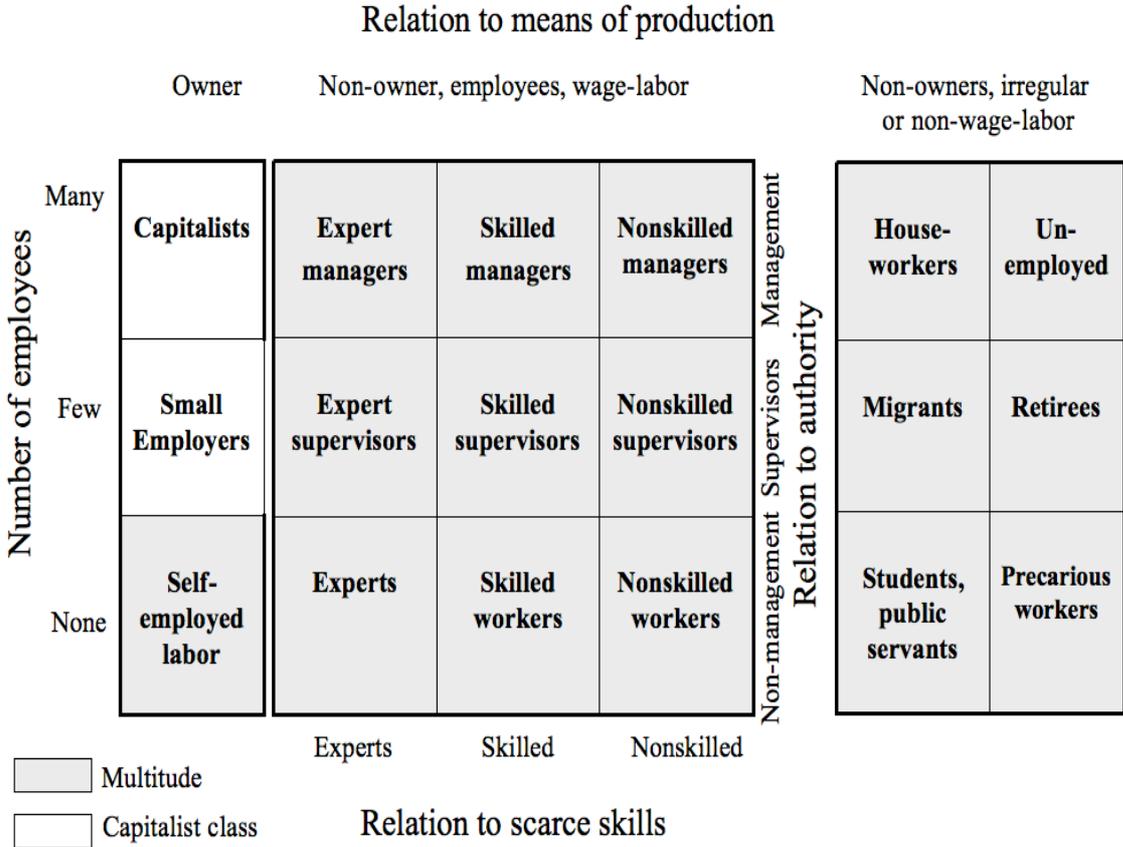


Figure 9: An expanded class model

Knowledge is a social and historical product; new knowledge emerges from the historical heritage of knowledge in society and is in many cases produced co-operatively. Hence, Marx argued that knowledge is “universal labour” that is “brought about partly by the cooperation of men now living, but partly also by building on earlier work” (Marx, 1894, p. 199). Nature, knowledge, and societal infrastructures due to their collective or natural form of production are common aspects of society. They are not produced by single individuals. “Communal labour, however, simply involves the direct cooperation of individuals” (Marx, 1894, p. 199): Marx stressed the co-operative character of knowledge production. Knowledge and infrastructures can only exist due to the collective activities of many. Nature produces itself and is transformed into resources by metabolic processes organized by many. Knowledge, nature, and infrastructures are collective goods that cost nothing for capital, but they are a necessary condition for capital accumulation. They enter production processes and capital profits from them. Capital consumes the commons for free; it exploits the results of

societal and natural production processes such as education, science, health, reproductive labour, and so on. The essence of the commons is its social character, but in capitalism the commons are individually appropriated by capital. In categories of the Hegelian logic, one can argue that essence and existence of knowledge and the commons are non-identical. Exploitation alienates the existence of the commons from their essence and their truth, reason, and reality.

All humans benefit from knowledge in society that was produced in the past (inherited, historical knowledge) in the form of organizations that allow the development of skills (educational knowledge), cultural goods (music, theatre performances, literature, books, films, artworks, philosophy, etc) that contribute to mental reproduction (entertainment knowledge), and in the form of traditional practices as aspects of education and socialization (practical knowledge). These four forms of knowledge are handed over to future generations and enriched by present generations through the course of the development of society. All humans contribute and benefit therefrom (although to different degrees under the given circumstances). Another form of knowledge is technological knowledge that is objectified in machines and practices that function as means for reaching identified goals so that labour processes are accelerated and the amount of externalized labour power can be reduced. Not all humans and groups benefit from the five types of knowledge to the same extent. Especially corporations consume a share above average. Educational, entertainment, and practical knowledge are aspects of the reproduction of manpower. Individuals and society perform these processes to a large extent outside of firms and labour time. Technological progress helps corporations to increase their productivity, that is, the ability of capital to produce ever more profit in even less time. Technological knowledge does not enter the production process indirectly as the other three forms of knowledge do; it is directly employed in the production process by capital. Technological knowledge is produced by society, but it is individually appropriated as a means of production by capital. One argument that some scholars employ is that corporations pay for technological progress in the form of machines, software, hardware, and so on that they buy as fixed capital. But the value produced by labour with the help of technology is much larger than the value of technology as such, and each individual item of technology is based on the whole history of technology and engineering that enters the product for free. <107>: Another argument is that technological knowledge and progress are created in an industry that produces technology and in the research departments of corporations. This argument is deficient because a certain part of knowledge is produced in public research institutions and universities and each technological innovation is based on the whole state of the art of science, for which one does not have to pay and which is consumed by research departments and technology-producing corporations for free as an external resource.

The result of this discussion is that corporations consume the commons of society that consist of nature, inherited knowledge, educational knowledge, entertainment knowledge, practical knowledge, technological knowledge, and public infrastructures (labour in the areas of health, education, medical services, social services, culture, media, politics, etc.) for free. Hence, one important form of exploitation in the knowledge society is the exploitation of the commons by capital, which is also exploitation of the multitude and of society as a whole. But are capitalists and small employers not as well part of the multitude in the sense that they contribute to the production and reproduction of the commons in everyday life? There is no doubt that all humans contribute certain shares of unpaid labour to the production and reproduction of nature, knowledge, and services. But the capitalist class is the only class in society that exploits and expropriates the commons—it is the only class that derives economic profit and accumulates capital with the help of the appropriation of the commons. All humans

produce, reproduce, and consume the commons, but only the capitalist class exploits the commons economically. Hence, this class should not be considered as a part of the multitude. With the rise of informational capitalism, the exploitation of the commons has become a central process of capital accumulation.

The immediate effects of surplus-value production in class relations are that the product belongs to the capitalist and not to the worker and that surplus-value “costs the worker labour but the capitalist nothing, and...becomes the legitimate property of the capitalist” (Marx, 1867, p. 731). If you do not produce cotton, the example mentioned by Marx (1867, p. 251) for defining surplus value, but knowledge, such as for example the Microsoft Windows Vista operating system, the decisive quality is that knowledge only needs to be produced once, can be infinitely reproduced at low costs and distributed at high speed. There is no physical wear and tear of the product, knowledge is not used up in consumption, can be reworked and built upon. There are high initial production costs, but once knowledge as, for example, <108>: software is produced, it can be cheaply copied and sold at high prices. The constant and variable capital costs for reproduction are low, which is beneficial for sustained capital accumulation in the knowledge industries.

The situation again changes a little if knowledge is produced for new media and carried and distributed by it. A central characteristic of networked digital media is that the consumer of knowledge has the potential to become its producer. Alvin Toffler (1980) spoke of the emergence of the prosumer within the information society. Axel Bruns (2007, 2008) applied this notion to new media and speaks of produsers—users become producers of digital knowledge and technology. Philip Graham (2000) argues that hypercapitalism’s immediacy and pervasiveness has resulted in the entanglement of production, circulation, consumption, material and non-material production, productive and unproductive labour, base and superstructure, forces and relations of production. Therefore value creation “becomes an immediate, continuous process” (Graham, 2000, p. 137). New media are simultaneously used for the production, circulation, and consumption of knowledge. They support cognition (thought, language), communication (one-to-one, one-to-few, one-to-many, few-to-one, few-to-few, few-to-many, many-to-one, many-to-few, many-to-many), and co-operation (peer production, sharing, virtual communities, social networking, cyberlove, online collaboration, etc) by combining the universal digital machine of the computer with networking functions as structural principles (Fuchs, 2008b). In informational capitalism, the brain and its bodily mediations are enabled to engage in organic practices of economic production, surplus-value generation, co-production, communicative circulation, and productive consumption by new media. The production of knowledge is based on the prior consumption of the same, in co-production as well on communicative interchange as a coordinative mechanism. Consumption of knowledge produces individual meaning and incentives for further social production and communication. Circulation of knowledge is the consumption of bandwidth and technical resources and the production of connections.

For Marx, the profit rate is the relation of profit to investment costs:  $p = s / (c + v) = \text{surplus value} / (\text{constant capital} + \text{variable capital})$ . If the users become productive, then in terms of Marxian class theory this means that they become productive labourers who produce surplus value and are exploited by capital, because for Marx, productive labour generates surplus. Therefore, the exploitation of surplus value in cases like Google, YouTube, MySpace, or Facebook is not merely <109>: accomplished by those who are employed by these corporations for programming, updating, and maintaining the soft- and hardware, performing marketing activities, and so on, but by these employees, the users, and the produsers that engage in the production of user-generated content. New media corporations do not (or

hardly) pay the users for the production of content. One accumulation strategy is to give them free access to services and platforms, let them produce content, and to accumulate a large number of producers that are sold as a commodity to third-party advertisers. Not a product is sold to the users, but the users are sold as a commodity to advertisers. The more users a platform has, the higher the advertising rates can be set. The productive labour time that is exploited by capital on the one hand involves the labour time of the paid employees and on the other hand all of the time that is spent online by the users. For the first type of knowledge labour, new media corporations pay salaries. The second type of knowledge is produced completely for free. There are neither variable nor constant investment costs. The formula for the profit rate needs to be transformed for this accumulation strategy:

$$p = s / (c + v_1 + v_2)$$

(s ... surplus value, c ... constant capital, v<sub>1</sub> ... wages paid to fixed employees, v<sub>2</sub> ... wages paid to users)

The typical situation is that  $v_2 \Rightarrow 0$  and that  $v_2$  substitutes  $v_1$ . If the production of content and the time spent online were carried out by paid employees, the variable costs would rise and profits would therefore decrease. This shows that produsage in a capitalist society can be interpreted as the outsourcing of productive labour to users who work completely for free and help maximize the rate of exploitation ( $e = s / v$ , = surplus value / variable capital) so that profits can be raised and new media capital may be accumulated. If the wages paid to users converges towards zero, then the rate of exploitation  $e = s / v$  converges towards infinity. Capitalist produsage is an extreme form of exploitation, in which the producers work completely for free and are infinitely exploited.

Produsage in a capitalist society can be interpreted as the outsourcing of productive labour from wage labour to users who work completely for free and help maximizing the rate of exploitation ( $e = s / v$ , = surplus value / variable capital) so that profits can be raised and new media capital can be accumulated. This is a situation that converges towards infinite exploitation:  $e = s / v$ :  $v \Rightarrow 0 \Rightarrow \text{exploitation} \Rightarrow \text{infinity}$

**<110>**: That surplus value generating labour is an emergent property of capitalist production, means that production and accumulation will break down if this labour is withdrawn. It is an essential part of the capitalist production process. That producers conduct surplus-generating labour, can also be seen by imagining what would happen if they would stop using platforms like YouTube, MySpace, and Facebook: the number of users would drop, advertisers would stop investing in online advertising because no objects for their advertising messages and therefore no potential customers for their products could be found, the profits of the new media corporations would drop, and they would go bankrupt. If such activities were carried out on a large scale, a new economy crisis would arise. This thought experiment shows that users are essential for generating profit in the new media economy. Furthermore they produce and co-produce parts of the products, and therefore parts of the use value, exchange value, and surplus value that are objectified in these products.

Dallas Smythe (1981/2006) suggests that in the case of media advertisement models, the audience is sold as a commodity to advertisers: “Because audience power is produced, sold, purchased and consumed, it commands a price and is a commodity. ... You audience members contribute your unpaid work time and in exchange you receive the program material and the explicit advertisements” (Smythe, 1981/2006, pp. 233, 238).

With the rise of user-generated content, free access social networking platforms, and other free access platforms that yield profit by online advertisement—a development subsumed under categories such as web 2.0, social software, and social networking sites—the web seems to come close to accumulation strategies employed by the capital on traditional mass media like TV or radio. The users who google data, upload or watch videos on YouTube, upload or browse personal images on Flickr, or accumulate friends with whom they exchange content or communicate online via social networking platforms like MySpace or Facebook, constitute an audience commodity that is sold to advertisers. The difference between the audience commodity on traditional mass media and on the Internet, is that in the latter case the users are also content producers, there is user-generated content, the users engage in permanent creative activity, communication, community building, and content-production. That the users are more active on the Internet than in the reception of TV or radio content is due to the decentralized structure of the Internet, which allows many-to-many communication. Due to the permanent activity of the recipients and their status as producers, we can say that in the case <111>: of the Internet, the audience commodity is a producer commodity. The category of the producer commodity does not signify a democratization of the media towards a participatory or democratic system, but the total commodification of human creativity. During much of the time that users spend online, they produce profit for large corporations like Google, News Corp. (which owns MySpace), or Yahoo! (which owns Flickr), and other Internet firms. Advertisements on the Internet are frequently personalized; this is made possible by surveilling, storing, and assessing user activities with the help of computers and databases. This is another difference from TV and radio, which provide less individualized content and advertisements due to their more centralized structure. But one can also observe a certain shift in the area of traditional mass media, as in the cases of pay per view, tele-votes, talk shows, and call-in TV and radio shows. In the case of the Internet, the commodification of audience participation is easier to achieve than with other mass media.

Marx has anticipated the exploitation of producers by arguing that as a result of the development of the productive forces a time of capitalist development will come, in which “general intellect”, the “power of knowledge, objectified”, “general social knowledge has become a direct force of production” (Marx 1857/58, 706). The productive forces would not only be produced in the form of knowledge, but also as “immediate organs of social practice, of the real life process”. Marx here describes that in a knowledge society, social life becomes productive. That knowledge labour, such as the one performed online by producers, is productive, then also means that under capitalist class relations it is exploited and that all knowledge workers, unpaid and paid, are part of an exploited class.

“By putting the means of production into the hands of the masses but withholding from those masses any ownership over the products of their communal work, the World Wide Computer provides an incredibly efficient mechanism for harvesting the economic value of the labor provided by the very many and concentrating it in the hands of the very few” (Carr 2009, 142f). Figure 10 shows the rapid growth of profits from Internet advertising in the United States. These profits amounted to 23.4 billion US\$ in 2008, which make up 11.0% of the total U.S. advertising profits (data source: IAB Internet Advertising Revenue Report 2008). The online advertising profits were higher than the profits made by radio- and cable TV-advertising in 2008 and were only exceeded by profits in newspaper- and TV distribution-advertising (data source: IAB Internet Advertising Revenue Report 2008).

<112>:

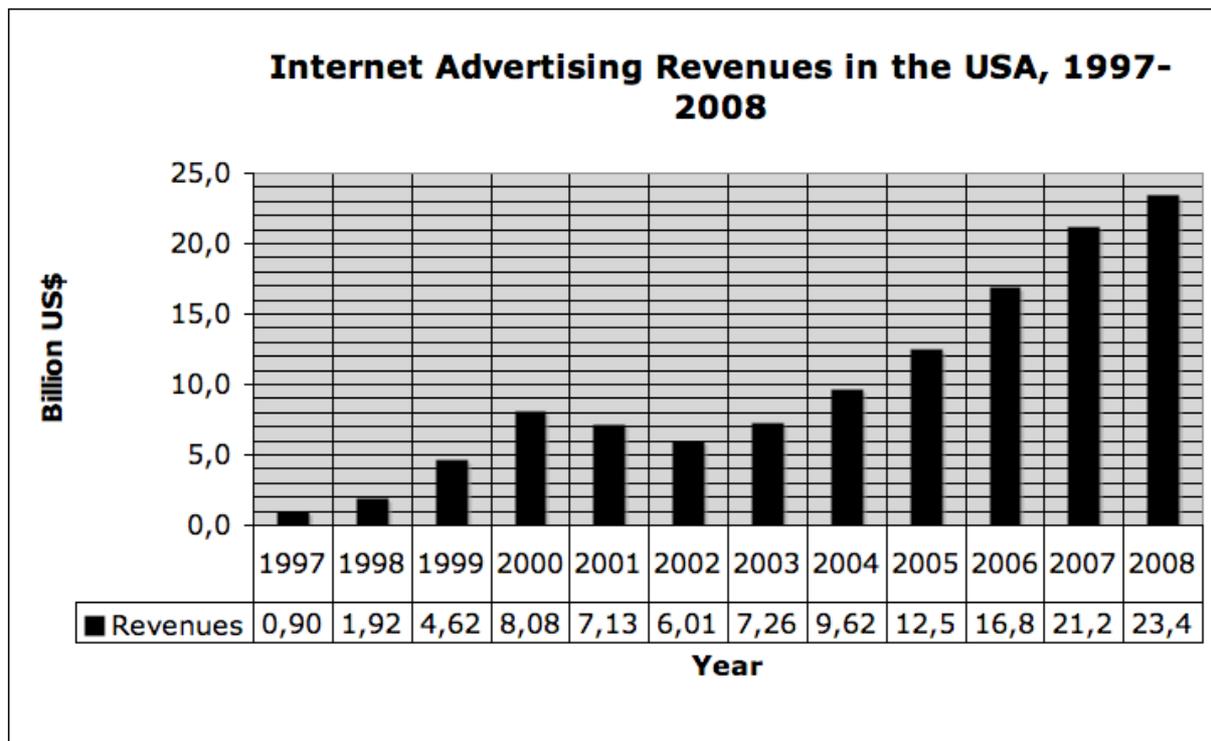


Figure 10: Internet advertising revenues in the United States, 1997-2008, data source: IAB Internet Advertising Revenue Report 2008

Internet users come from all backgrounds. So for example the relative majority of YouTube users in the US is aged 18-34 (36%), 13% have obtained graduate degrees. 49% of U.S. MySpace users come from lower income classes (< 60,000 US\$ per year), whereas 58% of U.S. Facebook users have an upper income class background. 9% of U.S. Myspace users and 14% of U.S. Facebook users have graduated. 58% of U.S. Google users come from upper income classes. 56% of U.S. MySpace users have attended no college or graduate school, whereas 42% of U.S. Facebook users have attended college and 14% have graduated. 58% of YouTube users, 73% of Facebook users, and 76% of Facebook users in the U.S. are aged 3-34 (all data by quantcast.com, accessed on July 18, 2009). Such data show that Internet users have diverse backgrounds in terms of age, income, and education. The class structure of the virtual world is not a reproduction of the class structure of the offline world. The most decisive difference is that many more younger people produce online than offline. Children, pupils, and students who do not have a regular paid employment form the primary group of exploited producers. Expressed cynically, we can say that the Internet is today the primary space for the exploitation of child labour. This example shows that it is necessary to go beyond the traditional class concept that considers only wage labour as productive and exploited, because there are also many unpaid labourers who are necessary for the accumulation of capital accumulation.

### <113>: Conclusion

The aim of this chapter was to make a contribution to the debate on the role of class in informational capitalism. I first argued that the notion of informational capitalism is preferable to the one of cognitive capitalism because it is based on a subject-object-dialectic, whereas the concept of cognitive capitalism that has been introduced by autonomist Marxism is subjectivistic and idealistic. I also stressed that the claims that knowledge or information technology are the dominant qualities of contemporary society, economy, or capitalism are overdrawn because there are also other important phenomena such as globalization,

financialization, and hyper-industrialism that shape contemporary society. Therefore the notion of informational capitalism should be used carefully and in a pragmatic way for characterizing those aspects of the economy that are information-based. This is different from saying that society or the economy is dominated by information, knowledge, or information technology. I also analyzed in this chapter the relationship of class and information labour in informational capitalism based on Marxian class analysis.

If one considers knowledge not as a narrow, but as a broad social category, then it becomes clear that it is not an economic category specific for a sector, but also lies at the heart of class formation in informational capitalism. Knowledge forms part of the commons of society, it is a social product produced and consumed by all. All humans produce, reproduce, and consume the commons, but only the capitalist class exploits the commons economically. The multitude is an expanded Marxist class category that is used for describing the common labour class that produces the commons and is exploited by capital that appropriates the commons for free and subsumes them under capital in order to gain profit. The political demand underlying the argument that that nobody is unproductive and that each human being is a productive worker producing and reproducing the commons of society that are appropriated by capital, is that capital should in return give something back to society in the form of taxes that are used for compensating society and its members for the theft of the commons by installing the common form of a guaranteed basic income.

Broadening the notion of class is necessary because the development of capitalism and the productive forces have increased the significance of non-wage workers. Therefore if Marxian class analysis is and wants to remain a political project, it needs to refine its notion of the potential agents of change. The proletariat “falls into a great number of constituent parts” (Thompson, 1960b, p. 24f). <114>: That more people are now “involved in the exchange of human services (welfare, education, entertainment and the like)” shatters “traditional notions of the working-class as a fixed, unchanging category with a fixed consciousness and unchanging forms of expression” (Thompson, 1960b, p. 27). To broaden the notion of the proletariat is not a post-Marxist project applied to the economy. Post-Marxism sees universality as a totalitarian project (Laclau and Mouffe, 1985, p. 188) and argues for the primacy of a plurality of political subjects that are at best loosely connected. Laclau and Mouffe (1985) speak in this context of “the plurality of diverse and frequently contradictory positions” (1985, p. 84), “decentred subject positions” (1985, p. 87), the “plurality of political spaces” (1985, p. 137), the “rejection of privileged points of rupture and the confluence of struggles into a unified political space” (1985, p. 152), or the “polysemic character of every antagonism” (1985, p. 170). This chapter was specifically concerned with economic relationships, not with the relationship of the economic and the non-economic. Laclau and Mouffe have been primarily talking about the relationships of new social movements and the working class, but they have also pointed out that “workers’ struggles are not universal, but have been numerous, and have assumed an extraordinary variety of forms” (1985, p. 167). Slavoj Žižek has in this context, in my opinion, correctly said that postmodernism 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, p. 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 demands to establish participatory alternatives to the capitalist totality. All non-class antagonisms are articulated with class, whereas not all non-class antagonisms are articulated with each other, which means that 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, 2008b). 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 over-determine, but condition other antagonisms, then it is important to give specific attention to this category. The subdomains of the exploited class that were identified in this chapter can stand in antagonisms to each other, which in the actual world is frequently the case. So, for example, there are coun- <115> tries like Austria, where the majority of workers tends to vote for right-wing extremist parties and therefore politically support racism and racist classism because they hope to improve their class position by achieving a downgrading of the class position of immigrant workers.

But given the possibility of the existence of internal antagonisms of the multitude, can there be a combined political project of the multitude that aims to overthrow capitalism? As Marx knew, a class-in-itself is not automatically a class-for-itself, there can be classes without class consciousness and without class struggles, because defining the existence of a class based on the existence of a specific consciousness or practical political project is a philosophically idealistic, subjectivistic, and therefore also reductionistic move that negates Marxian analysis. The task is to construct political projects that aim at the connection of the multiplicity of subject positions that are immanent in the multitude and that have the potential to advance struggles that transcend capitalism and anticipate a participatory alternative to capitalism, i.e. grassroots socialism. Such projects can be organized around particular political demands (as for example the demand for a redistributive universal basic income that is financed by capital taxation, (Fuchs, 2008a)) as part of a politics of radical reformism that creates frameworks that work within established institutions against these institutions. Workers' consciousness, demands, and struggles are not automatically progressive, but there can be no emancipation without abolishing the proletariat, which makes the task of advancing emancipatory proletarian struggles important. A widely given condition today is that proletariat is a "revolutionary class 'in-itself' but not 'for-itself', objectively but not subjectively" (Marcuse, 1969, p. 54).

Classes exist as objective economic groups that have certain subjective practices (in economic, political, and everyday popular settings) that to certain extents allow the class subjects to perceive their economic relationships as common or uncommon. Class as political class emerges if a class as a group perceives itself as a common economic and political entity, builds a common identity, and starts to act based on this entity. The subjective and the objective class dimension interact, class structures produce human practices that reproduce and (potentially) differentiate class structures, but there is no automatic guarantee that these practices acquire a political character, nor that they acquire an emancipatory political character. Classes owe "as much to agency as to conditioning" (Thompson, 1968, p. 8).

The political task is to create a political unity in plurality of the multitude so that the internal antagonisms are externalized and can by synergetically combining <116>: the strength of the now fragmented powers be directed against the capitalist class. An objective foundation for a political unity in plurality of the multitude is the experience of the lack of control of the commons and the lack of affluence that generates precariousness in one or the other sense. Such projects of creating unity in plurality are open and complex experiments without guarantees for success or failure, but at best, trial-and-error approaches that have learned from the lessons taught by political history. Fundamental social change might be triggered, but it cannot be determined, which also means that emancipation can only be the result of the self-activity of the proletariat. "It is the business of socialists to draw the line...between the

monopolists and the people—to foster the ‘societal instincts’ and inhibit the acquisitive” (Thompson, 1960a, p. 8). Either the proletariat makes its own emancipation, and thereby creates grassroots socialism through its own destruction as class and the destruction of classes as such, or there can be no emancipation.

Informational capitalism is an antagonistic system that by trans-nationalization and informatization produces at the same time new potentials of class domination and class struggle (Fuchs, 2008b). Class domination can be observed in our everyday life, whereas class struggle from below is the exception from the rule, but nonetheless exists as examples, like the practice of file sharing that puts pressure on corporate interests shows. The forces of emancipation are only developed rudimentarily and it is not determined how the future will look.

The multitude lacks the control of the commons of society, and all of its members lack the actual experience of affluence. The multitude is connected by its position in the production of the commons, by the confrontation with the expropriation and exploitation of the commons, as well as the lack of affluence, and the control of the commons. This exploitation of the commons also poses a threat of the destruction of the fundamental foundations of life itself (nature, health, education, etc). These are common experiences that distinguish the multitude objectively and subjectively from the capitalist class that possesses the commons and the means that enable the class’ own affluence by dispossessing the multitude and exploiting the commons in order to accumulate profit. The proletariat constantly creates and recreates spaces of common experience, such as the Internet, educational institutions, knowledge spaces, culture, etc., through their practices. These spaces and experiences are appropriated and thereby expropriated and exploited by capital in order to accumulate capital. Slavoj Žižek (2008, p. 428f; 2009, pp. 53-55) distinguishes three kinds of commons that are enclosed by capital so that destructive potentials are created: the commons of culture, the commons of external nature, and the <117>: commons of internal nature. “It is this reference to ‘commons’ which allows the resuscitation of the notion of communism: it enables us to see their progressive enclosure as a process of proletarianization of those who are thereby excluded from their own substance; a process that also points towards exploitation—for instance, that of anonymous ‘knowledge workers’ by their companies” (Žižek, 2009, p. 54).

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