

# How can surveillance be defined?<sup>1</sup>

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## ABSTRACT

The task of this paper is to explore and compare ways of defining surveillance. In order to give meaning to concepts that describe the realities of society, social theory is needed. Therefore social theory is employed in this paper for discussing ways of defining surveillance. “Living in ‘surveillance societies’ may throw up challenges of a fundamental – ontological – kind” (Lyon, 1994, p.19). Social theory is a way of clarifying such ontological questions that concern the basic nature and reality of surveillance. A distinction between neutral and negative concepts of surveillance is drawn. Some potential disadvantages of neutral concepts of surveillance are outlined. This paper wants to contribute to the discussion of how to best define surveillance and wants to show that one of the main theoretical differences and questions in surveillance theory is if surveillance should be defined as a negative or a neutral concept.

**Keywords:** surveillance theory, social theory, neutral surveillance theory, negative surveillance theory, critical surveillance studies

## INTRODUCTION

News of the World surveillance of detective: what Rebekah Brooks knew. [...] As editor of the News of the World Rebekah Brooks was confronted with evidence that her paper's resources had been used on behalf of two murder suspects to spy on the senior detective who was investigating their alleged crime. (*The Guardian*, July 6, 2011).

Lidl Systematically Conducted Surveillance of Employees. Hidden cameras, pages-long protocols: Lidl has put employees in many of its stores under surveillance. Monitored were private conversations, life situations and the ways of work of employees. That the secret spying is illegal, seemed to disturb the food discounter little. (*Der Spiegel*, March 26, 2008; translation from German).

Wiretapping and Other Eavesdropping Devices and Methods. Wiretapping and electronic eavesdropping are virtually as old as the telephone. But the debates over wiretapping have intensified in recent years, as the pressure to fight terrorism after the Sept. 11th attacks and rapid technological change led to an unprecedented expansion of electronic surveillance. (*New York Times*, October 19, 2010).

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More Employees Under Surveillance at Work. Employees are being put under increasing strain because their bosses are using surveillance equipment to keep track of how hard they are working, a survey has found. More than half of employees claim their managers use electronic systems to keep a log of their work. (*The Telegraph*, January 9, 2008).

Foreign Intelligence Surveillance Act (FISA). [...] On March 31, 2010, a federal judge ruled that the National Security Agency's program of surveillance without warrants was illegal, rejecting the Obama administration's effort to keep shrouded in secrecy one of the most disputed counterterrorism policies of former President George W. Bush. (*New York Times*, April 1, 2010).

These randomly collected news clippings from newspapers give us an idea of how important the topic of surveillance has become for the media and for our lives. Economic and state surveillance seem to be two issues that affect the lives of all citizens worldwide. Economic organizations are entangled into both workplace/workforce surveillance and consumer surveillance in order to enable the capital accumulation process. State institutions (like the police, the military, secret services, social security and unemployment offices) are using surveillance for organizing and managing the population. All of this takes place in the context of the extension and intensification of surveillance (Ball and Webster, 2003; Lyon, 2003) in post-9/11 new imperialism that is afraid of terrorism and at the same time creates this phenomenon and in the context of neoliberal corporate regimes that subjugate ever larger spheres and parts of life to commodity logic (Harvey, 2003, p. 2005). If organizations are an important source and space of surveillance, then it is important to understand how surveillance can be defined.

Given the circumstance that there is much public talk about surveillance and surveillance society, it is an important task for academia to discuss and clarify the meaning of these terms because academic debates to a certain extent inform and influence public and political discourses. The task of this paper is to explore compare ways of defining surveillance. In order to give meaning to concepts that describe the realities of society, social theory is needed. Therefore social theory is employed in this paper for discussing ways of defining surveillance. "Living in 'surveillance societies' may throw up challenges of a fundamental – ontological – kind" (Lyon, 1994, p. 19). Social philosophy is a way of clarifying such ontological questions that concern the basic nature and reality of surveillance.

I approach the notion of surveillance by suggesting one possible typology for defining surveillance. On the one hand I see neutral concepts of surveillance that see surveillance as an ontological quality of all societies or all modern societies and identify besides negative aspects

also actual or potential positive qualities of surveillance. Examples for neutral surveillance concepts will be discussed in section two. Negative surveillance concepts consider surveillance to be inherently connected to violence and domination. Example concepts will be discussed in section three. The task of this paper is not to suggest that only one distinction/typology of surveillance concepts/theories/definitions is possible, but rather to argue that a discourse about the ways surveillance can be defined is important in order to show commonalities and differences between various approaches. In my view, it is especially necessary to spell out besides common characteristics of surveillance studies also the differences between various approaches because constructive controversy is a way for advancing the state of a field and a sign that a research field is alive and well.

The overall view that this paper advances is that surveillance should not be defined in a neutral way, but in a negative sense. In section four, reasons for this position are given and some arguments that question neutral surveillance concepts are provided. Finally, some conclusions are drawn in section five.

#### NEUTRAL CONCEPTS OF SURVEILLANCE

Neutral concepts of surveillance make one or more of the following assumptions:

- There are positive aspects of surveillance.
- Surveillance has two faces, it is enabling and constraining
- Surveillance is a fundamental aspect of all societies.
- Surveillance is necessary for organization.
- Any kind of systematic information gathering is surveillance.

Max Horkheimer says that neutral theories “define universal concepts under which all facts in the field in question are to be subsumed” (Horkheimer, 1937/2002, p. 224). Neutral surveillance concepts see surveillance as ontological category, it is seen as being universally valid and characteristic either for all societies or all modern societies.

Anthony Giddens has provided a very influential neutral concept of surveillance. By surveillance, Giddens refers to the accumulation of information defined as symbolic materials that can be stored by an agency of collectivity as well as to the supervision of the activities of subordinates by their superiors within any collectivity (Giddens, 1981, p.169). Surveillance is “the coding of information relevant to the administration of subject populations, plus their

direct supervision by officials and administrators of all sorts” (Giddens, 1984, p. 183). With the rise of modern, capitalist society, Giddens argues, the nation-state and surveillance have become the fundamental mechanisms of integration. “Surveillance as the mobilising of administrative power – through the storage and control of information – is the primary means of the concentration of authoritative resources involved in the formation of the nation-state” (Giddens, 1985, p. 181). The modern state would make use of surveillance in the sense of gathering information about the subject population in order to allow overall organization and control. Information gathering would include data on births, marriages, deaths, demographic and fiscal statistics, ‘moral statistics’ (relating to suicide, divorce, delinquency and so on) etc. and would result in the power of the state and bureaucratic organization. Computer technology would expand surveillance in the sense of information control. Modern technology would also allow a technical control and supervision of workers that is a much more anonymous form than face-to-face supervision that was used in the early days of capitalism. Giddens sees surveillance as a fundamental process of information gathering that is necessary for organization. Organizing and surveillance are inextricably linked for Giddens and would have taken on systematic forms in the modern nation state. He therefore also argues that all modern societies are information societies (Giddens, 1987, p. 27; see also: Lyon, 1994, p.27). Dandeker (1990) stresses based on Giddens that bureaucracies require surveillance.

One claim of neutral surveillance concepts is that there is a positive side of surveillance or that there is a negative as well as a positive side of surveillance. Kevin Haggerty (2006) argues that surveillance scholars do not want to see positive aspects of surveillance such as infectious disease control or surveillance in parenting because they “are trained in a tradition of critique” (Haggerty, 2006, p. 36). David Lyon says that surveillance has two faces, an enabling and a constraining one (Lyon, 1994, p. ix). Elia Zureik (2003, p. 42) says that surveillance is “disabling as well as enabling”.

Surveillance can serve goals of protection, administration, rule compliance, documentation, and strategy, as well as goals involving inappropriate manipulation, restricted life opportunities, social control, and spying. [...] To varying degrees, surveillance is a property of any social system – from two friends to a workplace to a government (Marx, 2007, p. 535).

Another claim of neutral surveillance concepts is that surveillance is a universal phenomenon that can be found in all societies. Surveillance

is seen not only as both protective and enabling but also as deeply implicated in the structure of totalitarian rule. Surveillance is recognised as an elementary building block of all human societies

since the act of socialisation would be unthinkable without the surveillance of adults. How else could children be fabricated into cultural competent members of a society? (Norris and Armstrong, 1999, p. 5).

In one form or another, it [surveillance] is a basic and ubiquitous social process, occurring in settings ranging from the family to state bureaucracies – whenever one party seeks to shape its treatment of the other on the basis of the latter’s past performance (Rule, 2007, p. 14).

Various examples for neutral definitions of surveillance can be given. The following list of definitions is exemplary and does by no means claim to be complete.

Surveillance involves the observation, recording and categorization of information about people, processes and institutions (Ball and Webster, 2003, p.1). Ball and Webster (2003, 7f) identify besides three negative forms of surveillance (categorical suspicion, categorical seduction, categorical exposure) also a positive one, namely categorical care.

Dandeker identifies three meanings of the term surveillance:

(1) the collection and storage of information, presumed to be useful, about people or objects; (2) the supervision of the activities of people or objects through the issuing of instructions or the physical design of the natural and built environments; and (3) the application of information-gathering activities to the business of monitoring the behaviour of those under supervision and, in the case of subject populations, their compliance with instructions, or with non-subject populations, their compliance with agreements, or simply monitoring their behaviour from which, as in the control of disease, they may have expressed a wish to benefit (2006, p. 225).

Surveillance involves the collection and analysis of information about populations in order to govern their activities (Haggerty and Ericson, 2006, p. 3).

Surveillance is “the garnering and processes of personal information to regulate, control, manage and enable human individual and collective behaviour” (Hier and Greenberg, 2007, p. 381).

To surveil something essentially means to watch over or guard it. Guardianship is not a simple constraint, but an art of control that makes it safe for something to move freely. You keep a close eye on your child playing, or someone deflects a danger close to you before you even sense it (Bogard, 2006, 98f).

Systematically harvested personal information, in other words, furnishes bases for institutions to determine what treatment to meter out to each individual. I call such operations systems of mass surveillance. Mass surveillance is a distinctive and consequential feature of our times. Whether carried out by government agencies or private-sector organizations, it shapes the ways we approach major institutions and our treatment at their hands. Surveillance in this sense does not necessarily entail harmful intent. [...] What has changed in the last hundred years is the rise of mass, bureaucratic surveillance based on formal record-keeping. Surveillance in this form ranges from the benign to the repressive—from the personal information systems supporting intensive care in hospitals to those mobilized to track and curtail terrorists (Rule, 2007, p.14).

Surveillance is “the act of monitoring the behaviour of another either in real-time using cameras, audio devices or key-stroke monitoring, or in chosen time by data mining records of internet transactions” (Wall, 2007, p. 230).

### **NEGATIVE CONCEPTS OF SURVEILLANCE**

For Max Horkheimer, the “method of negation” is “the denunciation of everything that mutilates mankind and impedes its free development” (Horkheimer, 1947/1974, p.126) For Herbert Marcuse, negative categories are “an indictment of the totality of the existing order” (Marcuse, 1941, p. 258) and at the same time “already contain their own negations and transcendence” (Marcuse, 1936/1988, p. 86). Negative concepts “contain an accusation and an imperative” (Marcuse, 1936/1988, p. 86). For Horkheimer, the goal is “a state of affairs in which there will be no exploitation or oppression” (Horkheimer, 1937/2002, p. 241), a “society without injustice” (p. 221). Theories’ “goal is man’s emancipation from slavery” (p. 249) and “the happiness of all individuals” (p. 248). This requires “the idea of self-determination for the human race, that is the idea of a state of affairs in which man’s actions no longer flow from a mechanism but from his own decision” (p. 229). Such a society is shaped by “reasonableness, and striving for peace, freedom, and happiness” (p. 222) and the “the establishment of justice among men” (p. 243).

In general concepts of surveillance, surveillance is presented as a general and universal phenomenon of society that not only exists in contemporary or heteronomous societies, but in all kinds of societies. It is conceptualized as a positive, self-evident, endless phenomenon of society. A negative concept of surveillance characterizes an aspect of the negativity of power structures, contemporary society, and heteronomous societies. It uses the notion of surveillance for denouncing and indicting domination and dominative societies. By doing so it wants to point towards emancipation and a dominationless society, which is conceived as being also a society without surveillance. In a negative theory, surveillance is a negative concept that is inherently linked to information gathering for the purposes of domination, violence, and coercion and thereby at the same time accuses such states of society and makes political demands for a participatory, co-operative, dominationless society that is not only a society where co-operative modes of production and ownership replace classes and the exploitation of surplus value, but also a society where care and solidarity – in one word: democratic socialism – substitute surveillance. A neutral concept of surveillance is a disservice for a critical theory of

surveillance, it makes critique more difficult and may support the ideological celebration and normalization of surveillance.

The most influential thinker for the elaboration of negative surveillance concepts has been Michel Foucault. Howard Rheingold argues that Foucault “was to surveillance what Darwin was to evolutionary biology” (Rheingold, 2002, p. 188).

For Foucault, Marxism is on the one hand not so different from liberalism because they share, he argues, a typical 19<sup>th</sup> century belief in the “fulfilment of an end to History” (Foucault, 1973, p. 261). On the other hand, Foucault refers to Marx when discussing the role of surveillance and disciplinary power in production (Foucault 1977, 163f, 175, p. 221). Foucault (1973) assumes based on Nietzsche that history is based on difference and radical discontinuities. Nonetheless he does not dismiss Marxist analysis:

It is only too clear that we are living under the regime of a dictatorship of class, of a power of class which imposes itself by violence, even when the instruments of this violence are institutional and constitutional, and to that degree, there isn't any question of democracy for us (Chomsky and Foucault, 2006, p. 39).

Institutions such as the state, the family, the university, medicine, teaching systems, psychiatry “are made to maintain a certain social class in power, and to exclude the instruments of power of another class” (Chomsky and Foucault, 2006, p. 40).

For Foucault, surveillance is a form of disciplinary power. Disciplines are “general formulas of domination” (Foucault 1977, p. 137), it includes penal mechanisms (p. 177), it encloses humans into institutions such as schools, orphanages, training centres, the military, towns, factories, prisons, reformatories, houses of correction, psychiatry, hospitals, asylums, etc in order to control their behaviour and to partition and rank them (Foucault, 1977, p. 141; see also 1994, p. 57, p.75) and to normalize, punish, hierarchize, homogenize, differentiate, and exclude (Foucault, 1977, p. 183). Foucault argues that in order to secure domination, disciplines make use of certain methods such as the hierarchical observation, the normalizing judgement, and the examination (p.170). The instrument of hierarchical observation establishes the connection disciplines-surveillance because the “exercise of discipline presupposes a mechanism that coerces by means of observation” (p. 170). The “means of coercion make those on whom they are applied clearly visible” (p. 171). For Foucault, disciplinary power is also characteristic for the logic of capitalism. “Liberalism turns into a mechanism continually having to arbitrate between the freedom and security of individuals by reference to this notion of danger” (Foucault, 2008, p. 66). A consequence of “liberalism and the liberal art of government is the

extension of procedures of control, constraint, and coercion” (Foucault, 2008, p. 67). “Economic freedom, liberalism in the sense I have just been talking about, and disciplinary techniques are completely bound up with each other” (Foucault, 2008, p. 67).

Surveillance or the panopticon secretly prepares “a knowledge of man” (Foucault, 1977, p. 171), knowledge about “whether an individual” is “behaving as he should, in accordance with the rule or not” (Foucault, 1994, p. 59). It is “permanent, exhaustive, omnipresent” (Foucault, 1977, p. 214). Surveillance is based on “a principle of compulsory visibility” that is exercised through the invisibility of disciplinary power (p. 187), it “must see without being seen” (p. 171), is “capable of making all visible, as long as it could itself remain invisible” (p. 214), it is a “system of permanent registration” (p. 196) in which “all events are recorded” (p. 197), a “machine for dissociating the see/being seen dyad” (p. 202). “One is totally seen, without ever seeing” (p. 202). “He is seen, but he does not see; he is the object of information, never a subject in communication” (p. 200). “We live in a society where panopticism reigns” (Foucault 1994, p. 58). For Foucault, surveillance is inherently coercive and dominative – negativity is surveillance’s pure immanence.

The idea of the panopticon is a modern idea in one sense, but we can also say that it is completely archaic, since the panoptic mechanism basically involves putting someone in the center – an eye, a gaze, a principle of surveillance – who will be able to make its sovereignty function over all the individuals [placed] within this machine of power. To that extent we can say that the panopticon is the oldest dream of the oldest sovereign: None of my subjects can escape and none of their actions is unknown to me. The central point of the panopticon still functions, as it were, as a perfect sovereign (Foucault, 2007, p. 93).

Foucault argues that drawing up tables was one of the important problems of disciplinary power in the 18<sup>th</sup> century (Foucault, 1977, p. 148). The table is a “procedure of knowledge” (p. 148), surveillance and disciplinary power produce reality, knowledge about individuals (p. 194). Surveillance always includes “a network of writing” and “a whole mass of documents” (p. 189). In contemporary society, tables take on the form of digital databases that store huge amounts of data that can be automatically collected, assessed, manipulated, and remixed, are available in real time, are distributed at high speed all over the world, are easy and cheap to collect and distribute, and can be duplicated without destruction of the original data. The computer database enables an extension and intensification of surveillance based on tables. The computer and the computer network used for surveillance constitute one of the “innovations of disciplinary writing” (p. 190) of the contemporary age. The connection power/knowledge that Foucault stresses as constitutive for surveillance takes on the form of power/digital data in the

information age.

A number of authors argue that Foucault's notion of the panopticon can be used for characterizing and criticizing contemporary society. Gordon (1987) speaks of the electronic panopticon. Zuboff (1988) says that computers advance workplace panopticism. Poster (1990) has coined the notion of the superpanopticon: "Today's 'circuits of communication' and the databases they generate constitute a Superpanopticon, a system of surveillance without walls, windows, towers or guards" (Poster, 1990, p. 93). Gandy (1993) defines the panoptic sort as "a difference machine that sorts individuals into categories and classes on the basis of routine measurements. It is a discriminatory technology that allocates options and opportunities on the basis of those measures and the administrative models that they inform" (Gandy, 1993, p. 15). It is a system of power and disciplinary surveillance that identifies, classifies, and assesses (Gandy, 1993, p. 15). James Boyle (1997) argues that the works of Foucault allow an alternative to the assumption of Internet libertarians that cyberspace cannot be controlled in order to provide "suggestive insights into the ways in which power can be exercised on the Internet" (Boyle, 1997, p. 184). Robins and Webster (1999) argue that in what they term cybernetic society "the computer has achieved [...] the extension and intensification of panoptic control" (Robins and Webster, 1999, p. 180, see also pp. 118-122). They focus on consumer surveillance and social Taylorism. Webster (2002, p. 222) argues that computers result in a panopticon without physical walls. Elmer (2003) speaks of diagrammatic panoptic surveillance. Mathiesen (2004) argues that the panopticon, where the few see the many, is accompanied in contemporary society by the synopticon that is based on the mass media and "in which the few see and survey the many" (Mathiesen, 2004, p. 98) so that the media recipients are silenced.

These approaches show that Foucault has a certain importance in contemporary surveillance studies. However, a considerable number of scholars question the suitability of Foucault's theory for analyzing contemporary surveillance. Lyon (1994, 26, p. 67) argues that Foucault's notion of the panopticon does not give attention to two central features of contemporary surveillance: information technologies and consumerism. This is certainly true, but Foucault's focus was on more historical, older forms of surveillance. His method of genealogy traces surveillance with examples back in history in order to identify more general principles of surveillance for modernity. He stresses that surveillance is an open and historical phenomenon; his analysis can therefore be applied to contemporary contexts. Foucault argues that disciplinary mechanisms have the capability of swarming (Foucault 1977, p. 211), they can

spread out through society. This principle allows giving an explanation for the extension of surveillance into the realms of IT and consumption in contemporary society.

Some scholars argue that Foucault's notion of surveillance is outdated because surveillance would today no longer be centralized, but operate in a decentralized and networked form so that there is not a central surveilling power, but many disperse and heterogeneous agents of surveillance.

Certainly, surveillance today is more decentralized, less subject to spatial and temporal constraints (location, tie of day, etc.), and less organized than ever before by the dualisms of observer and observed, subject and object, individual and mass. The system of control is deterritorializing (Bogard, 2006, p. 102).

Lace (2005, p. 210) argues that "allusions to Big Brother scrutiny are becoming dated – instead, we now are moving towards a society of 'little brothers'" (see also Castells, 2004, p. 342; Solove, 2004, p. 32) that she terms a democratized surveillance society.

Haggerty and Ericson (2000/2007) define surveillance based on Gilles Deleuze and Félix Guattari as assemblage. The surveillant assemblage means "a rhizomatic levelling of the hierarchy of surveillance, such that groups which were previously exempt from routine surveillance are now increasingly being monitored" (Haggerty and Ericson, 2000/2007, p. 104). They argue that one should conceive contemporary surveillance with analytical tools that are different from Foucault and Orwell. Haggerty (2006) calls for demolishing Foucault's notion of the panopticon. Haggerty and Ericson (2000/2007) argue that contemporary surveillance is heterogeneous, involves humans and non-humans, state and extra-state institutions, "allows for the scrutiny of the powerful by both institutions and the general population" (Haggerty and Ericson 2000/2007, p. 112). They interpret Mathiesen as saying that synopticism means "'bottom-up' forms of observation" (Haggerty and Ericson, 2000/2007, p. 113). Hier (2003/2007, p. 118) argues that the surveillant assemblage brings about "a partial democratization of surveillance hierarchies".

In my view, Thomas Mathiesen's intention when formulating the concept of the synopticon was not, as unfortunately implied by Haggerty's and Ericson's usage of the term, to argue that surveillance has become a form of democracy. He did not suggest that the synopticon brings about democratic surveillance, but that the panopticon and the synopticon are interlinked, "feed on each other" (Mathiesen, 1997, p. 231) and are structures of domination. He points out that the synopticon of the mass media "first of all directs and controls or disciplines our consciousness" (Mathiesen, 1997, p. 230) and refers in this context to the critical theorists

Enzensberger, Adorno, and Horkheimer and their culture industry theory. Mathiesen says that in the synopticon there is “an extensive system enabling the many to see and contemplate the few”, whereas in the panopticon the few “see and supervise the many” (Mathiesen, 1997, p. 219). There is a difference between seeing and supervising, in Mathiesen’s concept the many do not have the power to supervise the few, but the few have the power to supervise the many. The synopticon is not, as argued by scholars such as Haggerty and Ericson, a democratic system, he does not see an optimistic alternative to Foucault in existence, but rather “things are much worse than Foucault imagined” (Mathiesen, 1997, p. 231).

Foucault assumes that the historical forms that he analyzed have “a central point” (Foucault, 1977, p. 173), a “central tower” (p. 207) that illuminates everything and is “a locus of convergence for everything that must be known” (p. 173), “a perfect eye” (p. 173), “a centre towards which all gazes would be turned” (p. 173), from which all order come and where all activities are recorded (p. 174). Due to the availability of digital networks, surveillance operates with the help of global decentralized networks and can in principle be exerted by many actors who have access to such networks. There is not one single geographical point of access to gathered data, it can be accessed from everywhere. Also there is not one central electronic database for surveillance, but many dispersed ones that can be used in combination by powerful actors in order to conduct interlinked data searches. These are important technological changes, but it is a postmodernist misbelief that surveillance becomes symmetric and can be exercised by everyone. Gathering a huge amount of data about many people is complex, time- and resource-intensive, actors who control money and bureaucratic power can therefore easier accomplish it, i.e. corporations and the state are privileged actors in conducting surveillance because they control economic and political power. To obscure this unequal power geography of surveillance trivializes the coercive realities of economic and political surveillance. If we understand Foucault as saying that powerful actors control disciplinary power, then the notion of centralized and hierarchical surveillance is still valid. It is easier to exert counter-power, but there is an unequal distribution of power. Surveillance as social relation is embedded into asymmetric social relationships that have a tendency towards centralizing power and organizing it into a hierarchy. The technologies of surveillance have evolved from more geographically centralized and temporally discontinuous methods towards geographically decentralized and temporally continuous methods. Foucault’s analysis does not exclude that the methods of surveillance can become more decentralized and dispersed because he says that surveillance is “a network of

relations from top to bottom, but also to a certain extent from bottom to top and laterally” (Foucault, 1977, p. 176).

The analysis that corporations and states are the central surveillance actors can for example be found in the works of Toshimaru Ogura and Oscar Gandy.

Toshimaru Ogura (2006, p. 272) argues that “the common characteristics of surveillance are the management of population based on capitalism and the nation state”. He distinguishes stages in the development of modern surveillance: 1) workplace surveillance; 2) population management in the nation state; 3) mass media and advertising as tools for the control and manipulation of the human mind; 4) computerized surveillance that allows new forms of marketing based on the social sorting of consumers; 5) surveillance based on networked ICTs.

The intention of surveillance in modern capitalist society is to control and mobilize each individual as labour power and to integrate various subject identities into a national identity. [...] Modern/postmodern surveillance-oriented society is rooted in a deep scepticism of humans. In other words, modern/postmodern society inherently has a kind of machine fetishism at the core of its worldview. It assumes, therefore, that being human lies at the root of uncertainty, that machines are without error, and that following instructions faithfully is an ideal model of humans (Ogura, 2006, p. 277).

For Oscar Gandy, corporations and the state are the central actors that conduct surveillance. “The panoptic sort is a technology that has been designed and is being continually revised to serve the interests of decision makers within the government and the corporate bureaucracies” (Gandy, 1993, p. 95). Gandy argues that the panoptic sort is an antidemocratic system of control of human existence (Gandy, 1993, p. 227), threatens the autonomy of the individual because if personal information becomes available to those who are able to make decisions about a person’s options (p. 180), that some parts of a person are used by another without permission (p. 186) for example by corporations.

Many contemporary definitions of surveillance lack a distinction between the social relations and the technological forces of surveillance. It is not clear if surveillance is considered as a technology or a social relation. I therefore argue that it is important to distinguish and see the difference between technologies of surveillance (what could be termed the productive forces of surveillance, which also points towards the historical development of the productivity of surveillance technologies) and social/societal structures of surveillance (the relations of production of surveillance).

Surveillance is today panoptic not because surveillance technologies are centralized and hierarchic (they are more dispersed and decentralized, for example the Internet), but because

states and corporations are dominant actors that accumulate power that they can use for disciplinary surveillance (disciplining economic and political behaviour).

For Foucault, surveillance is an instrument of disciplinary power. He has stressed that “the term ‘power’ designates relationships” (Foucault, 1994, p. 337), “it brings into play relations between individuals” (p. 337). Surveillance is a social relationship between humans that involves disciplinary power and makes use of instruments for producing knowledge about these humans in order to coerce and dominate them. To reduce surveillance to the level of surveillance technologies not only robs it of its social dimension, it is a form of techno-deterministic reductionism and fetishism that reifies surveillance and thereby destroys the concept’s critical potential.

Big Brother envisions a centralized authoritarian power that aims for absolute control, but the digital dossiers constructed by businesses aren’t controlled by a central power, and their goal is not to oppress us but to get us to buy new products and services (Solove, 2004, p. 7).

Although businesses each collect data for their own marketing and accumulation purposes, a certain share of these data are traded and decentralized collection results in a centralized power of capital as totality over citizens. Marketing and advertising are also forms of oppression because they aim at capital accumulation that benefits only a few people in financial terms. Solove (2004) prefers the notion of intransparent bureaucratic surveillance from Kafka’s “The Trial” to Orwell’s notion of Big Brother or the idea of the panopticon for describing contemporary surveillance. Intransparency is an aspect of contemporary Internet surveillance because so much data about us is stored that we do not even know about. But this intransparency helps two powerful collective actors, capital and the state, to control our lives, which means that the little sisters converge in two panoptic Big Brothers.

Deleuze (1995) has stressed that contemporary domination operates based on self-control, identification, inclusion, networks, modulations, flexibility. Deleuze compares the post-fordist individual to a serpent and the fordist individual to a mole. Individuals in flexible capitalism must be agile like a snake, flexible, innovative, motivated, dynamic, modern, and young in order to survive. The dull compulsion of economic relations forces individuals to engage full-scale in their own economic exploitation, to positively respond to the participatory management strategies that tell them that they should be creative, bring up new ideas, permanently innovate without gaining ownership rights (see Fuchs, 2008, pp. 148-153). The self-control that Deleuze speaks about is an ideology in the sense of knowledge that fails to

identify the essence of real phenomena. For Georg Lukács, ideology “by-passes the essence of the evolution of society and fails to pinpoint it and express it adequately” (Lukács, 1971, p. 50). Slavoj Žižek (1994, p. 305) argues that “‘ideological’ is a social reality whose very existence implies the non-knowledge of its participants as to its essence”. Self-controlling individuals identify with their own exploitation and domination, they consent to it and take active part in its reproduction. They do not or cannot recognize the true nature of the relations they are part of. Self-control is not a process of surveillance because it is not based on external data gathering for repressive ends. No external supervision for disciplinary ends is needed in self-control, the individuals discipline themselves. I agree that Deleuze is important for conceptualizing contemporary information processes (see especially Murakami Wood, 2007). In my categorical universe, Deleuze’s notion of self-control is useful for describing the partial obliteration of surveillance by self-control and ideology. Surveillance does not vanish, but is in many cases implemented as a security mechanism so that surveillance and self-control are used as two mechanisms (one of direct violence and one of ideological violence) for reproducing and securing domination. Managers are called for by strategists to no longer understand themselves as watchpersons, but as partners of the workforce. Just in case that participatory management does not work for securing and increasing productivity and efficiency, surveillance systems are in operation in order to guarantee a double disciplinary mechanism that drives profitability.

For John Fiske, surveillance is always a totalitarian power:

Surveillance is the power to know without being known, to see without being seen. [...] all surveillance is totalitarian, for it allows its victims no say in the way it operates, and we must not allow the general benignity of its uses to mask the fact (Fiske, 1996, p. 46, p. 241).

To sum up, we can say that negative approaches tend to define surveillance as the collection of data on individuals or groups that are used so that control and discipline of behaviour can be exercised by the threat of being targeted by violence. The negative notion of surveillance can for example be found in the works by Foucault, in neo-foucauldian surveillance studies, in the approaches of representatives of the critical political economy of surveillance (Gandy, Ogura), and in cultural studies of surveillance (Fiske). Surveillance is an expression of instrumental reason and competition because it is based on the idea that others are watched and data on their behaviour, ideas, look, etc. are gathered so that they can be controlled and disciplined and choose certain actions and avoid others that are considered as undesirable. Competitive interests and behaviours are involved, the controlling group, class or individuals try

to force the surveilled to avoid certain actions by conveying to the latter that information on them is available that could be used for actions that could have negative influences on their lives. Surveillance operates with threats and fear; it is a form of psychological and structural violence that can turn into physical violence.

Following Ogura's (2006) and Gandy's (1993) argument that a common characteristic of surveillance is the management of population based on capitalism and/or the nation state, we can distinguish between economic and political surveillance as the two major forms of surveillance. Surveillance by nation states and corporations aims at controlling the behaviour of individuals and groups, i.e. they should be forced to behave or not behave in certain ways because they know that their appearance, movements, location, or ideas are or could be watched by surveillance systems. In the case of political electronic surveillance, individuals are threatened by the potential exercise of organized violence (of the law) if they behave in certain ways that are undesired, but watched by political actors (such as secret services or the police). In the case of economic electronic surveillance, individuals are threatened by the violence of the market that wants to force them to buy or produce certain commodities and help reproduce capitalist relations by gathering and using information on their economic behaviour with the help of electronic systems. In such forms of surveillance violence and heteronomy are the *ultimo ratio*.

One can certainly criticize that Foucault did not want to provide thoughts about alternatives to surveillance and disciplinary society because he was cautious and argued that such claims might result in new disciplines. Foucault made clear that the "struggle against disciplines, or rather against disciplinary power" is a "search for a nondisciplinary power" (Foucault, 2004, p. 39). Foucault does not go beyond this specification, whereas in the Foucault/Chomsky debate Chomsky argued that "solidarity and sympathy" are "fundamental human needs" (Chomsky and Foucault, 2006, p. 55) and that a future society can be built on these qualities and be organized as a "system of decentralized power and free association" (p. 63). The counter-pole to surveillance is solidarity and co-operation, a co-operative society built on solidarity, a socialist society, is a dominationless, non-surveillance society (Fuchs, 2008).

David Lyon has constructed a theory of surveillance (Lyon, 1994, p. 192). In my view, Lyon's surveillance studies approach is ambivalent in character. On the one hand, he says that surveillance is janus-faced, which speaks for a neutral notion of surveillance. "I regard some form of surveillance as an inherent – and not necessarily evil – feature on all human societies" (Lyon, 1994, p. 19). On the other hand, David Lyon's approach is normative and *clairaudient* for

the voices and interests of political activists, which is more characteristic for negative concepts of surveillance. David Lyon defines surveillance as the “contexts within which personal data is collected” (Lyon, 1994, ix). Lyon refined his definition so that surveillance was later defined as “any collection and processing of personal data, whether identifiable or not, for the purposes of influencing or managing those whose data have been garnered” (Lyon, 2001, p. 2) and as “routine ways in which focused attention is paid to personal data by organizations that want to influence, manage, or control certain persons or population groups” (Lyon, 2003, p. 5). The terms influence, management, and control are ambiguous. Depending on how exactly they are understood/defined, either as general concepts or as more negative concepts, one will either get a neutral or a negative definition of surveillance.

### A CRITIQUE OF NEUTRAL SURVEILLANCE CONCEPTS

In my opinion, there are four reasons that speak against defining surveillance in a neutral way.

#### **Etymology**

Surveillance stems etymologically from the French *surveiller*, to oversee, watch over. Lyon (2001, p. 3) says that literally surveillance as “watching over” implies both involves care and control. Watching *over* implies that there is a social hierarchy between persons, in which one person exerts power over the other. Watching, monitoring, seeing over someone is etymologically connected to nouns such as watcher, watchmen, overseer, and officer. If the word surveillance implies power hierarchies, then it is best to assume that surveillance always has to do with domination, violence, and (potential or actual) coercion. Foucault there fore sees surveillance as a technique of coercion (Foucault, 1977, p. 222), it is “power exercised over him [an individual] through supervision” (Foucault, 1994, p. 84). John Gilliom (2001) studied the attitudes of women who were on welfare in Ohio, whose personal activities are intensively documented and assessed by computerized systems. Gilliom stresses that this system works as “overseer of the poor”. He concludes that these women saw surveillance as inherently negative. Surveillance would be “watching from above”, an “expression and instrument of power” used “to control human behavior” (Gilliom, 2001, p. 3). “The politics of surveillance necessarily include the dynamics of power and domination” (Gilliom 2001, p. 2). Gilliam also notes the connectedness of the term surveillance to the categories overseer and supervisor (Gilliom, 2001, p. 3).

**Theoretical conflationism**

Neutral concepts of surveillance analyze phenomena as for example taking care of a baby or the electrocardiogram of a myocardial infarction patient on the same analytical level as for example preemptive state-surveillance of personal data of citizens for fighting terrorism or economic surveillance of private data and online behaviour by Internet companies such as Facebook, Google, etc for accumulating capital by targeted advertising. If surveillance is seen as an all-encompassing concept, it becomes difficult to see the differences between phenomena of violence and care. The danger of surveillance conflationism is that violence and care can no longer be analytically separated because they are always both at the same time contained within the very concept of surveillance. If surveillance is used as a neutral term, then the distinction between non-coercive information gathering and coercive surveillance processes becomes blurred, both phenomena are amassed in an undifferentiated unity that makes it hard to distinguish or categorically fix the degree of coercive severity of certain forms of surveillance. The double definitional strategy paves the categorical way for trivializing coercive forms of surveillance. It becomes more difficult to elaborate, apply, and use normative, critical concepts of surveillance. There is a danger that surveillance conflationism results in merely analytical concepts of surveillance that lack normative and political potential.

In everyday language use, citizens tend to use the concept of surveillance in a negative way and to connection the Orwellian dystopia of totalitarianism with this notion. In academia, the notion of surveillance is besides in the social sciences especially employed in medicine. Surveillance data and surveillance systems in medicine are connected to the monitoring of diseases and health statuses. In the Social Sciences Citation Index (SSCI), the most frequently cited paper that contains the word surveillance in its title, is a medical work titled “Annual report to the nation on the status of cancer, 1975-2000, featuring the uses of surveillance data for cancer prevention and control” (SSCI search, April 30, 2010). This shows that there is a difference between the everyday usage and the predominant academic usage of the term surveillance. The first tends to be more political and normative, the latter more analytical. My argument is that the social science usage of the term surveillance should not be guided by the understandings given to the term in medicine, the natural sciences, or engineering because the specific characteristic of the social sciences is that it has a strong normative and critical tradition that should in my opinion not be dismissed. The question is if surveillance should be considered as a political concept or a general concept.

**Difference between information gathering and surveillance**

If surveillance is any form of systematic information gathering, then surveillance studies is the same as information society studies and the surveillance society is a term synonymous for the category of the information society. Given these assumptions, there are no grounds for claiming that surveillance studies is a distinct discipline or transdiscipline. For me, information and information society are the more general terms. I consider surveillance as one specific kind of information process and a surveillance society as one specific kind of information society. The notion of the surveillance society characterizes for me certain negative aspects of heteronomous information societies. It is opposed to the notion of a participatory, co-operative, sustainable information society (Fuchs, 2008, 2010; Fuchs, Boersma, Albrechtslund and Sanvoal; Fuchs and Obrist, 2010). Depending on societal contexts and political regulation, information has different effects. I suggest that the opposing term of surveillance is solidarity, which allows to categorically separate negative and positive aspects and effects of information processes.

I do not intend to say that information technologies do not have positive potentials and I do agree with David Lyon and others that Foucault's account is too dystopian and lacks positive visions and strategies for the transformation of society. The relationship of information technology and society is complex and dialectical and therefore creates multiple positive and negative potentials that frequently contradict each other (Fuchs, 2008). But under heteronomous societal conditions we cannot assume that the pros and cons of information technology are equally distributed, the negative ones are automatically present, the positive ones remain much more latent, precarious, and have to be realized in struggles. My suggestion is therefore that the term surveillance should be employed for describing the negative side of information gathering, processing, and use that is inextricably bound up with coercion, domination, and (direct or indirect; physical, symbolic, structural, or ideological) violence.

**Normalization of surveillance**

If everything is surveillance, it becomes difficult to criticize repressive forms of surveillance politically because surveillance is then a term that is used in everyday language for all sorts of harmless information processes that do not inflict damage on humans. The post 9/11 world has seen an intensification and extension of repressive surveillance. Therefore I consider it important to have categories available that allow scholars, activists, and citizens to criticize

these developments. If surveillance is a normalized concept of everyday language use that characterizes all forms of information gathering, storage, and processing and not only a critical concept, then this normative task becomes more difficult. If everything is surveillance, then there is no outside of surveillance left, no transcendental humanistic sphere, idea, or subject that allows to express discontent coercive information gathering and the connected human rights violations. Repressive surveillance has slowly, but steadily, crept into our lives and it therefore becomes easier that policy makers and other powerful actors present its implementation as necessary and inevitable. The normalization of the concept of surveillance may ideologically support such developments. It is therefore in my opinion a better strategy to make surveillance a strange concept that is connected to feelings of alienation and domination. For doing so, it is necessary to alienate the notion of surveillance from its normalized neutral usage.

## CONCLUSION

The task of this paper was to argue that it is important to deal with the theoretical question of how surveillance can be defined. My view is that it will be impossible to find one universal, generally accepted definition of surveillance and that it is rather importance to stress different approaches of how surveillance can be defined, to work out the commonalities and differences of these concepts, and to foster constructive dialogue about these questions. A homogenous state of the art of defining surveillance is nowhere in sight and maybe is not even desirable. Constructive controversy about theoretical foundations is in my opinion not a characteristic of the weakness or of a field, but an indication that it is developing and in a good state. It is not my goal to establish one specific definition of surveillance, although I of course have my own view of what is surveillance and what is not surveillance, which I try to ground by finding and communicating arguments. Theorizing surveillance has to take into account the boundary between surveillance and information and it has to reflect the desirability or undesirability of normative and critical meanings of the term. No matter how one defines surveillance, each surveillance concept positions itself towards theoretical questions such as the relation of abstractness and concreteness, generality and specificity, normative philosophy and analytical theorizing, etc.

My personal view is that information is a more general concept than surveillance and that surveillance is a specific kind of information gathering, storage, processing, assessment, and use that involves potential or actual harm, coercion, violence, asymmetric power relations, control,

manipulation, domination, disciplinary power. It is instrumental and a means for trying to derive and accumulate benefits for certain groups or individuals at the expense of other groups or individuals. Surveillance is based on a logic of competition. It tries to bring about or prevent certain behaviours of groups or individuals by gathering, storing, processing, diffusing, assessing, and using data about humans so that potential or actual physical, ideological, or structural violence can be directed against humans in order to influence their behaviour. This influence is brought about by coercive means and brings benefits to certain groups at the expense of others. Surveillance is in my view therefore never co-operative and solidary – it never benefits all. Nonetheless, there are certainly information processes that aim at benefiting all humans. I term such information processes monitoring, it involves information processing that aims at care, benefits, solidarity, aid, and co-operation, benefits all, and is opposed to surveillance.

Here are some examples of what I consider to be forms of surveillance:

- \* teachers watching private activities of pupils via webcams at Harriton High School, Pennsylvania;
- \* the scanning of the fingerprints of visitors entering the United States;
- \* the use of speed cameras for identifying speeders (involves state power);
- \* electronic monitoring bracelets for prisoners in an open prison system;
- \* the scanning of Internet and phone data by secret services with the help of the Echelon system and the Carnivore software;
- \* the usage of full body scanners at airports;
- \* biometrical passports containing digital fingerprints;
- \* the use of the DoubleClick advertising system by Internet corporations for collecting data about users' online browsing behaviour and providing them with targeted advertising;
- \* CCTV cameras in public means of transportation for the prevention of terrorism;
- \* the assessment of customer shopping behaviour with the help of loyalty cards;
- \* the data collection in marketing research;
- \* the publication of sexual paparazzi photos of celebrities in a tabloid;
- \* the assessment of personal images and videos of applicants on Facebook by employers prior to a job interview;
- \* the collection of data about potential or actual terrorists in the TIDE database (Terrorist Identities Datamart Environment) by the US National Counterterrorism Center;
- \* Passenger Name Record (PNR) data transfer from Europe to the United States in aviation;
- \* Telekomgate: spying on employees, trade unionists, journalists, and members of the board of directors by the German Telekom;
- \* the video filming of employees in Lidl supermarkets and assessment of the data by managers in Germany;
- \* watching the watchers: corporate watch systems, filming of the police beating of Rodney King (LA 1992), YouTube video of the police killing of Neda Soltan (Iran, 2009).

The point about these examples is that they all involve asymmetrical power relations, some form of violence, and that systematic information processing inflicts some form of harm.

We live in heteronomous societies, therefore surveillance processes can be encountered very frequently. Nonetheless, it would be a mistake to argue that domination is a universal characteristic of all societies and all social systems. Just think of the situations in our lives that involve altruism, love, friendship, and mutual care. These are examples that show that non-dominative spheres are possible and actual. My argument is that it is possible to think about alternative modes of society, where co-operation, solidarity, and care are the guiding principles (Fuchs, 2008). If information processes are central in such a society, then I would not want to term it surveillance society, but solidary information society or participatory, co-operative, sustainable information society (Fuchs, 2008, 2010).

Here are some examples of monitoring that are not forms of surveillance:

- \* consensual online video sex chat of adults;
- \* parents observing their sleeping sick baby with a camera or babyphone in order to see if it needs their help;
- \* the permanent electrocardiogram of a cardiac infarction patient;
- \* the seismographic early detection of earthquakes;
- \* the employment of the DART system (Deep-ocean Assessment and Reporting of Tsunamis) in the Pacific Ocean, the Atlantic Ocean, and the Caribbean Sea for detecting tsunamis;
- \* the usage of a GPS-based car navigation system for driving to an unknown destination;
- \* the usage of a fire detector and alarm system and a fire sprinkling system in a public school;
- \* drinking water quality measurement systems;
- \* the usage of smog and air pollution warning systems;
- \* the activities of radioactivity measuring stations for detecting nuclear power plant disasters;
- \* systems for detecting and measuring temperature, humidity, and smoke in forest areas that are prone to wildfires;
- \* measurement of meteorological data for weather forecasts.

The point about these examples is that there are systematic information processes in our societies that do not involve systematic violence, competition, and domination, but aim at benefits for all. One can certainly discuss if these are particularly good examples and if the boundaries between the first and the second list can be clearly drawn, but the central point I want to make is that there are political choices between advancing and regulating systematic information processing that has repressive or solidary effects and that this difference counts normatively. Certainly, forms of monitoring can easily turn into forms of surveillance, and surveillance technologies might be refined in ways that serve solidary purposes. The more crucial point that I want to make is that normative theories, critical thinking, and critical political practices matter in our society and that they need a clear understanding of concepts. I question postmodern and constructivist approaches that want to tell us that it has become

completely impossible to distinguish what is desirable and undesirable or that all normative ideas and political projects are inherently prone to producing new forms of violence and domination. I am convinced that a non-violent, dominationless society is possible and that it is especially in times of global crisis important to have clearly defined concepts at hand that help criticizing violence and domination and points towards a different world. I therefore see a need for a realist, critical concept of surveillance.

My argument is that there is a difference between the productive forces of surveillance and the social relations/structures of surveillance. Most information technologies can be designed in different ways and used in different societal contexts. Therefore technologies as such in most cases do not determine the larger effects in society. What is and what is not surveillance can therefore in my opinion not be determined at the level of technologies, but only at the level of social structures, by observing if the contexts, outcomes and effects of certain surveillance technologies benefit all, or cause harms and enforce and deepen domination, exploitation, and alienation. I therefore argue for a critical theory of surveillance. Such a theory is also a realist and non-constructivist theory because it argues that humans are able to observe and make grounded and reasonable judgements about the positive and negative effects of technologies.

I identified a number of issues that in my opinion should be addressed by what I term neutral surveillance approaches:

- A neutral notion of surveillance puts negative and positive aspects of surveillance on one categorical level and therefore may trivialize repressive information gathering and usage.
- A neutral surveillance concept does not allow distinguishing between information gathering and surveillance, therefore no distinction between a surveillance society and an information society and no distinction between surveillance studies and information society studies can be drawn.
- A dialectic should not be assumed at the categorical level of surveillance, but at a meta-level that allows to distinguish between surveillance and solidarity as positive respectively negative side of systematic information gathering.
- Etymologically the term surveillance implies a relationship of asymmetrical power, domination, hierarchy, and violence.

Neutral surveillance approaches see surveillance as having two faces, a positive and a negative one, argue that surveillance exists in all societies, and that it involves any kind of information gathering in organizations. Neutral surveillance approaches have become the new orthodoxy of Surveillance Studies that hardly anybody has questioned. Surveillance Studies wants to be a broad interdisciplinary field that institutionalizes itself, therefore the suggestion to conceptualize surveillance as purely negative concept does not fit into this task. Negative

surveillance approaches point out that surveillance is a repressive process of information gathering aiming at the installation or reproduction of domination.

A critical theory of surveillance is in need of a negative concept of surveillance. Otherwise it ends up limiting its critical potentials and becoming part of administration.

## REFERENCES

- Ball, Kirstie and Frank Webster. (2003). The intensification of surveillance. In *The intensification of surveillance*, ed. Kirstie Ball and Frank Webster, 1-15. London: Pluto Press.
- Bogard, William. (1996). *The simulation of surveillance*. Cambridge: Cambridge University Press.
- . (2006). Surveillance assemblage and lines of flight. In *Theorizing surveillance*, ed. David Lyon, 97-122. Portland, OR: Willan.
- Boyle, James. (1997). Foucault in cyberspace. *University of Cincinnati Law Review* 66 (1): 177-205.
- Castells, Manuel. (2004). *The power of identity*. Malden, MA: Blackwell.
- Chomsky, Noam, and Michel Foucault. (2006). *The Chomsky-Foucault debate: on human nature*. New York: The New Press.
- Dandeker, Christopher. (1990). *Surveillance, power and modernity. Bureaucracy and discipline from 1700 to present day*. Cambridge: Polity Press.
- . (2006). Surveillance and military transformation: organizational trends in twenty-first-century armed services. In *Surveillance and visibility*, ed. Kevin Haggerty and Richard Ericson, 225-249. Toronto: University of Toronto Press.
- Deleuze, Gilles. (1995). Postscript on the societies of control. In *Negotiations*, 177-182. New York: Columbia University Press.
- Elmer, Greg. (2003). A diagram of panoptic surveillance. *New Media & Society* 5 (2): 231-247.
- Fiske, John. (1996). *Media matters*. Minneapolis, MN: University of Minnesota Press.
- Foucault, Michel. (1973). *The order of things*. New York: Vintage.
- . (1977). *Discipline & punish*. New York: Vintage.
- . (1994). *Power*. New York: New Press.
- . (2004). *Society must be defended*. New York: Picador.
- . (2007). *Security, territory, population*. Basingstoke: Palgrave Macmillan.
- . (2008). *The birth of biopolitics*. Basingstoke: Palgrave Macmillan.
- Fuchs, Christian. (2008). *Internet and society: social theory in the information age*. New York: Routledge.
- . (2010). Theoretical foundations of defining the participatory, co-operative, sustainable information society. *Information, Communication & Society* 13 (1): 23-47.
- Fuchs, Christian, Robert Bichler and Celina Raffl. (2009). Cyberethics and co-operation in the information society. *Science and Engineering Ethics* 15 (4): 447-466.
- Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, eds. (2011)/forthcoming. *The Internet and surveillance*. New York: Routledge.
- Fuchs, Christian and Marianna Obrist. (2010). HCI and society: towards a typology of universal design principles. *International Journal of Human-Computer Interaction* 26 (6).
- Gandy, Oscar H. (1993). *The panoptic sort. A political economy of personal information*. Boulder: Westview Press.
- . (2003). Data mining and surveillance in the post-9/11 environment. In *The intensification of surveillance*, ed. Kirstie Ball and Frank Webster, 26-41. London: Pluto Press.
- Giddens, Anthony. (1981). *A contemporary critique of historical materialism. Vol. 1: power, property and the state*. London: Macmillan.
- . (1984). *The constitution of society. Outline of the theory of structuration*. Cambridge: Polity Press.

- . (1985). *A contemporary critique of historical materialism. Vol. 2: the nation-state and violence*. Cambridge: Polity Press.
- . (1987). *Social theory and modern sociology*. Cambridge: Polity Press.
- Gilliom, John. (2001). *Overseers of the poor*. Chicago, IL: University of Chicago Press.
- Gordon, Diana. (1987). The electronic panopticon. *Politics and Society* 15 (4): 483-511.
- Haggerty Kevin. (2006). Tear down the walls: on demolishing the panopticon. In *Theorizing surveillance*, ed. David Lyon, 23-45. Portland, OR: Willan.
- Haggerty, Kevin and Richard Ericson. (2000/2007). The surveillant assemblage. In *The surveillance studies reader*, ed. Sean P. Hier and Josh Greenberg, 104-116. Berkshire: Open University Press.
- . (2006). The new politics of surveillance and visibility. In *Surveillance and visibility*, ed. Kevin Haggerty and Richard Ericson, 3-33. Toronto: University of Toronto Press.
- Harvey, David. (2003). *The new imperialism*. Oxford: Oxford University Press.
- . (2005). *A brief history of neoliberalism*. Oxford: Oxford University Press.
- . (2010). *A companion to Marx's Capital*. London: Verso.
- Hier, Sean P. (2003/2007). Probing the surveillant assemblage: on the dialectics of surveillance practices as processes of social control. In *The surveillance studies reader*, Sean P. Hier and Josh Greenberg, 117-127. Berkshire: Open University Press.
- Hier, Sean P. and Josh Greenberg, eds. (2007). *The surveillance studies reader*. Berkshire: Open University Press.
- Horkheimer, Max. (1937/2002). Traditional and critical theory. In *Critical theory*, 188-252). New York: Continuum.
- . (1947/1974). *Eclipse of reason*. New York: Continuum.
- Lace, Susanne. (2005). The new personal information agenda. In *The glass consumer*, ed. Susanne Lace, 207-245. Birstol: Policy Press.
- Lukács, Georg. (1971). *History and class consciousness*. London: Merlin.
- Lyon, David. (1994). *The electronic eye. The rise of surveillance society*. Cambridge: Polity.
- . (2001). *Surveillance society: monitoring everyday life*. Buckingham: Open University Press.
- . (2003). *Surveillance after September 11*. Cambridge: Polity.
- Marcuse, Herbert. (1936/1988). The concept of essence. In *Negations*, 43-87. London: Free Association Books.
- . (1941). *Reason and revolution. Hegel and the rise of social theory*. New York: Humanity Books.
- Marx, Gary T. (2007). Surveillance. In *Encyclopedia of privacy*, ed. William G. Staples, 535-544. Westport, CN: Greenwood Press.
- Mathiesen, Thomas. (1997). The viewer society: Michel Foucault's 'panopticon' revisited. *Theoretical Criminology* 1 (2): 215-234.
- . (2004). Panopticon and synopticon as silencing systems. In *Silently silenced. Essays on the creation of acquiescence in modern society*, 98-102. Winchester: Waterside Press.
- Murakami Wood, David. (2007). Beyond the panopticon? Foucault and surveillance studies. In: *Space, knowledge and power: Foucault and geography*, ed. James Crampton and Stuart Elden, 245-263. Aldershot: Ashgate.
- Norris, Clive and Gary Armstrong. (1999). *The maximum surveillance society. The rise of CCTV*. Oxford: Berg.
- Ogura, Toshimaru. (2006). Electronic government and surveillance-oriented society. In *Theorizing surveillance*, ed. David Lyon, 270-295. Portland, OR: Willan.
- Poster, Mark. (1990). *The mode of information*. Cambridge: Polity.
- Rheingold, Howard. (2002). *Smart mobs: the next social revolution*. New York: Basic Books.
- Robins, Kevin and Frank Webster. (1999). *Times of the technoculture*. New York: Routledge.
- Rule, James B. (2007). *Privacy in peril*. Oxford: Oxford University Press.
- Solove, Daniel J. (2004). *The digital person. Technology and privacy in the information age*. New York: New York University Press.

- . (2007). *The future of reputation. Gossip, rumor, and privacy on the Internet*. New Haven: Yale University Press.
- Wall, David S. (2007). *Cybercrime*. Cambridge: Polity.
- Webster, Frank. (2002). *Theories of the information society*. New York: Routledge.
- Žižek, Slavoj. (1994). How did Marx invent the symptom? In *Mapping ideology*, ed. Slavoj Žižek, 296-331. London: Verso.
- Zuboff, Shoshana. (1988). *In the age of the smart machine*. New York: Basic Books.
- Zureik, Elia. (2003). Theorizing surveillance. The case of the workplace. In *Surveillance as social sorting*, ed. David Lyon, 31-56. New York: Routledge.

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