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Social Media Surveillance & Society

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Social Media Surveillance & Society

Abstract:

“Social media” like Facebook, Twitter or YouTube have become tremendously popular in recent years. Their popularity provides new opportunities for data collection by state and private companies, which requires a critical and theoretical focus on social media surveillance. The task of this paper is to outline a theoretical framework for defining social media surveillance in the context of contemporary society, identifying its principal characteristics, and understanding its broader societal implications. The analysis is based on a threefold model of information that includes processes of cognition, communication, and co-operation as well as on a model of modern society that discerns various societal spheres (economy, state, civil society, culture). Social media surveillance is a form of surveillance, in which different forms of sociality (cognition, communication, co-operation) converge as well as different social roles of individuals (in the economy, politics, and civil society), so that surveillance becomes a monitoring of different (partly converging) activities in different (partly converging) social roles with the help of profiles that hold a complex networked multitude of data about humans. Societal implications of social media surveillance include categorical suspicion, social sorting and discrimination via cumulative disadvantages, as well as surveillance creep. Social media surveillance has academic as well as political implications.

Keywords: surveillance, Internet, social media, society, social theory, sociological theory, communication theory

1. Introduction

- “New software being trialled during the Olympics to predict where and when crime and social disorder may take place could be adopted by police in Scotland, England and Wales. [...] The technology would make it easier for police to stop public disorder by picking up at an early stage should large groups of networkers be agitating over social tensions. [...] Gordon Scobbie, deputy chief constable of Tayside Police and the lead officer for social media within the UK police, said: ‘In my national role in terms of social media and engagement we will be looking, post-Olympics, to develop this capability. We all need to understand the impact that social media has. We have no choice but to develop the anticipatory aspect to this’” (Police develop technology to monitor social networks. *The Herald Scotland*. August 6th, 2012. <http://www.heraldscotland.com/news/home-news/police-develop-technology-to-monitor-social-networks.18357627>).
- Many employers already monitor their workers' Facebook, Twitter and other social media pages - but the practice is set to increase. By the year 2015, 60% of employers will monitor social media pages of their employees, a new report by data analysts Gartner has claimed. The 'Big Brother' monitoring will be driven by security worries about employees leaking information or talking negatively about their workplace. (They're watching you! By 2015, 60% of employers will monitor their workers' Facebook pages. *Daily Mail*. June 1st, 2012. <http://www.dailymail.co.uk/sciencetech/article-2153100/Theyre-watching-By-2015-60-employers-monitor-workers-Facebook-pages.html#ixzz22sdQw2Id>)

These two examples show that the surveillance of “social media” like Facebook or Twitter by companies and state-institutions such as the police is massively rising and as such warrants scholarly attention. “Social media” and “web 2.0” are terms that have in recent years been employed to describe the information-, communication-, community-, and collaborative features of blogs (e.g. Blogger), social networking sites (e.g. Facebook), video hosting platforms and sites (e.g. YouTube), wikis (e.g. Wikipedia) and microblogs (e.g. Twitter).

Although there has been a lot of hype about these terms, mainly focused on how they create new business and advertising opportunities online, there are societal effects of these technologies that need to be studied. As a precondition of such studies, we need to theoretically understand how information processing and communication work on social media and what their potential implications are for society. In this context, the notion of social media surveillance is important.

The task of this paper is to outline a theoretical framework for defining social media surveillance in the context of contemporary society, identifying its major characteristics, and understanding its main societal implications. First, we introduce a theoretical model of the information process (section 2). Then we introduce a theoretical model for conceptualizing modern society (section 3). These two models are then

combined for defining the social media surveillance process (section 4). Societal implications of social media surveillance are discussed (section 5) and finally some conclusions are drawn (section 6).

2. The Information Process

In order to understand how Internet surveillance works, we first need a model that explains how the human information process works. One such model is based on Hegelian dialectical philosophy, which allows us to identify three levels/stages of social life: cognition, communication and co-operation (Fuchs 2008, 2010).

Cognition refers to the status and processes of human thought that create and reproduce knowledge. Humans are not isolated monads, but social beings – they exist in and through the relations with other humans. Communication is a social relation between at least two human beings, in which there is a mutual exchange of symbols that are interpreted so that the interaction partners give meanings to them. Communication is the social dimension of human existence. It is based on cognition because communication changes the states of knowledge of the participating communication partners. Based on communication, humans can collaborate. Many communication processes do not result in co-operation, but some of them do. Collaboration or co-operation means that humans together create new qualities of social systems or new social systems. Co-operation is based on communication and cognition, every co-operation process is also a communication and cognition process, every communication process involves also cognition processes. The tripleC (CCC) information model is visualized in figure 1.

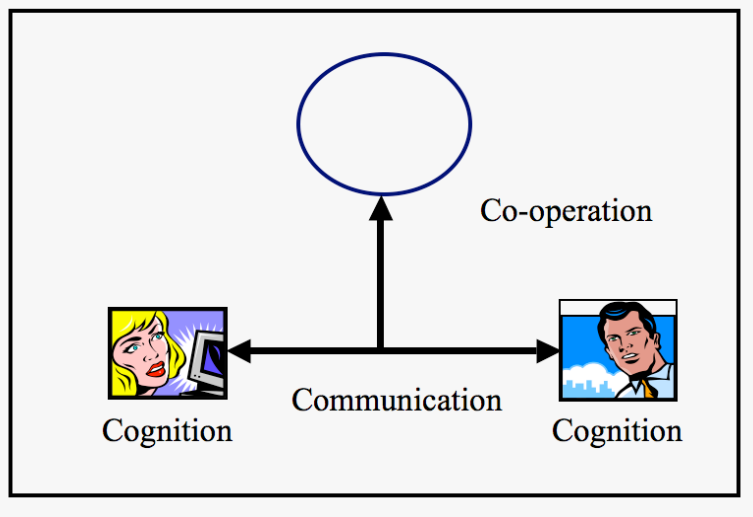


Figure 1: The information process

In this dialectical approach, information is conceived as a dynamic threefold process, in which, based on subjective cognitive processes, social relations emerge (communication), in which new systems and qualities can be formed (co-operation). It is a threefold process of cognition, communication, and co-operation. The triad can also

be seen as one of the individual, social relations, and social systems. This corresponds to the three steps of development in Hegelian dialectics (being-in-itself/identity, being-for-another, being-in-and-for-itself) and to Peirce's triad of firstness, secondness, and thirdness.

For Hegel, the dialectical process consists of three steps that in the human realm correspond to the three processes of cognition, communication, and co-operation.

- *Identity/Being-in-itself:*

A thing/phenomenon in the world exists and is therefore identical with itself. The "Maxim of Identity, reads: Everything is identical with itself, $A = A$: and negatively, A cannot at the same time be A and Not- A " (Hegel 1830, §115).

- *Negation/Being-for-another:*

Identity can only exist through difference, interdependence, and mutual constitution. Hegel therefore describes the negative as contradiction that contains difference and connection at the same time. The "negation is at the same time a relation, is, in short, Distinction, Relativity, Mediation" (Hegel 1830, §116). "The one is made visible in the other, and is only in so far as that other is. Essential difference is therefore Opposition; according to which the different is not confronted by any other but by its other. That is, either of these two (Positive and Negative) is stamped with a characteristic of its own only in its relation to the other: the one is only reflected into itself as it is reflected into the other. And so with the other. Either in this way is the other's own other" (Hegel 1830, §119). "Thus, for example, debts and assets are not two particular, self-subsisting species of property. What is negative to the debtor, is positive to the creditor. A way to the east is also a way to the west. Positive and negative are therefore intrinsically conditioned by one another, and are only in relation to each other. The north pole of the magnet cannot be without the south pole, and vice versa" (Hegel 1830, note to §119).

- *Negation of the negation/Being-in-and-for-itself:*

Dialectical relations contain two negating poles. If the contradiction between the two poles develops, then the negative relation of the two mutually negating poles is negated, which means that the contradiction results in a new result. Hegel speaks of this process as the negation of the negation. Negation of the negation is "the effected coincidence of each with its other" (Hegel 1812, §1343). The negation of the negation produces a new unity of two negating poles: "What we now in point of fact have before us, is that somewhat comes to be an other, and that the other generally comes to be an other. Thus essentially relative to another, somewhat is virtually an other against it: and since what is passed into is quite the same as what passes over, since both have one and the same attribute, viz. to be an other, it follows that something in its passage into other only joins with itself. To be thus self-related in the passage, and in the other, is the genuine Infinity. Or, under a negative aspect: what is altered is the other, it becomes the other of the other. Thus Being, but as negation of the negation, is restored again: it is now Being-for-self" (Hegel 1830, §95).

The negation of the negation produces positive results, it is determinate negation: "the negation of the negation is something positive" (Hegel 1812, §168). The negation of the negation is the process, by which being develops infinitely. Hegel

therefore speaks of an infinite process of unification: the negation of the negation is “an infinite unity” (Hegel 1812, §517), an “infinite unity of the negativity with itself” (Hegel 1812, §1326). “Something becomes an other; this other is itself somewhat; therefore it likewise becomes an other, and so on ad infinitum” (Hegel 1830, §93).

Hegel connects the notion of the negation of the negation to the one of sublation (Aufhebung): Being “is self-mediated through negation of the negation; being is posited as the unity which pervades its determinatenesses, limit, etc., which are posited in it as sublated” (Hegel 1812, §372). Sublation is at the same time “coming-to-be and ceasing-to-be” (Hegel 1812, §180), “We mean by it (1) to clear away, or annul: thus, we say, a law or regulation is set aside; (2) to keep, or preserve: in which sense we use it when we say: something is well put by. (Hegel 1830, §96). “To sublatare’ has a twofold meaning in the language: on the one hand it means to preserve, to maintain, and equally it also means to cause to cease, to put an end to. Even ‘to preserve’ includes a negative elements, namely, that something is removed from its influences, in order to preserve it. Thus what is sublated is at the same time preserved; it has only lost its immediacy but is not on that account annihilated” (Hegel 1812, §185).

Sublation is at the same time uplifting, preservation, and elimination, which is the threefold meaning of the term “Aufhebung” in German.

Figure 2 visualizes the dialectical process and its three dimensions.

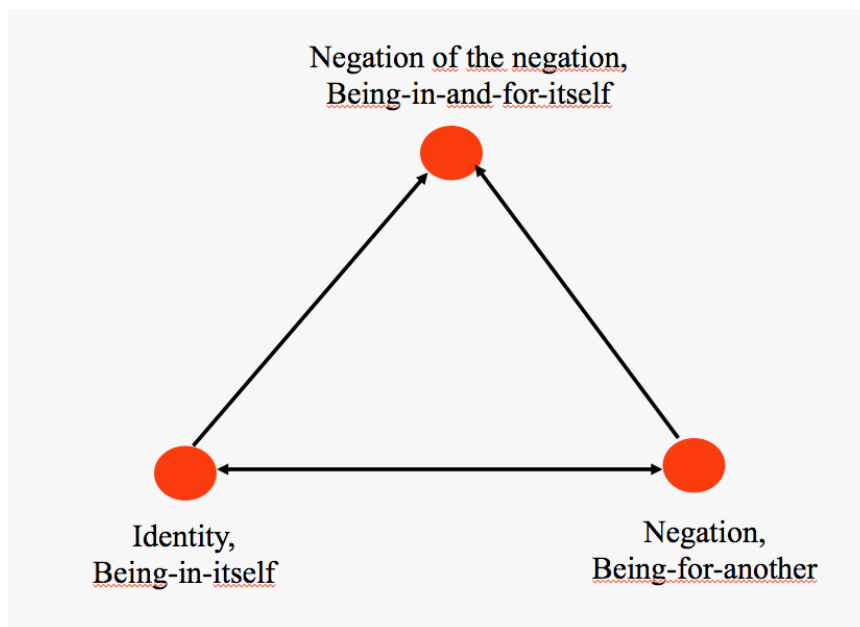


Figure 2: Hegel's model of dialectics

The tripleC model corresponds to the three stages of the dialectical logic identified by Hegel: identity/being-in-itself, being-for-another, being-in-and-for-itself. Abstractly speaking, any entity in the world is unique, although it is one of a kind, it is identical

with itself (I=I). But an entity does not exist as a monad in the world, it can only exist in relation to another entity. So being is always relational being, one entity exists in difference and relation to others, existence is individual and relational at the same time (being-for-another, contradiction, negation). Out of the relation between entities, new qualities can emerge. This is not an automatic necessity, but always a potentiality. Hegel describes the process of the emergence of new qualities as *Aufhebung* (sublation) or negation of the negation. In society, this model of dialectical logic can be applied to the existence of humans. One stage is the precondition for the next. First, the individual, who acts through cognition. Second, individuals engage in social relations through communication. Third, relational communication contributes to cooperative endeavours and/or community building/maintenance. Organisations and communities are produced and reproduced at this final stage. The three stages correspond to three notions of sociality: Emile Durkheim's social facts (cognition), Max Weber's social action (communication), Ferdinand Tönnies' concept of community and Karl Marx's notion of collaborative work (Fuchs 2008, 2010). Both community and collaborative work are expressions of co-operation.

This is the structural basis of social life. Individual action is the basis of communication, which in turn is the basis of corporate endeavours as well as community building. Media has always played an important role in these stages. Because it transforms thought into digital content, and transmits that content to other users, all media technologies have played a crucial role in these functions.

What is unique about social media is the fact that it collapses these three processes together. Individual cognition almost automatically becomes a matter of social relations, and a cooperative endeavour. For instance, one may write a reflexion on my profile. By default, other users will see this reflexion, and be able to respond to it. The reflexion becomes a statement towards others, and also becomes a project. If one wrote this statement on a word processor, it would remain in the first stage. If one wrote it on a conventional website, it would remain in the second stage.

The ease with which it moves through these social stages is not entirely new. But what is striking about social media – indeed, what makes it a convergence of the three modes of sociality – is the difficulty of remaining in the first or second stage. By virtue of its built-in functionality, individual thought becomes relational and cooperative. Self-reflexion now exists in a relational sense (it has an audience, it is sent to that audience), and it also becomes a kind of cooperative activity (that audience is expected to contribute to that initial reflexion). So for example writing a blog post or a Facebook wall post is a form of self-reflexion that at the same time is outreaching to a community and by way of comments of this community is shaped by others' ideas.

All media are social in the sense that they are tools of cognition. Some of them are social in the sense of allowing communication (e.g. the telephone). Some of them are also tools of co-operation (such as the Internet, wikis, and Computer-Supported-Cooperative-Work (CSCW) tools). An important characteristic of "social media" like Facebook is the convergence of the three spheres of sociality.

Social media makes reflection and communication a complex form of sociality by

pushing both of these towards a cooperative stage. This has specific implications for both visibility and labour. In terms of visibility, content that would otherwise stay with an individual is by default pushed to a broad audience. Any content that is uploaded to a site like Facebook (on the profile, excluding the private message) is sent to that person's entire social network. It may possibly be sent beyond this network if their privacy settings are relaxed.

Something can remain cognition by not being placed on Facebook. While this is true, this either-or approach differs from other media. The word processor keeps the content with the individual, who may decide to print or transmit the content. Even the email allows you to save a draft before sending it to others. Yet with social media the only option is to publish.

Social media pushes activity into the realm of labour by making it visible (as seen above) and collaborative, no matter if it is an intentional act of communication or an act of browsing. Everything becomes an entry point to a comment. Users are positioned vis-à-vis one another, obliged to intake what others produce, and in turn produce a response. Statements become conversations; there is no final word. Photographs and videos become conversations. News items linked from an outside site become conversations. With social advertising schemes, conversations about products in a community of friends and contacts are invited by the ad mechanism itself on a digital platform with the help of the constant monitoring of online behaviour, purchasing patterns and the social networks/relations of users. Social advertising is based on the gathering, analysis, and comparison of online behaviour and the predictive algorithmic calculation of potential purchasing choices.

Social saturation contributes to its value for companies, and its potential for exploitation. It is not only that cognition can become cooperation, but the specific status and location of sites like Facebook, especially for individual users. They frame their functionality in a very generic light. They are simply designed to 'share' with the 'people' that 'matter' to you. They are therefore cross-contextual, or rather they contribute to a convergence of social contexts. They monopolize the user's social life.

For understanding social media surveillance, we not only need a model for the understanding the underlying information processes, but also one that allows coming to grips with the societal context of data processing. Therefore, we introduce a model of modern society in the next section.

3. A Theoretical Model of Modern Society

Modern society is based on the differentiation of social roles. In modern society, human beings act in different capacities in different social roles. Consider the modern middle-class office worker, who also has roles as a husband, father, lover, friend, voter, citizen, child, fan, neighbour, to say nothing of the various associations to which he may belong. In these different roles, humans are expected to behave according to specific rules that govern the various social systems of which modern society is composed (such as the company, the schools, the family, the church, fan clubs, political

parties, etc).

Jürgen Habermas (1987, 1989) describes how modern society is grounded in different spheres, in which humans act in different roles. He says that modernity resulted in:

a) the separation of the economy from the family and the household so that the modern economy (based on wage labour and capital) emerged,

b) the rise of a political public sphere, in which humans act as citizens, who vote, hold a political opinion, etc, in contrast to the earlier monarchic system, in which political power was controlled by the monarch, aristocracy, and the church. This includes the shift of the economy towards a capitalist economy grounded in private ownership of the means of production and on the logic of capital accumulation. The economy started to no longer be part of private households, but became organized with the help of large commodity markets that go beyond single households. The modern economy has become “a private sphere of society that [...] [is] publicly relevant” (Habermas 1989, 19). The family started to no longer be primarily an economic sphere, but the sphere of intimacy and the household economy based on reproductive labour. Connected to this was the separation of the private and the public sphere that is based on humans acting in different roles (Habermas 1989, 152, 154; see also Arendt 1958, 47, 68).

A distinction of a three subsystems of society (economy, polity, culture) can be found in several social theories: Giddens (1984, 28–34) distinguishes between economic institutions, political institutions, and symbolic orders/modes of discourse as the three types of institutions in society. Bourdieu (1986) speaks of economic, political, and cultural capital as the three types of structures in society. Jürgen Habermas (1987) differs between the lifeworld, the economic system, and the political system. In our model of society, we take up this distinction. In relation to modern society, the distinction between economy, politics, and culture translates into the distinction of the capitalist economy, the state, and culture.

Habermas (1987) defines the economy and the state as systems that are guided by the steering media of power respectively money. The modern economy is the capitalistic way of organising production, distribution, and consumption, i.e. it is a system that is based on the accumulation of money capital by the sale of commodities that are produced by workers who are compelled to sell their labour power as a commodity to owners of capital and means of production, who thereby gain the right to exploit labour for a specific time period. The modern political system is a bureaucratic state system, in which liberal parliamentary democracy (including political parties, elections, parliamentary procedures), legal guarantees of bourgeois freedoms (freedoms of speech, assembly, association, the press, movement, ownership, belief and thought, opinion and expression), and the monopolization of the means of violence by coercive state apparatuses guarantee the reproduction of the existing social order.

Besides the capitalist economy and the state, modern society also consists of the cultural sphere that can be divided into a private and a public culture. Hannah Arendt stresses that the private sphere is a realm of modern society that functions as “a

sphere of intimacy" (Arendt 1958, 38) and includes family life as well as emotional and sexual relationships. Habermas adds to this analysis that consumption plays a central role in the private sphere: "On the other hand, the family now evolved even more into a consumer of income and leisure time, into the recipient of publicly guaranteed compensations and support services. Private autonomy was maintained not so much in functions of control as in functions of consumption" (Habermas 1989, 156). He furthermore points out that the private sphere is the realm of leisure activities: "Leisure behavior supplies the key to the floodlit privacy of the new sphere, to the externalization of what is declared to be the inner life" (Habermas 1989, 159). In other words, one can say that the role of the private sphere in capitalism as sphere of individual leisure and consumption that Habermas identifies is that it guarantees the reproduction of labour power so that the latter remains vital, productive, and exploitable.

But there are also social forms of organising leisure and consumption, as e.g. fan communities, amateur sports clubs, churches, etc. This means that there are both individual and social forms of organising everyday life. Together they form the sphere of culture understood as the sphere, in which mundane everyday life is organised, and meaning is given to the world. The basic role of culture in society is that it guarantees the reproduction of the human body and mind, which includes on the one hand activities like sports, sexuality, health and social care, beauty care, and on the other hand activities like education, knowledge production (e.g. in universities), art, literature, etc. If these activities are organised on an individual basis, then they take place in the private sphere, if they are organised on a social basis outside of the home and the family, then they take place in the socio-cultural sphere.

According to Habermas (1989), the realms of the systems of the economy and the state on the one hand and the lifeworld (culture in our model) is mediated by what he terms the public sphere or civil society. Hegel, who is considered as one of the most influential writers on civil society (Anheier et al. 2010, 338), described civil society as political and as a sphere that is separate from the state and from the private life of the family (Hegel 1821, §§157, 261). Jürgen Habermas' (1989) seminal work describes that eighteenth century France and Germany were characterized by a separation of spheres. Civil society was the private "realm of commodity exchange and social labor" (Habermas 1989, 30) that was distinct from the public sphere and the sphere of public authority. This understanding was reflected in liberal market-driven civil society conceptions of thinkers like Locke and Smith that positioned economic man at the heart of civil society (Ehrenberg 1999). The structural transformation of the public sphere has in the 19th and 20th century according to Habermas resulted in an increasing collapse of boundaries between spheres so that "private economic units" attained "quasi-political character" and from "the midst of the publicly relevant sphere of civil society was formed a repoliticized social sphere" that formed a "functional complex that could no longer be differentiated according to criteria of public and private" (Habermas 1989, 148). One can say that the structural transformation Habermas describes meant the emergence of the modern economy as a separate powerful sphere

of modern society and the separation of the economy from civil society. This notion of civil society could be found in the works of Montesquieu, Rousseau and Tocqueville and has today become the common understanding (Ehrenberg 1999). In later works, Habermas (1987, 320) as a result describes contemporary modern society as consisting of systems (economic system, administrative system) and the lifeworld (private sphere, public sphere). Civil society as part of the lifeworld now exists of “associational networks” that “articulate political interests and confront the state with demands arising from the life worlds of various groups” (Habermas 2006, 417). Civil society’s “voluntary associations, interest groups, and social movements always strive to maintain a measure of autonomy from the public affairs of politics and the private concerns of economics” (Ehrenberg 1999, 235). Habermas (2006) mentions as examples for civil society actors: social movements, general interest groups, advocates for certain interests, experts, and intellectuals. Qualities and concepts of civil society mentioned in the literature include: voluntariness, nongovernmental associations, healthy democracy, public sphere, exchange of opinions, political debate, self-organization, self-reflexion, non-violence, struggle for egalitarian diversity (Keane 2010, Kenny 2007, Salzman 2011, Sheldon 2001, 62f).

Salzman (2011, 199) mentions “environmental groups, bowling leagues, churches, political parties, neighbourhood associations, social networking Internet sites” as examples for civil society organizations. Keane (2010) adds charities, independent churches and publishing houses as examples. In civil society theory, the concept of hegemony in particular has been used for stressing civil society’s aspects of contradiction, power, counter-power, ideology and its dialectical relation to the state and the economy (Anheier et al. 2010, 408ff). Such characterizations of civil society groups are merely enumerative, but lack a more systematic distinction that is based on a theoretical criterion.

Habermas (1987, 320) mentions the following social roles that are constitutive for modern society: employee, consumer, client, citizen. Other roles, as e.g. wife, husband, houseworker, immigrant, convicts, etc can certainly be added. So what is constitutive for modern society is not just the separation of spheres and roles, but also the creation of power structures, in which roles are constituted by power relations (as e.g. employer-employee, state bureaucracy-citizen, citizen of a nation state-immigrant, manager-assistant, dominant gender roles – marginalised gender roles). Power means in this context the disposition of actors over means that allow them to control structures, influence processes and decisions in their own interest at the expense of other individuals or groups.

Modern society is based on political and economic exchange relations. Based on different roles that humans have in the lifeworld, they exchange products of their social actions with goods and services provided by the systems of the state and the economy. Table 1 gives an overview of these exchanges and specifies the two sides of the exchanges. The systems of the state and the lifeworld stand in modern society in exchange relations. Lifeworld communication is according to Habermas (1987) based mainly on communicative action and is not mediated by money and power, they are

more realms of altruistic and voluntary behaviour. Systemic logic and exchange logic is not an automatic feature of these realms, it can however shape them. An example is e.g. the household economy in the family, in which altruistic motivations are paired with reproductive labour that reproduces labour power and can be based on gender-based power relations that inscribe gender roles into private life. The political public sphere, civic cultures, and private life are not independent from the political and the economic systems: they create legitimacy and hegemony (political public, civic cultures) in relation to the political system as well as consumption needs and the reproduction of labour power in relation to the economy (private life, family).

Claus Offe (1985) distinguishes between socio-political movements, which want to establish binding goals for a wider community and are recognized as legitimate, and socio-cultural movements, which want to establish goals, which are not binding for a wider community (retreat) and are considered as illegitimate. Further forms of non-institutional action would be private crime (non-binding goals, illegitimate) and terrorism (binding goals, illegitimate). Offe's distinction between socio-political and socio-cultural movements has been reflected in Touraine's (1985) distinction between social movements and cultural movements. Table 1 summarizes the discussion. We add to this distinction one between socio-political and socio-economic movements.

The struggles of socio-economic movements are oriented on the production and distribution of material resources that are created and distributed in the economic system. They are focused on questions of the production, distribution and redistribution of material resources. One modern socio-economic movement is the working class movement that struggles for the betterment of living conditions as they are affected by working conditions and thereby opposes the economic interests of those who own capital and the means of production. In the history of the working class movement, there have been fierce debates about the role of reforms and revolution. A more recent debate concerns the role and importance of non-wage workers in the working class movement (Cleaver 2000). Another socio-economic movement is the environmental movement that struggles for the preservation and sustainable treatment of the external nature of humans (the environment). Whereas the working class movement is oriented on relationships between organised groups of human beings (classes) with definite interests, the ecological movements is oriented on the relationship between human beings and their natural environment. Both relations (human-human, human-nature) are at the heart of the economy and interact with each other.

Socio-political movements are movements that struggle for the recognition of collective identities of certain groups in society via demands on the state. They are oriented on struggles that relate e.g. to gender, sexual orientation, ethnicity and origin, age, neighbourhood, peace or disability. Examples are the feminist movement, the gay-rights movement, the anti-racist movement, the youth movement, the peace movement, the anti-penitentiary movement, the anti-psychiatry movement, etc. The common characteristic of these movements is that their struggles are oriented on recognising specific groups of people as having specific rights, ways of life, or identities. So for example the peace and human rights movement struggles for the recogni-

tion of the basic right of all humans to exist free from the threat of being killed or coerced by violence. As another example, racist movements struggle for recognising specific groups (like white people) as either superior and other groups as inferior or so culturally or biologically different that they need to be separated.

Socio-cultural movements are groups of people that have shared interests and practices relating to ways of organizing your private life. Examples include friendship networks, neighbourhood networks, churches, sports groups, fan communities, etc.

	Civil society	
Goals	Recognized as legitimate	Illegitimate
Binding for a wider community	Socio-political and socio-economic movements (=Political public sphere) 1) NGOs: more hierarchical, formal, lobbying 2) Social movements: grass-roots, informal, protest	Terrorism
Non-binding for a wider community	Socio-cultural movements (=Civic cultures) consensus, shared interests and values, affinity Examples: friendship networks, neighbourhoods, work networks, churches, sects, sports team, fan communities, professional organizations/associations	Crime

Table 1: A typology of different forms of non-institutional action (adapted from: Offe 1985)

Figure 3 visualizes the model of modern society introduced in this section. The model is grounded in the social theory insight that the relationship between structures and actors is dialectical and that both levels continuously create each other (for dialectical solutions of the structure-agency problem in social theory, see: Archer 1995, Bhaskar 1993, Bourdieu 1986, Fuchs 2003a, 2003b, Giddens 1984, Archer 1995).

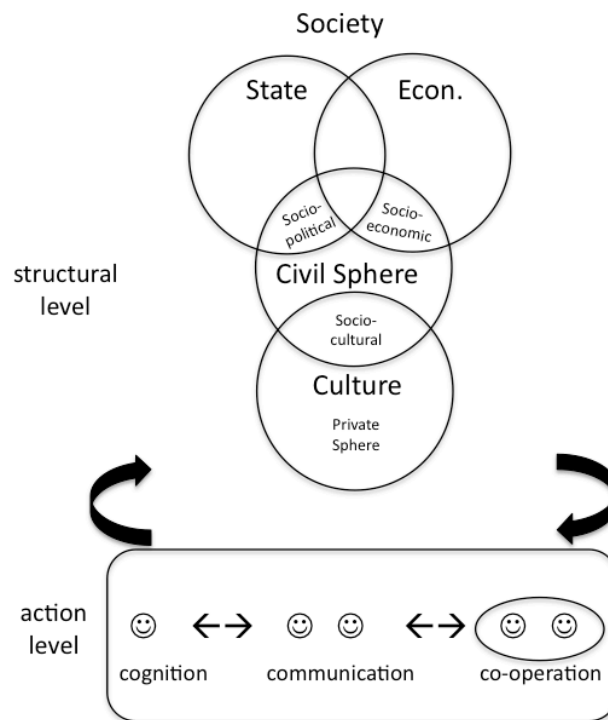


Figure 3: A model of modern society

Given that the topic of this paper is social media, the question arises how to locate the media more generally within a model of society. Media can be defined as structures that enable and constrain human information processes of cognition, communication and cooperation, which are practices that produce and reproduce informational structures. In modern society, media can be organized in different forms. Murdock (2011, 18) argues that the media can be organized within the capitalist economy, the state or civil society, which results in three different political economies of the media that are respectively based on commodities, public goods or gifts. In our model of society, civil society is made up of the socio-political, the socio-economic and the socio-cultural spheres, which corresponds to the three organizational forms of the media that Murdock identifies. Therefore we identify socio-political (organized by the state as public service media), socio-economic (organized by private companies as commercial media) and socio-cultural (organized by citizens and public interest groups as civil and alternative media) forms of the media. Although there are three organizational forms of the media, there is a specific political economy of the media realm that allocates resources to different media types to a different degree, generally putting civil-society media at a disadvantage, and favouring capitalist media organizations.

Based on the distinction of different spheres of modern society, we can discern various social roles that are part of the subsystems of modern society (see table 2).

Political roles citizen, politician, bureaucrat, political party member	Socio-political roles privacy advocates, electoral reform advocate, feminist activist, gay-rights activists, anti- racist advocate, youth movement advocate, peace movement activist, anti-penitentiary advocate, anti-psychiatry activist, non- governmental organisation member/activist, non-parliamentary political activist (student groups, non-parliamentary fascist groups, non- parliamentary leftist groups, etc)
Economic roles capital owner, entrepreneur, manager, employee, prosumer, self-employee	Socio-economic roles labour activist, union member, consumer pro- tectionists, environmental activist
Private roles lover, family member, friend, consumer, audience member, user	Socio-cultural roles sports group member, fan community mem- ber, parishioner, member of a sect or cult, pro- fessional organizations and associations, self- help groups, neighbourhood association, etc

Table 2: A typology of roles in modern society

Based on the theoretical models of the information process (section 2) and modern society (section 3), we can next characterise social media surveillance.

4. Social Media Surveillance

Defining social media surveillance requires an understanding of surveillance. Many existing definitions of surveillance stress on the one hand processes of information collection and processing, and on the other hand processes of shaping behaviours (controlling, managing, governing, supervising, influencing or regulating behaviours) (Fuchs 2011). Many existing definitions lack further theoretical grounding of the underlying social processes that are said to shape human behaviour. Surveillance in society involves the collection, storage, processing and assessment of data about humans or groups of humans by an actor in order to advance the latter's goals by violence exerted with the help of the collected information upon the humans under watch. Based on the works of Johan Galtung (1990), violence can be defined as "avoidable insults to basic human needs, and more generally to life, lowering the real level of needs satisfaction below what is potentially possible" (Galtung 1990, 292). Violence can according to Galtung be (1990) divided into three principal forms: direct violence (through physical intervention; an event), structural violence (through state or organizational mandate; a process), and cultural violence (dehumanizing or otherwise exclusionary representations; an invariance). These forms operate through the denial of four basic needs: survival needs (through killing and exploitation), well-

being needs (through maiming, sanctions, and exploitation), identity needs (through desocialization, resocialization and segmentation), and freedom needs (through repression, detention, expulsion, marginalization and fragmentation) (Galtung 1990). Surveillance gathers data about humans in order to exert actual or potential direct, structural, or cultural violence against individuals or groups. The violence involved in surveillance either operates as actual violence (e.g. in the case, where the Nazis used census data and calculating machine in order to determine who has Jewish origins and shall be deported and killed in the Nazi extermination camps, see Black 2012) or as the threat of violence in order to discipline humans behaviour (as e.g. when a company announces that it monitors its employee's Internet use in order to prevent Facebook use for private use during the work time). Both actual violence and threats of violence constitute violence: "Threats of violence are also violence" (Galtung 1990, 292).

Scholars have been aware of the privacy and surveillance implications of computing since quite some time and have in this context coined notions such as the new surveillance (Marx 1988, 2002), dataveillance (Clarke 1988, 1994), the electronic (super)panopticon (Poster 1990), electronic surveillance (Lyon 1994), digital surveillance (Graham and Wood 2007), the world-wide web of surveillance (Lyon 1998), or the digital enclosure (Andrejevic 2004, 2007). These discussions preceded the current ones that focus on social media surveillance.

The study of social media surveillance is due to the novelty of blogs and social networks like Facebook and Twitter a relatively young endeavour. Fuchs, Boersma, Albrechtslund and Sandoval (2012) identify qualities of Internet surveillance: it is global, can work in real time, can access stored data over a long time, is multimodal, traces social relations and networks, accesses personal characteristics and behaviour online, and tends to become ubiquitous. Trottier and Lyon (2012) describe features of social media surveillance based on these sites' reliance on social ties (peers render each other visible through a collaborative identity construction, personal information circulating between lateral ties provide unique surveillance opportunities, and social ties themselves become a kind of content) as well the dynamic nature of social media platforms (both interfaces and social media content are growing and mutating, and as a result information contained on social media can easily be applied to new contexts). Trottier also refers to mutual augmentation as a process in which "formerly discrete surveillance practices feed off each other through their prolonged engagement with [social media platforms, including] Facebook" (Trottier 2012, 156).

Based on the theoretical assumptions about the information process (the tripleC model introduced in section 2) and society (the model of modern society in section 3), we can describe social media surveillance based on social theory. Thus far, social theory foundations of social media surveillance have been missing in the literature.

Some constitutive features of social media like Facebook are the following:

Integrated sociality: Social media enable the convergence of the three modes of sociality (cognition, communication, cooperation) in an integrated sociality. This means for example on Facebook, an individual creates a multi-media content like a video on

the cognitive level, publishes it so that others can comment (the communicative level), and allows others to manipulate and remix the content, so that new content with multiple authorship can emerge. One step does not necessarily result in the next, but the technology has the potential to enable the combination of all three activities in one space. Facebook, by default, encourages the transition from one stage of sociality to the next, within the same social space.

Integrated roles: Social media like Facebook are based on the creation of personal profiles that describe the various roles of a human being's life. In contemporary modern society, different social roles tend to converge in various social spaces. The boundaries between public life and private life as well as the work place and the home have become fuzzy and liquid. As we have seen, Habermas identified systems (the economy, the state) and the lifeworld as central realms of modern society. The lifeworld can be further divided into culture and civil society. We act in different social roles in these spheres: for example as employees and consumers in the economic systems, as clients and citizens in the state system, as activists in the socio-political and socio-economic spheres, as lovers, consumers, or family members in the private sphere, or as fan community members, parishioners, professional association members, etc in the socio-cultural sphere (see table 2). A new form of liquid and porous sociality has emerged, in which we partly act in different social roles in the same social space. On social media like Facebook, we act in various roles, but all of these roles become mapped onto single profiles that are observed by different people that are associated with our different social roles. This means that social media like Facebook are social spaces, in which social roles tend to converge and become integrated in single profiles.

Integrated and converging surveillance on social media: On social media like Facebook, various social activities (cognition, communication, co-operation) in different social roles that belong to our behaviour in systems (economy, state) and the lifeworld (the private sphere, the socio-economic sphere, the socio-political sphere, the socio-cultural sphere) are mapped to single profiles. In this mapping process, data about a) social activities within b) social roles are generated. This means that a Facebook profile holds a1) personal data, a2) communicative data, a3) social network data/community data in relation to b1) private roles (friend, lover, relative, father, mother, child, etc.) b2) civic roles (socio-cultural roles as fan community members, neighbourhood association members, etc). b3) public roles (socio-economic and socio-political roles as activists and advocates), b4) systemic roles (in politics: voter, citizen, client, politician, bureaucrat, etc.; in the economy: worker, manager, owner, purchaser/consumer, etc.). The different social roles and activities tend to converge, as e.g. in the situation where the workplace is also a playground, where friendships and intimate relations are formed and dissolved and where spare time activities are conducted. This means that social media surveillance is an integrated form of surveillance, in which one finds surveillance of different (partly converging) activities in different partly converging social roles with the help of profiles that hold a complex networked multitude of data about humans.

Figure 4 visualizes the surveillance process on one single social media system (such as Facebook, etc). The total social media surveillance process is a combination and network of a multitude of such processes.

Social media surveillance makes use of monitoring converging social activities of humans in their converging social roles on social media platforms in order to exert actual or potential violence. Let us briefly come back to the two examples from the introduction: The UK police plans to expand social media surveillance in order to prevent online crime/terrorism and to catch actual criminals and terrorists. The idea is to monitor social media content and behavior in order to identify potential offenders so that their future behaviour can be prevented by disciplinary action on the part of the state and that actual offenders can be brought to trial. The basic idea is to use social media data in order to exert state violence against those who do not respect the rules set by existing laws, i.e. to limit the basic human need of free movement in space for those who offend these laws and to prevent criminal and terrorist behaviour by threatening potential offenders with the announcement that social media are monitored and misconduct will be punished by the violent actions of the state. In the case of the monitoring of employees' social media behaviour by employers, the basic idea is to gather data about social media use in order to prevent that employees exert the human need of information and communication with the help of Internet use during work time that is expected to be profit-generating time that benefits the company and to discipline employees by the threat of disciplinary action and the announcement that their online behaviour is being monitored. In both cases, social media surveillance conducted by the police and companies, there is the idea to gather data in order to discipline behaviour that is considered to violate set rules or to punish those who violate these rules. In both cases, violence shall be inflicted in order to defend existing norms. A crucial consequence of social media surveillance is that violence is not only inflicted on those who actually violate rules set by the state or companies, but that a large basis of personal data about citizens and employees is generated that can be used in various contexts for exerting violence against these groups. The actual data gathering for preventive and disciplinary means turns into a large surveillance machine that can harm humans in various contexts if the data is stored, known, analysed, assessed, networked, or if predictive analysis is performed based on it.

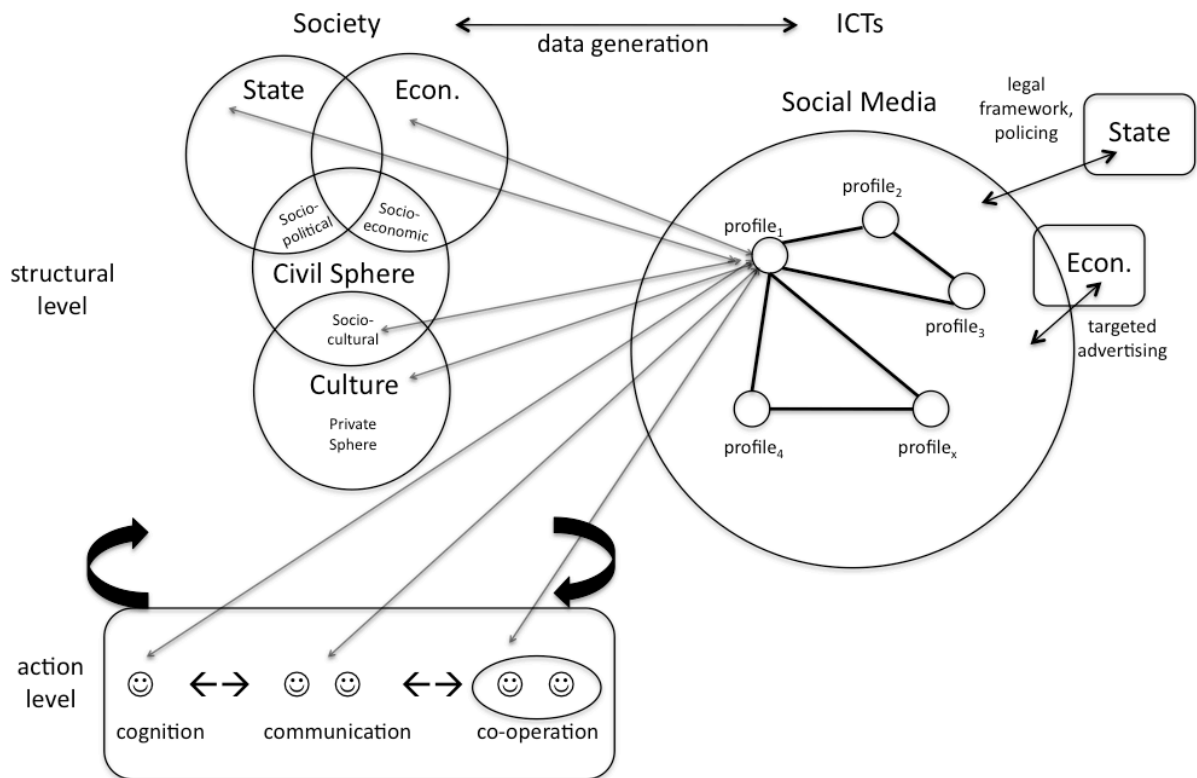


Figure 4: The process of social media surveillance

Social media is made up of voluntary and involuntary forms of exposure and information exchange. Users rely on social media for social and cultural life. These activities are made visible to social media companies like Facebook, and by extension to whomever these companies wish to sell this data.

Communication occurs within, but also across different social spheres. This is often voluntary, but surveillance underscores when information is obtained in a manner that is involuntary by the sender. One aspect of social media surveillance is the mutual augmentation of surveillance (Trottier 2012), which dictates that the coexistence of so many social actors on one media platform means that users will have access to so much more information from other social actors. Thus, any attempt to gather information will be augmented by the visibility of so many other social relations. Voluntary visibility augments involuntary visibility.

Surveillance of Internet users includes:

- surveillance of personal profile data,
- surveillance of produced content,
- surveillance of browsing and clicking behaviour,
- surveillance of social relations and networks,
- surveillance of communication.

Social media surveillance is a form of surveillance, in which different forms of sociality (cognition, communication, co-operation) converge as well as different social roles of individuals (in the economy, politics, and civil society) converge so that surveillance becomes a monitoring of different (partly converging) activities in different partly converging social roles with the help of profiles that hold a complex networked multitude of data about humans.

Social media surveillance is not only a process whose communication and information processes need to be theorized. Also its implications for society need to be further discussed, which is the goal of the next section.

5. Discussion: Categorical Suspicion, Social Sorting and Surveillance Creep - 3 Societal Implications of Social Media Surveillance

A first societal implication of surveillance has to do with the phenomenon of categorical suspicion. Categorical suspicion means that due to surveillance technologies "everyone becomes a reasonable target. The new forms of control are helping to create a society where everyone is guilty until proven innocent; technologies that permit continuous, rather than intermittent, monitoring encourage this" (Marx 1988, 219). After 9/11, surveillance has been intensified and as a result, contemporary "forms of surveillance, more than ever before, create categories of suspicion" (Lyon 2003, 10).

The focus on fighting and preventing terrorism and the creation of a culture of categorical suspicion is one of the societal contexts of social media surveillance. Social media contain a lot of data about personal interests and social relations. The police and secret services have therefore developed a special interest in being able to monitor social media usage. For example, the FBI has developed the idea of creating backdoors to social media and web-mail platforms that allows them to monitor all traffic as part of the so-called "Going Dark" programme (FBI: We need wiretap-ready Web sites - now. CNet. May 4th, 2012. http://news.cnet.com/8301-1009_3-57428067-83/fbi-we-need-wiretap-ready-web-sites-now/). The former FBI general counsel Valerie Caproni argued in this context that web-based " e-mail, social-networking sites, and peer-to-peer communications" have made it "increasingly unable" that intelligence agencies conduct wiretapping as they did in the past. Police surveillance of social media in the situation of post 9/11-categorical suspicion can easily result in the constant monitoring of social media activities of citizens and the police assumption that all users are actual or potential criminals and terrorists until proven innocent.

There is also the danger that social media surveillance conducted by the police is especially directed towards groups that already face discrimination in Western societies, like immigrants, people of colour, people of Arabic or African background, the poor, the unemployed, political activists and that thereby stereotypes and discrimination are deepened and reified.

A second societal implication of surveillance is the actual or potential fostering of social sorting as a specific form of discrimination. Oscar H. Gandy (1993) has in this context coined the notion of the panoptic sort. "The panoptic sort is a difference ma-

chine 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, 15). It is a system of power and disciplinary surveillance that identifies, classifies, and assesses (Gandy 1993, 15). David Lyon (2003b) considers Gandy’s notion of the panoptic sort in relation to computers and the Internet of surveillance as social sorting. “The surveillance system obtains personal and group data in order to classify people and populations according to varying criteria, to determine who should be targeted for special treatment, suspicion, eligibility, inclusion, access, and so on” (Lyon 2003b, 20).

In newer works, Gandy (2009) has pointed out the connection of social sorting and cumulative disadvantages: “Cumulative disadvantage refers to the ways in which historical disadvantages cumulate over time, and across categories of experience” (Gandy 2009, 12). Thus, membership in a targeted group, as well as other kinds of disadvantage, become a dominant factor in determining future negative social outcomes: “People who have bad luck in one area, are likely to suffer from bad luck in other areas as well” (Gandy 2009, 116).

This means that if by chance you have dark skin, are poor, live in a deprived, neighbourhood, have become unemployed or ill, etc, you are more likely to be discriminated and flagged as a risk group by data mining and other social sorting technologies. The arbitrary disadvantages an individual has suffered then cumulate and result in further disadvantages that are enforced by predictive algorithms that calculate that based on certain previous behaviour an individual is part of a risk group and should therefore be discriminated (by not being offered a service, being offered a lower quality service at a higher price (e.g. in the case of a loan or mortgage), by being considered as a criminal or terrorist, etc). “Once they have been identified as criminals, or even as potential criminals, poor people, and black people in particular, are systematically barred from the opportunities they might otherwise use to improve their status in life” (Gandy 2009, 141).

Social media profiles are a historical accumulation and storage of online behaviour and interests. Social media tend to never forget what users are doing online, but tend to keep profiles of personal data and provide thereby a foundation for the algorithmic or human analysis of who belongs to a so-called “risk group” and should be treated in a special way. Commercial social media surveillance uses specific data from social media profiles for targeting advertising and providing special offers. As a result, privileged groups tend to be treated differently than the poor and outcast. Another effect of commercial social media surveillance is that consumer culture and the fostering of a world that is based on the logic of commodities has become almost ubiquitous on the Internet. If state intelligence agencies get access to social media profile data and combine such data with state-administered records (such as databases covering crime, welfare and unemployment benefits, health records, etc), then discrimination based on cumulative disadvantages can be advanced. The quality of social media to cover and store data about various social roles and social activities that converge in

social media profiles, allows commercial and state surveillance to use social media data for advancing discrimination that is based on algorithmic profiling and predictions as well as the networking of data from various sources. Data collection on commercial social media is permanent, constant, totalizing, and works in real time and covers a lot of activities in various everyday social roles of billions of humans worldwide. The potentials for unfair treatment and racist, classist, sexist, or other forms of discrimination are thereby greatly enhanced.

Gary Marx has introduced the notion of the surveillance creep: “As powerful new surveillance tactics are developed, the range of their legitimate and illegitimate use is likely to spread. Where there is a way, there is often a will. There is the danger of an almost imperceptible surveillance creep. [...] The new forms of social control tend to be subtle, invisible, scattered, and involuntary. They are often not defined as surveillance, and many people, especially those born after 1960, are barely conscious of them” (Marx 1988, 2f). David Lyon argues that surveillance creep means “the expansion [of surveillance] into new domains of software or a surveillance system, and the ways that new functions are constantly found for surveillance technologies and practices” (Lyon 2007, 201).

Social media like Facebook tend to naturalize the idea of humans being under constant surveillance. It becomes a habitual behaviour of social media users to make parts of their profiles and content visible to the public and to laterally observe what others or doing and posting. Publicity is part of the attraction of social media. Many users accept permanent commercial surveillance that is needed for targeted advertising in return for “free” social media services. Users of commercial social media become acquainted to the idea of being under surveillance. The consequences of this circumstance for their attitudes towards surveillance are largely unknown.

Commercial social media, just like e.g. location-based services on mobile phones, the prevalence of CCTV in public spaces, surveillance as entertainment in popular culture (reality TV, paparazzi journalism, etc) or security checks as entrance conditions to transportation, are practices of surveillance creep in everyday life. The effect is that contemporary society tends to become ever more controlled by commercial enterprise and the logic of policing and law & order. As more and more social life is represented as content on social media, this content can become the foundation of the commodification/commercialization and the policification of society and everyday life.

6. Conclusion

Social media surveillance is a relatively new form of surveillance that is based on making visible the convergence of social roles and social activities to powerful institutions, especially companies and the state. As we spend more and more time online on social media, a lot of our everyday activities in different roles during a lot of our working and free time become accessible, traceable, analysable in real time to institutions with whom we not necessarily have a relationship of trust. The prevalent danger of the intensification and extension of surveillance via social media and other

technologies is that we create a society that is totalitarian in the double-sense of being a dictatorship of the market and capitalist logic as well as a state dictatorship. The logic of commercial surveillance and state surveillance in fact tend to interact. An example is the use of credit card data by the police for trying to locate terrorists. Ben-Hayes (2012) argues in this context that there is the emergence of a surveillance-industrial complex. The interlocking of state and commercial surveillance poses considerable threats for society.

We see two important implications of this analysis. First, we think that it is not just important to study communication and information processes on social media in any possible way, but we think that it is important to conduct such analyses in a critical way. We not only need Internet Studies and Social Media Studies, but we rather need Critical Internet Studies and Critical Social Media Studies (Fuchs and Dyer-Witford 2013). The surveillance implications of social media for society require us to give special attention to the power structures as well as actual and potential negative consequences of social media for society. We therefore hold that it is of utmost importance to foster research that uncovers how ICTs can harm humans in societal contexts of crisis, inequality and asymmetric power structures.

Second, we think that it is politically important that tendencies towards the creation of a totalitarian surveillance society are resisted and that movements and civil society groups that engage in this resistance are supported.

One example of such civil society action is the State of Surveillance project (<http://www.thebureauinvestigates.com/2011/12/01/the-state-of-surveillance-the-data/>) operated by Privacy International and the Bureau of Investigative Journalism that has published a database of companies that sell communications surveillance technologies. A related project is WikiLeaks' SpyFiles (<http://spyfiles.org/>) database that leaked documents that show how various companies from different countries engage in fostering the surveillance of the Internet, mobile phones, and location-based technologies. The Electronic Frontier Foundation operates a section on its website that documents problems of surveillance on social networking sites (<http://www.eff.org/issues/social-networks>). Austrian legal students have founded the initiative Europe vs. Facebook that has filed 22 complaints against privacy violations conducted by Facebook to the Irish Data Protection Commissioner (<http://europe-v-facebook.org/EN/en.html>). In 2008, the Canadian Internet Policy and Public Interest Clinic (CIPPIC) filed a complaint containing 22 alleged privacy violations against Facebook to the Office of the Privacy Commissioner of Canada (<http://cippic.ca/en/news/339/54/CIPPIC-files-privacy-complaint-against-Facebook>). There are also alternative social media projects that try to establish a surveillance-free, privacy-respecting, non-commercial Internet. Examples include the social networking site projects Diaspora (<https://joindiaspora.com/>), the Global Square (<http://theglobalsquare.org/>), N-1 (<https://n-1.cc>).

New forms of social media and Internet surveillance are constantly evolving. It is therefore necessary to continue to study these developments in a critical way, to foster the institutional conditions for conducting Critical Social Media Studies, and to

ensure the diffusion of such critical knowledge into the sphere of civil society and activism that tries to bring about political change that prevents the emergence of a totalitarian surveillance society and to foster the use of ICTs in ways that advance the establishment of a participatory, sustainable, and equitable information society.

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