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Article

Situated Surveillance: an ethnographic study of fisheries inspection in Denmark

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Abstract

Drawing inspiration from Science and Technology Studies (STS), this article develops an understanding of surveillance as a situated activity. Thus, concepts developed by feminist, Donna Haraway, and actor-network theorist, Bruno Latour, are used to establish an analytic attitude in which the 'situatedness' of vision and technologies is seen as a salient feature of surveillance. Empirically, the article examines how surveillance on a Danish fisheries inspection ship is situated in a specific way. This example depicts surveillance as fragile, limited, and partial, and as an ongoing and sometimes difficult achievement, which involves the work of many different actors. It shows how friction and resistance can be part of surveillance processes, and it questions the clear distinction between 'the observer' and 'the observed'. Finally, it shows how, in this instance, surveillance is not only a matter of control, but also of care. The notion of situated surveillance makes the development of overly general conceptions of surveillance (e.g. some interpretations of the Panopticon) problematic. Thus, it urges the researcher to study surveillance empirically, in specific settings.

Introduction

In this article, we develop an understanding of surveillance as a situated activity. This has been inspired by Science and Technology Studies (STS), and carried out through an empirical study of Danish fisheries inspection. The background to our attempt to 'situate' surveillance is the observation that surveillance has become extremely difficult to define. Apparently, surveillance is at work in every corner of daily life, and involves a wide variety of actors and technologies. For example, surveillance cameras are not only to be found on the walls of buildings, but also in the hands of ordinary citizens, documenting both remarkable and unremarkable events with mobile phone cameras (Koskela 2009). Thus, it has, according to Kevin Haggerty, 'become profoundly difficult to say anything about surveillance that is generally true across all, or even most, instances' (Haggerty 2006, 39).

The recognition of surveillance as an ambiguous phenomenon with many facets is, in many instances, developed as part of the critique of the Panopticon. Originally developed by Bentham, but made famous by Foucault (1991a), the Panopticon is a dominant presence in surveillance studies. However, to some the Panopticon has become a 'straightjacket' (Aas et al. 2009), leading to the suggestion that the walls of the Panopticon are (metaphorically) 'torn down' (Haggerty 2006). Thus, many scholars of surveillance are looking for fresh theories, and this is done to an extent that makes Koskela state that 'post-Foucauldian thinking is changing the paradigm of surveillance studies' (Koskela 2009, 150).

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This article does not contribute directly to the discussion about how the Panopticon can serve as a valuable theoretical source. But it is based on the observation that many participants in the discussion of the theory of surveillance studies seem to share a sense of uneasiness with 'the prospect of developing a model of surveillance that can be usefully generalized to all or even a considerable number of surveillance contexts' (Haggerty 2006, 39). Thus, situated surveillance is based on the insight that it is unproductive to define 'the nature' of surveillance in general terms. Instead, it is through empirical investigation that specific instances of surveillance are understood.

In the first part of the article, we develop the understanding of surveillance as a situated activity, by drawing on Donna Haraway's concept of situated knowledge (Haraway 1988), and Bruno Latour's notion of the oligopticon (Latour 2005; Latour and Hermant 2006). This focus on situatedness implies a certain analytical 'attitude', which we, inspired by Michel Callon (1986), label 'theoretical agnosticism'.

In the second part of the article, we report on a field study of surveillance, which was carried out with this attitude. The study concerns surveillance in relation to Danish fisheries inspection. Fieldwork aboard the inspection ship, *Vestkysten*, shows how, in this context, surveillance requires demanding work, carried out by both humans and technologies. The result is not an effective, smooth-running surveillance machine, but a fragile situation where it is often difficult to distinguish between 'the observer' and 'the observed'. Fisheries inspection is characterized by friction and resistance, and the precise effect of the control activities is hard to pinpoint. At the same time, crew-members stress that their work should not be seen as being solely about control; care is of almost equal importance.

In the closing discussion, we contrast the concept of situated surveillance with an ideal typical (in the sense of Max Weber) reading of the Panopticon, which attributes various general characteristics to surveillance, as well as a certain moral stance towards surveillance as such (Murakami Wood 2007). Situated surveillance challenges such an attribution of general characteristics. In fact, acknowledging that surveillance is situated implies recognizing that theoretical concepts are unable to convey the 'essence' of specific surveillance situations. To discover what surveillance is 'really' about, the researcher must allow him-/herself to be surprised and appreciative of the diverse relations, phenomena, and effects that are immanent in surveillance situations. Theoretical concepts that the researcher invoke should thus not be allowed to foreclose investigation but instead they should be used to support an open-ended research endeavour.

Theoretical agnosticism, vision, and oligoptica

In certain strands of Science and Technology Studies (STS), especially in actor-network theory (ANT) (Latour 1987, 2005; Law 2004; Law and Hassard 1999) and some versions of feminist STS (Haraway 1991, 1997), it has been argued that researchers must approach their topic *as practice*, and hence conceptualize their field of inquiry ethnographically from 'within'. This 'turn to practice' in STS is an attempt to confront the 'craving for generality' (Lynch 1997), which characterizes much academic work. In short, this craving is based on the assumption that concepts developed in one setting can be extrapolated to (all) other cases. For instance, while a somewhat generalized notion of gender can indeed inform research of gender in practice (and may even be a necessary point of departure), the argument in STS is that such a pre-conceptualization should not pre-empt the analysis of *how* gender is performed in specific settings.

Donna Haraway and Bruno Latour have both contributed to the discussion of how and on what terms it is possible to do research in such an open-ended manner. The result has been the development of a certain analytical attitude or disposition in STS (Jensen 2004; Gad and Jensen 2009), which has been named 'theoretical agnosticism' (Callon 1986). This is a call for the researcher to be careful not to draw hasty conclusions, and to be uncertain about the appropriateness of the theoretical explanations *before* a topic is

investigated empirically. Relations between theoretical concepts and empirical matters should be negotiated in the analysis, and established slowly in each specific case.

With theoretical agnosticism as its analytical strategy, this paper draws on two fundamental theoretical insights from Haraway's and Latour's work. The first is the understanding of vision as always limited, situated, and constituted in specific ways. In this light, the all-encompassing vision, implied, for example, in the Orwellian notion of *Big Brother*, is unachievable. The second is that not only humans, but also technologies are active participants in constituting surveillance situations. It is therefore necessary to include humans, as well as non-humans, in the scope of the analysis.

Haraway (1988) argues that vision is always part of a specific bodily apparatus, a specific cultural and material setting, etc. This opposes the idea that it is possible for an observer to obtain a position from which he/she can see everything. The observer will always be enabled as well as limited by his or her body, technologies, position, relations etc. Haraway refers to the idea that it is possible to attain an all-encompassing vision as the 'god trick' (Haraway 1988, 134). This expression denotes attempts in science to achieve objectivity by enforcing an extreme detachment from the world. However, according to Haraway, this is a rhetorical move, which is also authoritarian, because in practice it is impossible to achieve such a position. The researcher's view is *in* and *of* the world, and does not soar above it.

The god trick is the result of the Cartesian fallacy of believing that a clear distinction can be made between an autonomous, ethereal subject, and a passive, observable world. With a touch of irony, Haraway notes that Max Headroom, a fictional, computer manipulated character, who was the star of a late 1980s television show, is the only one to successfully perform the god trick. Not unlike Orwell's Big Brother, Max Headroom is an instantiation of the Cartesian subject. He has no body, he is nobody in particular, and, therefore, 'he alone sees everything' (Haraway 1988). According to Haraway, it is necessary to stop idealizing the impossible position of the Cartesian subject. Instead, we should 'insist on the embodied nature of all vision and so reclaim the sensory system that has been used to signify a leap out of the marked body into a conquering gaze from nowhere' (Haraway 1988, 581). There is no non-situated vision.

The focus on 'situatedness' leads to an interest in how vision and knowledge are produced in specific arrangements of humans and technologies. The world is not simply there, ready-made and waiting for neutral observation. It is through the cooperative work of both humans and nonhumans that reality emerges (also see Pickering 1995). It is also because of such interactions, that the world is visible in certain ways, and not in others. Technology thus plays an important part in the production of vision. In Haraway's view, however, technology is neither part of a larger force depriving humans their dignity, nor is it only a prosthetic tool with which people 'can do anything' (Strathern 1996). Technologies are reconfiguring devices that participate in the construction and reconstruction of situations. They are 'ways of life, social orders, practices of visualization' (Haraway 1988, 587). This means that it is through specific arrangements and apparatuses that surveillance situations are established. The observer cannot get 'the big picture', but only specific, partial, and framed versions of reality.

Latour's concept of the 'oligopticon' is compatible with the argument outlined above. The concept is at least partially developed in a critical dialogue about the Panopticon, "oligoptica […] do exactly the opposite of panoptica: they see much too little to feed the megalomania of the inspector or the paranoia of the inspected, but what they see they see it well" (Latour 2005, 181). In contrast to the Panopticon, the observer in an oligopticon has only a limited view. 'From oligoptica, sturdy but extremely narrow views of the (connected) holes are made possible' but 'the tiniest bug can blind oligoptica'. Thus, an oligopticon is a fragile construction that allows detailed observation, but only within a narrow framework. It involves the use of maps, documents, and computer programs, and is dependent on such technologies; if a map is changed, the vision also changes.

In 'Paris: Invisible City' (2006), Latour and Emilie Hermant investigate various oligoptic sites. One is the office of Mrs. Baysal, who plans and coordinates the lectures at a university. From her office window, she cannot see the lecture rooms. However, by looking at charts and large sheets of paper, she is able to obtain knowledge about the lecture halls, and manipulate activities, even though she never attends lectures. Hence, it is only in a specific and limited, yet effective, sense that Mrs. Baysal oversees all the lecture halls. Her knowledge depends on 'inscriptions': The school is inscribed in charts, which must correlate to the numbers on the signposts at the lecture halls. '[T]o see the entire school it is necessary first to inscribe it, then to circulate it and finally to make it correspond to some signpost' (Latour and Hermant 2006). Surveillance is thus limited, and dependent on the production of relevant relations between chains of actors.

From the concept of oligopticon, it follows that surveillance is an 'event' that only succeeds if a plethora of specific devices – for example, paper, charts, computer programs etc. – act together. From this perspective, the surveillance analyst should not necessarily look for an observer gazing out the window, but rather for the bureaucrat located in his office, behind piles of papers and other inscriptions.

Both Haraway and Latour encourage empirical inquiries into how particular surveillance situations are produced. The analyst should ask specific questions about the actors involved, and their activities: 'In which building? In which bureau? Through which corridor is it accessible? Which colleagues has it been read to? How was it compiled?' (Latour and Hermant 2006). However, this situatedness does not imply a kind of localism, where situations are seen as separate from one another. Instead, it implies that surveillance situations emerge as both events and as distributed activities involving the coordination, timing, and cooperation of a range of actors, which often operate across different sites.

Surveillance at sea

The fieldwork reported in the following sections was carried out by one of the authors, aboard the Danish fisheries inspection ship, *Vestkysten* ('The West Coast'). The ship is 49.9 metres long, and contains a crew of 9 to 10 men, including the captain, one or two mates, two marine engineers, a cook, and the ship's assistants. The main task of the ship is fisheries inspection at sea, but the ship is also part of the Danish national rescue service. The fieldwork was carried out with the analytical attitude of theoretical agnosticism, and the concepts of Haraway and Latour as background. It involved participatory observation (Flick 2002) for five weeks, as well as semi-structured interviews (Kvale 1996) with members of the crew. In addition, documents, notably Internet sites and evaluation reports, were studied.

Fisheries inspection presents a broad field for studying surveillance. Since Denmark joined the EU in 1973, Danish fisheries have become highly regulated, with quotas, rules governing equipment, landing and registering catches, licensing, and much more. An important goal of *Vestkysten* is to ensure that fishermen comply with these regulations.

During the last decade, the surveillance capabilities of *Vestkysten* have changed significantly. Today, the ship has Internet access through a satellite connection, which enables the crew to send and receive messages about inspection plans, new legislation, etc. When conducting surveillance operations, two IT systems are especially important. The 'Fisheries System' is a database that contains information about vessels, records of catches, personal details about fishermen, information about licences, observed vessels, law-breakers, etc. Inspectors use this system when deciding which boats to inspect, and what to look for on a boarded vessel.

The other system is the Vessel Monitoring System (VMS). It was introduced in 1999, as the result of an initiative from the EU that commits member states to inspection of their fishing fleets by means of information technologies. By 2005, all Danish fishing vessels longer than 15 metres were encompassed by this initiative. Technically, the VMS consists of a transceiver and an aerial installed on-board each fishing vessel. The transceiver is connected to a GPS system, and sends information about position, course, and

speed to a satellite controlled by the International Maritime Satellite Organization (INMARSAT). The satellite then sends the information to a communication centre in Holland, which in turn distributes the information to the fisheries directorates of the member states. From the Danish directorate, information is sent to *Vestkysten.* At present, member states (and hence *Vestkysten*) receive information about two kinds of vessels: Vessels sailing under their home flag in any maritime territory, and foreign vessels operating in their home territory. The frequency of the signals can be set individually for each fishing boat. In Denmark, the standard is once every hour, partly because INMARSAT charges for the signal. If a vessel is under suspicion, and more precise information about its movements is needed, the inspectors can increase the frequency. This happens, for example, if a ship is suspected of quota jumping, which means that it is registering fish caught in one zone as caught in another.

Aboard *Vestkysten*, the information about fishing vessels from the two systems is accessible on a PC on the bridge. Through an application called V-Track, the whereabouts, speeds, and courses of fishing vessels are visualized. Inspectors will open V-Track several times a day, in order to decide where to go. In making this decision, they tend to look for clusters of ships, so that more boardings can be carried out. In addition to information about the actual positions, courses, and speeds of vessels, inspectors are able to track the historical movements of a vessel. They can also retrieve information about the state of the transceiver on a vessel. If, for instance, the transceiver has been turned off, which is a sign of misconduct, this information is automatically stored in the VMS, and can be displayed in V-Track. Furthermore, inspectors can access information about previous sightings of a vessel, which are registered in the system by *Vestkysten*, the land-based inspection, and other inspection ships. Information about any previous illegalities, quotas, licences, and more, will also be available. In principle, then, the inspectors have access to the whereabouts of any vessel, and they can harvest a range of information about each individual vessel.

Working to establish surveillance

The above depicts an ideal situation, where things work as they should, and information flows smoothly through the system. However, this is almost never the case. At one point, for example, *Vestkysten's* satellite connection broke down, and the inspectors struggled to do their job. Since the IT systems were useless, the inspectors started to improvise. Other resources were drawn upon: the inspectors' knowledge of preferred fishing locations became useful, calls were made to The Danish Directorate and hard copies of documents on-board were examined. The inspectors were able to handle the situation, but it required a lot of improvisation, and the captain complained: 'We are sailing blindfolded. We are lucky if we bump into any [fishing vessels] at all'. They did 'bump into' several ships, but this did not satisfy the captain, as establishing a *relevant* vision was very difficult, as long as the Fisheries System was unavailable. The captain further complained: 'We cannot gather the information we need in order to inspect, before the fishing boat is way astern'. On that day it was neither easy to decide where to inspect, nor what to look for. This remained the case over the following days, until the satellite connection was re-established.

What is made clear in this example is that surveillance is the result of situated, cooperative work that involves both humans and nonhumans. Effective surveillance is not established by an individual actor, but is accomplished by a network. The various members of this network have to be coordinated, in order for inspectors to observe anything meaningful. Establishing surveillance is thus an achievement in which neither *Vestkysten* nor the Danish government controls all the humans and nonhumans involved.

It becomes obvious that surveillance is an achievement, in a situation where the system breaks down, but work is also required in situations where the system works 'properly' (although inspectors complain that this is never really the case, since the satellite connection and the Fisheries System respond very slowly). Decisions have to be made continuously, regarding where to go and what to inspect. These decisions are based on the expertise of fisheries inspectors in cooperation with V-Track. But fishing vessels are also on the move, and since it can take hours to reach a destination, there is no guarantee of finding anyone on arrival. Therefore, it is most often first when fishing boats are directly observed at sea, that inspectors start to attend to the Fisheries System, in order to decide what to look for during boarding. In this process, they often consult the rather complicated fishing laws, which are regularly changed and updated. However,

because personnel are limited, and work is also necessary to navigate the ship, a final decision is often not reached before actually boarding a vessel. Aboard, more improvisation and coordination must take place. Establishing surveillance thus draws on a range of different resources that must be coordinated within a certain timeframe.

Friction

As illustrated above, it takes work to carry out surveillance. This work seldom proceeds without interruptions and problems or, as we call it, 'friction'. One example of this is related to legislation. There are limitations to the information provided by V-Track, about what a ship is doing. Only its movements and speed can be seen at a glance. Suspicions might be aroused when a ship is seen crossing back and forth over the border between two fisheries zones, since such conduct might indicate quota-jumping. However, in order to establish a legal case, it is necessary for *Vestkysten* to be located at the same spot as the fishing vessel, and actually witness the act. The pattern of movement is not sufficient evidence. Thus, surveillance must be done in the right way, and in the right place, in order to be effective. However, if *Vestkysten* is located very close to the fishing vessel, it is unlikely that any illegal activities would be attempted.

Trying to determine whether a ship is carrying illegal fish is another example of a situation that generates friction. It requires a tremendous effort to measure how many fish of different species there are in a cargo hold. Boxes of fish are piled on top of each other in a tiny space. This is not a situation of total visibility. In fact, inspectors can only make qualified estimates. In principle, inspectors could count all the fish, but this would restrict their control to one particular ship for a very long time.

A final example of friction relates to the weather. Before sailing, inspectors will look at the weather forecast. This is not because *Vestkysten* cannot sail in bad weather. However, boarding a fishing vessel requires a small boat to be launched from *Vestkysten,* and in bad weather, this is not considered worth the risk. In these situations, the ship will most often stay in harbour.

Resistance

Before the VMS was introduced, fishermen were sceptical. In the opinion of many, the profession should remain minimally regulated. According to a secretary from The Danish Directorate of Fisheries, fishermen argued that their privacy – and even their psychological well-being – was at stake, if the VMS were to be introduced. Fishermen worried that the system would be like a camera, filming their cargo holds. However, their uneasiness evaporated as the system was implemented. This could be interpreted as a successful implementation of a surveillance technology that only becomes more effective as it is integrated into everyday life. A more likely interpretation, however, is that the fishermen discovered that they were not dealing with an effective surveillance machine, but with a fragile oligopticon that can be bypassed and resisted. For example, fishermen sometimes cover the aerial connected to the VMS with metal buckets. They thereby block the signal, and become invisible to the inspectors. This innovative strategy only raises suspicion if it becomes a recognizable pattern in the VMS data that inspectors can access. Thus, the VMS has not turned out to be quite what the fishermen feared. Rather, the surveillance that is established is much more fragile and limited in its scope.

Who is surveilled?

In the description above, reified roles have been assigned to the fishermen and the inspectors. The former are under surveillance, the latter carry out surveillance. But this picture is too simplistic: Fishermen also keep inspection ships under surveillance. They talk to each other over scrambled radio frequencies, and warn each other, if an inspection ship is approaching. *Vestkysten* cannot sneak up on fishermen at sea, where everybody can see one another equally well most of the time. This means that in most cases, fishermen have time to update their logbooks, and rid themselves of illegal equipment and catch, before *Vestkysten* reaches their position. The inspectors acknowledge that they are not invisible, but state that their main role is preventive. In fact, they try to enhance the preventive effect, by leaving on their transponder signal, which allows other ships to access the position, name, and other information about the

ship. However, no one knows how extensive the preventive effect really is. *Vestkysten* needs to continuously render itself visible, and the fishermen still have plenty of time to react.

As part of their work, inspectors continually register information about boardings, observations, and more, in several IT systems. One reason for this is that the Directorate uses the registrations to observe the performance of *Vestkysten*. For instance, the number of boardings has become an indicator in the assessment of the quality of the inspection work. Although carrying out many boardings might seem good, it is obvious that the indicator leads to 'constitutive effects' (Dahler-Larsen 2007). The inspectors are not only observing fishing, but also their own performance, according to the indicators. So, while the IT systems help to expand surveillance, registering the number of boardings is an inducement to make less thorough inspections, and thus, to reduce the effectiveness of surveillance of the fishing vessels.

Care or control?

Fisheries inspectors identity with fishermen, being seamen. The freedom that can be experienced at sea is an important component in this identity formation. Inspectors know very well that they participate in restricting and managing the freedom of others. Not that many years ago, rescue service took most of their time, and fishermen depended on their presence for safety reasons. Today, almost all the work is related to inspection. Thus, inspectors sometimes find that they have become 'bad cops' rather than the 'heroes' or 'helpers' they used to be. However, they still see care as an important part of their work. Some inspectors argue that what is really at stake in inspection work is the well-being of fish and fish stocks, and that they are employed by the state, which has a responsibility to care about the environment.

That surveillance is related to care was also highlighted in a situation where the inspectors overheard an argument between a Danish and a Dutch trawler, and found that the fishermen had great difficulty understanding each other. The problem was that one had damaged the trawl of the other. Since *Vestkysten* happened to be nearby, they sailed to the scene and acted as arbiters. In this situation, the inspectors were happy to step out of their role of controller, and act as 'helpers', resolving the disagreement.

Related to the issue of care is also the fact that inspectors share the sensibility common among seafarers, that a ship is both a workplace and a home. The border between private and public is blurred at sea. Therefore, boarding is in most cases done with care and respect.

Discussion

Situated surveillance differs in many ways from the Orwellian understanding of a totalitarian and effective surveillance machine, controlled by Big Brother. This understanding is often visible in public discussions in the media, where it evokes a rather frightening picture of surveillance. References to Orwell are much less frequent within surveillance studies (however, see Rule 1974; Lyon 2001), yet it is interesting that one of the dominant concepts within this field, the Panopticon, has been interpreted in ways that bear some resemblance to Orwell's Big Brother (Simon 2005). As many doubtless know, the concept of the Panopticon was originally developed by the Bentham brothers in the eighteenth century (Boyne 2000). It is through Foucault's (1991a) famous analysis that most students of surveillance have become familiar with the concept, but how this analysis should be interpreted is highly debated within surveillance studies (e.g. Murakami Wood 2007; Aas et al. 2009). Although the panoptic principle was meant to be applicable to a wide range of institutions, it is perhaps best known as a model of a prison. An inspection structure is placed at the centre of the Panopticon, and from there, it is possible to see the prisoners, while the observer remains hidden. This implies that the inmates must assume that they are constantly under surveillance, and act accordingly. It is from this assumption that the Panopticon draws its disciplining power. In short, the Panopticon is an architectural principle that was meant to inculcate discipline in all subjects.

Elaborating on Simon's (2005) analysis, it is possible to note an ideal typical reading of the Panopticon, which stresses the following:

- Surveillance is related to a situation of *total visibility*. It follows that a surveillance society is transparent, and everything is visible.
- Surveillance is conceived as operating from *a centre*. From the inspection structure, the guard oversees the powerless actors at the periphery.
- Surveillance seems to be *a smooth and almost automatic process*. The technologies are already in place, they work, and we hear neither of breakdowns nor of surveillance operators maintaining the apparatuses.
- Surveillance is so effective, that resistance is almost hopeless. The inmate of a panoptic prison has no choices, and is forced to obey.

Seen through the lens of this ideal type, our account of situated surveillance and fisheries inspection seems to almost negate the panoptic principle. First, our account highlights the partial and limited nature of surveillance. As Haraway notes, the position of the 'god-eye' is unachievable. Secondly, surveillance is the result of distributed work. As such, it is not carried out by a powerful actor placed at the centre or at the top of a hierarchy. Thirdly, surveillance is not a smooth-running and automatic process. Rather, it takes work and involves friction. Finally, surveillance is a fragile construct, and can easily involve resistance from creative actors.

The interpretation of the Panopticon outlined above can be taken to contain firm and general knowledge about what surveillance is, how it is carried out, and to what effect. Furthermore, it furthers a certain moral stance towards surveillance as such, because it relates surveillance to totalitarian control. When working with situated surveillance as a starting point, one cannot exclude the possibility that surveillance situations may, in some instances, exhibit these characteristics. But this must be determined through an empirical investigation – the matter cannot be resolved theoretically. However, this should not lead to the conclusion that the Panopticon should be excluded from surveillance studies. In fact, it may be possible to draw interesting parallels between situated surveillance and other readings of the Panopticon, for example, those that draw on Foucault's work on governmentality (Foucault 1991b), and thereby stress the agency of other actors (Simon 2005, Haggerty 2006).

Situating surveillance strongly encourages researchers to explore surveillance in practice. What surveillance is, how it is carried out, and to what effect, are issues that must be investigated empirically. However, this does not require theoretical concepts to be abandoned (Blok and Jensen 2009). In fact, even more theory is necessary, if we wish to fully understand contemporary surveillance situations. Thus, in the words of David Murakami Wood, it is necessary that surveillance studies 'combine methodological advances from simple [Bentham-panoptic] genealogy with a continued refusal to allow moral assumption to predetermine analyses' (Murakami Wood 2007, 258). As we have attempted to demonstrate in this article, Science and Technology Studies seems to be a fruitful place to start, when addressing this challenge.

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References

Aas, Katja Franko, Helene Gundhus, and Heidi Mork Lomell. 2009. 'Introduction', in Aas, Katja Franko, Gundhus, Helene & Lomell, Heidi Mork (eds.) *Technologies of (in)security. Technologies of InSecurity. The Surveillance of Everyday Life.* Oxon: Routledge-Cavendish.

Blok, Anders, and Torben Elgaard Jensen. 2009. *Bruno Latour*. Copenhagen: Hans Reitzel.

Boyne, Roy. 2000. Post-Panopticism. *Economy and Society* 29(2): 285-307.

Callon, Michel. 1986. Some Elements of a Sociology of Translation – Domestication of the Scallops and Fishermen of St. Brieuc Bay. In *Power, Action, and Belief – A New Sociology of Knowledge*, ed. John Law, 196-233. London: Routledge and Kegan Paul Books.

Dahler-Larsen, Peter. 2007. Constitutive effects of performance indicator systems. In *Dilemmas of Engagement: Evaluation Development under New Public Management and the New Politics*, ed. Saville Kushner, 17-36. New York: Elsevier.
Flick, Uwe. 2002. *An Introduction to Qualitative Research*. London: Sage.
Foucault, Michel. 1991a. *Discipline and Punish: Birth of the Prison.* London: Penguin Books.
Foucault, Michel. 1991b. Governmentality. In *The Foucault Effect: Studies in Governmentality*, ed. Graham Burchell, Colin Gordon and Peter Miller, 87-104. Chicago: University of Chicago Press.
Gad, Christopher, and Casper Bruun Jensen. 2009. On the Consequences of Post-ANT. *Science Technology & Human Values* 34(6): (forthcoming).
Haggerty, Kevin D. 2006. Tear down the walls: on demolishing the panopticon. In *Theorizing Surveillance. The panopticon and beyond*, ed. David Lyon, 23-45. Portland: Willan Publishing.
Haggerty, Kevin D., and Richard V. Ericson. 2000. The surveillant assemblage. *British Journal of Sociology* 51(4): 605-22.
Haraway, Donna. 1988. Situated Knowledges: The Science Question in Feminism and the Privilege of the Partial Perspective. *Feminist Studies* 14(3): 575-599.
Haraway, Donna. 1991. *Simians, Cyborgs, and Women – The Reinvention of Nature*. New York: Routledge.
Haraway, Donna. 1997. *Modest_Witness@Second_Millennium. FemaleMan© Meets_OncoMouse™ – Feminism and Technoscience*. New York: Routledge.
Jensen, Casper Bruun. 2004. A non-humanist disposition: On performativity, practical ontology, and intervention. *Configurations* 12: 229-61.
Koskela, Hille 2009. Hijacking surveillance? The new moral landscapes of amateur photographing. In *Technologies of(in)security. Technologies of InSecurity. The Surveillance of Everyday Life*, ed. Katja Franko Aas, Helene Gundhus, and Heidi Mork Lomell. Oxon: Routledge-Cavendish.
Kvale, Steinar. 1996. *Interviews. An Introduction to Qualitative Research Interviewing*. Newbury Park: Sage.
Latour, Bruno.1987. *Science in action*. Cambridge, Mass.: Harvard University Press.
Latour, Bruno. 2005. *Reassembling the Social. An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
Latour, Bruno, and Emilie Hermant. 2006. Paris: Invisible City. http://www.bruno-latour.fr/livres/viii_paris-city-gb.pdf
Law, John. 2004. *After Method - mess in social science research*. London: Routledge.
Law, John, and John Hassard, eds. 1999. *Actor Network Theory and After*. Oxford: Blackwell.
Lynch, Michael. 1997. Theorizing Practice. *Human Studies* 20: 335-44.
Lyon, David. 2001. Facing the future: Seeking ethics for everyday surveillance. *Ethics and Information Technology* 3: 171-81.
Murakami Wood, David. 2007. Beyond the Panopticon? Foucault and Surveillance Studies. In *Space, Knowledge and Power – Foucault and Geography*, ed. Jeremy W. Crampton and Stuart Elden, 245-265. Hampshire: Ashgate.
Pickering, Andrew. 1995. *The Mangle of Practice: Time, Agency, and Science*. Chicago: The University of Chicago Press.
Rule, James B. 1974. *Private Lives and Public Surveillance: Social Control in the Computer Age*. New York: Schocken Books.
Simon, Bart. 2005. The Return of Panopticism: Supervision, Subjection and the New Surveillance. *Surveillance and Society* 3 (1):1-20.
Strathern, Marilyn. 1996. Enabling Identity? Biology, Choice and the New Reproductive Technologies. In *Questions of Cultural Identity*, ed. Stuart Hall & Paul Du Gay, 37-52. London: Sage Publications.