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Abstract

The article describes how CCTV has evolved in Denmark from 1954, where it is first mentioned in a specialist journal, to 1982, where legislation is passed that regulates how CCTV can be used and by whom. The article identifies four technological frames in which CCTV is placed in the period. Three of these are ‘use-directed’ as they point to various ways of using CCTV and identify certain advantages and obstacles for this use. These three frames are ‘CCTV in industries’, ‘CCTV in traffic’, and ‘CCTV in security practices’. The fourth technological frame is critical towards using CCTV; it fears that the relationship between citizens and state is hampered and that the privacy of citizens is at risk. This technological frame is labelled ‘CCTV as a democratic threat’. The article shows how there have been various controversies between the different interpretations of CCTV. Thus, CCTV in Denmark has not evolved through linear and uncontested progression; in fact, CCTV has been at the centre of several controversies in which surveillance practices have been negotiated and regulated.

Introduction

There is extensive literature on closed-circuit television (CCTV). Some of this consists of efficacy studies, where statistical calculations are used to settle the question of whether or not CCTV is able to prevent crime (Welsh and Farrington 2008). Other parts draw on sociology and criminology to investigate how CCTV is perceived by the public (Ditton 2000), how work is carried out by CCTV operators (Norris and Armstrong 1999), and how CCTV affects the work of the police (Goold 2004). When this literature is considered, it is surprising how little work has been devoted to the history of CCTV (Kammerer 2009). There are important exceptions. Williams et al. (2009) have described how the police filmed street betting in the English town of Chesterfield in 1935, and Kammerer (2009) has analyzed the history of police use of traffic cameras in Germany from the 1950s onward. The following is an attempt to continue the path carved out by these interesting works, but whereas both Williams and Kammerer focus on a single institution, that is, the police, our interest is in following CCTV as it has appeared in various contexts over time (Norris et al. 2002).

This article describes how CCTV has evolved in Denmark from 1954, when it is first mentioned in a specialist journal, to 1982, when legislation was passed that regulated how CCTV may be used, and by whom. In this period, CCTV developed from having a very limited use to a deeper integration, first, into industrial settings, then traffic surveillance, and finally, security practices.

The first section of this article presents our theoretical starting point in socio-historical technology studies and in particular the concept of technological frames. The second section presents the earliest examples of CCTV in Denmark that we have been able to find, and covers the time span from 1954 to 1960. The second section presents a controversy from 1961, when the police wanted to put up cameras on a street in a Danish town, but were turned down by the local authorities. The third section shows how the use of CCTV through the 1960s and 1970s was seen as a relevant practice in an increasing number of areas. The fourth section is devoted to another controversy, this time over the private use of CCTV on a public shopping street in the town of Hobro, in 1980. This case initiated a political and public debate, and resulted in the first legislation regulating the use of CCTV in Denmark (Blume 2008). The article ends with a discussion in which we briefly relate the development of CCTV in Denmark to the concept of surveillance creep, and present a call for more historical studies of CCTV and surveillance technologies in general.

Investigating the history of CCTV

This article is based on several insights from constructivist approaches to technology, or what Bijker (1995) calls ‘socio-historical technology studies’. One is the notion of multi-directionality, which may be seen as a warning against writing the history of technology as linear progression (Pinch and Bijker 1987). Instead, the history of a technology also includes trajectories that may not be obvious today, but are nevertheless important for understanding how the technology evolved. Therefore, the historian should not pay attention only to situations where a technology was successfully developed and integrated into various practices, but also to the ‘failures’, where the technology was deemed useless or unprofitable (Latour 2002). Also, it is argued that the meaning of a given technology is not inherent to the technology, but depends on the socio-technical circumstances in which it is placed. Bijker (1997) develops this insight in relation to the concept of technological frames, an analytical concept indicating the resources actors use when interpreting and using the technology. Bijker mentions—among other things—goals, key problems, problem-solving strategies, current theories, and exemplary artefacts as examples of elements in a technological frame. When actors are confronted with a new technology, they will draw on these resources, but as the technology is put to use, the elements will change and, eventually, completely new frames will be constructed.

In our study we have identified four technological frames. Three of these are ‘use-directed’, as they identify various ways of using CCTV, and indicate certain advantages and obstacles to these uses. These three frames are CCTV in industry, CCTV in traffic, and CCTV in security practices. The fourth technological frame is critical of the use of CCTV and is built on the belief that the privacy of citizens is at risk. We call this technological frame ‘CCTV as a democratic threat’. As will become clear, there have been various controversies related to the different interpretations of CCTV in Denmark, and it has not evolved in a linear and uncontested progression. In fact, CCTV has been at the centre of several controversies in which surveillance practices have been negotiated and regulated.

Finding relevant material has not been an easy task. One obvious problem is that there is no single archive where information on CCTV is stored. Thus, we have manually searched through major newspapers (using the national newspaper index (*Avis Kronik Index*)) and trade journals (*Politi Bladet*, *Dansk Vejtidskrift* and *Ingeniøren*). We have also visited a range of archives (local historical archives, police archives, the archive at the Danish Road Directorate, The Danish State archive, and the library of the Danish Parliament). Additionally, we conducted qualitative interviews with three persons with experience of using CCTV in its early days. Frede Kristian Wovk Jepsen was employed by the Road Directorate in 1969, when CCTV was installed in the tunnel under *Limfjorden*. Former security guard Finn Mortensen used CCTV at the beginning of the 1970s, at a military entry point to the Danish air force base in Karup. Lastly, former banker Jørgen Hansen was part of a group that installed CCTV in a public shopping street

in 1980, in the town of Hobro. The interviews provided us with valuable background information, helping us to understand the various use contexts.

In some instances, the result of our search for material was a set of rich descriptions and debates (which are presented in the article). But often CCTV was mentioned only in passing, making it difficult to understand the situation in detail. Thus, we could often see that CCTV was being used, but the material revealed only very little about reactions to this, and the implications.

A significant challenge has been that ‘CCTV’ is a relatively new term. *Tv-overvågning* and *videoovervågning* (which are the Danish translations of CCTV) were not well-established terms in the first decades of CCTV use. Instead, terms such as ‘the watchful tele-eye’, ‘the argus eye’, ‘industrial TV system’, ‘internal TV’, ‘traffic TV’, or simply ‘TV’ were used. Thus, when going through the material, we used the following definition as a guideline: CCTV is ‘a television system in which signals are transmitted from a television camera to the receivers by cables or telephone links, forming a closed circuit’ (*The Collins English Dictionary*). If the situation in question matched the definition, it was included.

Early CCTV in industry and traffic from 1954 – 1960

The first accounts of CCTV in a Danish context we have been able to find are from 1954. In an article in a trade journal (*Populær Radio og Fjernsyn*), ‘the television eye’ is described as consisting of two parts: a camera and a control box that may be connected to a TV monitor miles away (Olesen 1954). The article dwells on the technical aspects, and does not go into the actual use of CCTV. The other account is from the newspaper *Social-Demokraten* and describes the use of CCTV at production sites in the US (*Social-Demokraten* May 22, 1954). The author describes how workers at some production sites no longer have to conduct dangerous tasks, because machines may now be controlled at a distance through the use of CCTV. Furthermore, with special reference to mining, the author states:

[I]t is easy to imagine what this deep viewing eye can accomplish in catastrophic situations [because] you will be able to monitor the scene of the accident.

(*Social-Demokraten* May 22, 1954)¹

In an article from 1956, we see the first indication of CCTV being used in Denmark. A trade periodical (*Ingeniøren*) reports from a laboratory working on developing CCTV systems, describing how these systems are finding their way into industries where they are used to monitor processes in places that are difficult to access, or simply too dangerous to approach (Meyer 1956: 31). A specific example is *Isefjordværket* (an incineration plant), where CCTV was used to keep an eye on the flames in the incinerator, so personnel did not have to walk long distances, and climb up and down long ladders. Furthermore, Hellesens Industries in Copenhagen used CCTV to monitor and control chemical processes: “TV [CCTV] facilitates a continuous control with faster intervention in case of variation, and thereby improves the quality of the product” (Jensen 1956a: 703).

The examples above notwithstanding, CCTV is in the 1950s often described as a technology used in other countries, in particular the US, where it was applied for many purposes. This included monitoring children, transmitting surgery to medical students, watching gambling chips and cards in casinos in Reno, watching the enemy at war, and the surveillance of prisoners in their cells (*Social-Demokraten* May 22, 1954; Jensen 1956a; Jensen 1956b).

Although CCTV is described in relation to different use contexts, it is possible to identify two primary technological frames in which CCTV was placed in the 1950s. One is the use of CCTV in industry; it is

¹ All quotations from the material are translated from Danish by the authors.

here we find the first examples of the technology being used in Denmark. Apparently this use is inspired by experiences from other countries (Budde 1969). This can, for example, be seen in a description of how nuclear industries in the US use CCTV when handling radioactive material, and how steel, coal, and ore mines monitor wagons in mine shafts, or monitor ovens: “In front of him are four TV receivers, each connected to two cameras that accurately reveal how the white glowing beams move in the ovens” (Social-Demokraten May 22, 1954). There is also a description of how CCTV is used in the automobile industry and rolling mills for monitoring machines (Jensen 1956a). The most important implication of this use is that the worker becomes a supervisor of work processes:

The ever-progressing automation means that the worker is given the task of monitoring a work process to an extended degree, instead of using his hands....
(Jensen 1956a: 702)

Thus, CCTV contains the potential for rationalizing work processes because it makes it possible for one person to control several processes at once:

[It] is possible for a single man to take over the work of many, by letting him control several work processes at the same time, even if they occur in different buildings.
(Jensen 1956b: 2)

The other technological frame that may be identified is that of CCTV in traffic (Dansk Vejtidskrift 1958: nr. 2). For example, there are descriptions of how CCTV is used in the US and in Hamburg, Germany, to assist traffic regulation at chaotic road junctions (Jensen 1956a). Attention is also paid to the police in Detroit who use CCTV to monitor expressways and thus make traffic safer. Cameras were mounted on bridges and connected to a control centre where an observer could notify police or rescue vehicles when an accident was observed on the monitors. The procedure is described in the following way:

17.00 The control notes that cars are stuck in the right lane under a bridge over the expressway. The reason is that a car has drifted, and is stuck on the verge on the side of the road.
17.03 The police are alerted.
17.10 The police arrive.
17.14 The traffic is redirected to another lane.
17.15 The traffic continues at normal speed.

(Dansk Vejtidskrift 1958: nr. 2, 40)

Although the conclusion was that this kind of surveillance was unnecessary in Denmark because of the limited number of roads and traffic when compared to the US, this attitude towards monitoring traffic was soon to change.

A traffic camera controversy in 1961

In 1961, the local police in the town of Nørresundby applied for permission to install cameras on a bridge for a test period of one month (Andersen 1998). The idea was to monitor the traffic from the police station, which, according to Chief of Police E. Nyborg, would have several advantages: it would enable faster response in case of traffic jams, and it would be cost-saving in terms of time and staff. Furthermore, he argued that it would benefit the road’s users because of a smoother traffic flow (Jyllands-Posten September 9, 1961). The system, which would be the first of its kind in Denmark, could only be accessed by the police (Andersen 1998).

The application was declined by the city council. In a newspaper article, the mayor of Nørresundby explained:

Even though we have the very best relationship with the police [...] and do not suspect that the police will misuse TV [CCTV] to hide and take notes on our citizens, I am very hesitant about such an installation. It goes against the Danish mentality and the conception of democratic conditions to have an instrument that catches road users who are only potentially likely to commit an offense. That sort of instrument does not belong in a free nation such as Denmark, where citizens should see the uniformed police officer amongst them, rather than have hidden cameras at crossroads.

(Jyllands-Posten September 9, 1961)

The article continues, explaining that CCTV could damage the relationship of trust between citizens and police:

A relationship of trust exists between the citizens and the police, such as is not found in many countries, and this relationship is beneficial to our society. It would be a shame to destroy the relationship with secret cameras in our streets, and you cannot discount that these cameras may be misused.

(Jyllands-Posten September 9, 1961)

Another politician, E. Thorn, had nothing against the police filming the traffic, but argued that it would be more efficient and cheaper if the police received a call when the traffic was backed up (Jyllands-Posten September 9, 1961). Members of the police also made their voices heard: one police officer stated, “the technical developments of the past decade have apparently been ignored by the authorities...” (Klausen 1961: 280) whereas another raised concerns about whether the promised efficiency of CCTV might not come back to haunt the police as cutbacks and staff savings:

If TV cameras are installed all over the country for millions, do we not risk then, that our application for staff expansion being rejected with reference to our own claim that TV cameras will make huge staff savings possible?

(Nielsen 1961: 297)

This example of the police wanting to use CCTV is interesting, not only because it is apparently the first attempt to use CCTV in the regulation of traffic in Denmark, but also because it shows how the interpretation of CCTV as ‘just a traffic camera’ is problematised. This happens because a new technological frame is emerging. In this frame, CCTV is seen not only as a tool, but also as a threat to democracy and, potentially, even to the police workforce itself. As we will see, this framing of CCTV reappeared on a national level in the 1980s.

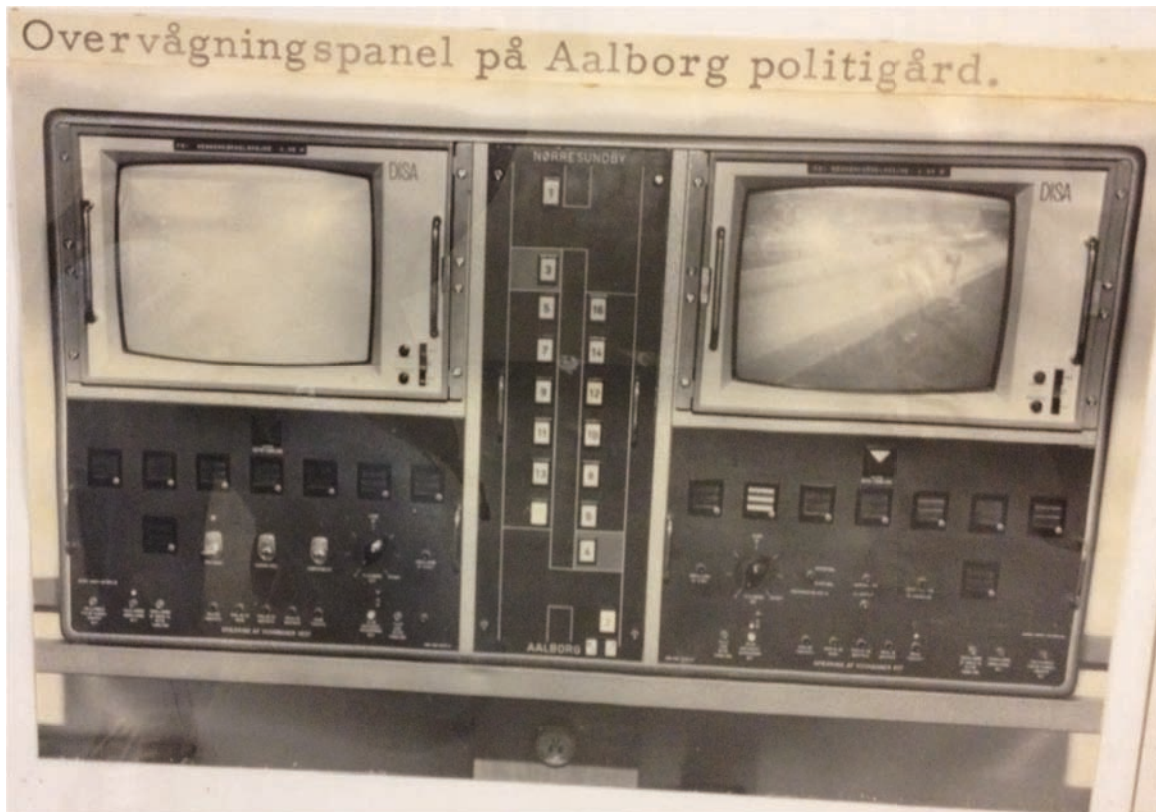
The proliferation of CCTV in the 1960s and 1970s

In the 1960s and 1970s there were more examples of CCTV being used in industry. For example, the power plant *Skærbækværket* installed CCTV to monitor smoke colour, to assess combustion (Budde 1969: 10). But CCTV also spread to other areas. The police succeeded in using CCTV to monitor traffic; the 1960s witnessed several tunnels being built in Denmark, which, according to the police, posed various traffic hazards that needed to be managed by the police. CCTV was seen as a valuable tool for doing this. An example is a tunnel (*Limfjordstunnelen*) connecting the towns of Nørresundby and Aalborg in northern Jutland, Denmark. In a letter dated 15 February 1966, addressed to the Ministry of Justice, local Chief of Police E. Nyborg argues that it should be mandatory to:

... install industrial television (surveillance TV) in the tunnel (so that in case of fire or road accidents the police stations in Aalborg and Nørresundby can have an immediate overview of the situation)...

In a response to Nyborg, the ministry stated, “[I]nstallation of a TV system along with the placement of a control room at the police station in Aalborg has been accepted”. CCTV was installed in the tunnel in 1969.

The material does not allow us to answer the obvious question of why the police in Aalborg were prevented from using CCTV in the surveillance of traffic at the above-mentioned bridge in 1961, but allowed to surveil the tunnel a few years later. A possible explanation is that it was much easier to argue that driver safety was at risk in the new tunnels, and that CCTV could play a decisive role in ensuring the safety of road users.



Above: Surveillance panel from Aalborg Police Station, 1969

In addition to technological frames related to industries and traffic, CCTV was also related to more traditional security practices in the 1960s and 1970s. For example, it was used in a shopping centre in order to reduce theft (Budde 1969: 10).² Also, the Danish air force started to use CCTV at entry points to several air bases. Furthermore, a prison (*Vestre Fængsel*) was granted money for a CCTV system that could prevent prison escapes:

² Apparently, in the early 1970s, banks in Denmark used photo apparatuses, instead of CCTV. The photo apparatus system consisted of a big box with a camera inside. If a robbery occurred, the entire film in the camera would be exposed, and still photos would then be available (Interview).

The surveillance system is a so-called microwave alarm system constructed as an alarm zone around the buildings and along the prison wall. The system consists of ten sets of microwave alarms and nine sets of TV cameras. An alarm is triggered when a person moves in the alarm zone that is monitored by TV cameras.

(Politiken July 26, 1979)

In the 1960s and 1970s, the use of CCTV proliferated, as did ideas about how the technology could be used in the future. For example, there is a description of how a new CCTV system from Siemens would make it much harder to rob banks (Tidsskrift for dansk politi 1972: nr. 13). The system consisted of an alarm and hidden surveillance cameras in the banks. Pictures were sent directly to a police station. The camera lenses were movable, and could be controlled from the police station. The incident would also be recorded on tape. By using radio signals, the police would be able to see the positions of police cars, and direct the closest one to the scene of the robbery. A scenario for a bank robbery where the Siemens CCTV system was used was described like this: “In front of the [bank] door a police patrol is waiting. [...] The criminal is handcuffed and the bank robbery is solved before it is completed” (Tidsskrift for dansk politi 1972: nr. 13, 253).

CCTV was described as a technology that had the potential to enable the rapid arrest of the perpetrator. However, CCTV, together with other types of equipment for better protection against robberies in banks, had a flipside, because it could affect the work environment. Also, enhanced protection could potentially push robbers into using more drastic measures to achieve their goal (Tidsskrift for dansk politi 1978: nr. 12).

The aspect of CCTV having a flipside may also be witnessed in other settings where it is introduced. For example, it is argued that CCTV can rationalise work processes (an implication that was also noted in the 1950s):

Remote controlled TV cameras in masts can monitor larger areas day and night, and the night watchman's days are numbered as a consequence of the total surveillance system that has been developed. One may, for example, let a mini data machine control up to 50 TV cameras, each of which constantly 'sweeps' the rooms in a building.

(Døygard 1975: 27)

However, controlling many cameras was not an easy and straightforward task that necessarily excluded human labour and intervention. Lillevang (1978) notes that CCTV could lead to confusion and a large control staff:

Many cameras, many monitors, many push buttons for the system, bad lighting conditions on the areas being filmed, wrong choice of camera lenses, poor resolution of the pictures, many possible thieves on the screen. The main result: Much uncertainty and confusion! [...] The size of the system therefore also entails a large control staff.

(Lillevang 1978: 22)

Lillevang proposes several ways of making CCTV more effective, including a smaller number of cameras, motion detection, and moving cameras (Lillevang 1978: 22). CCTV was not a guarantee of total protection against crime, or absolute control over machinery or people, nor was the night watchman's job definitively eliminated with the introduction and implementation of CCTV.

1980-1982: The Hobro case and legal regulation of CCTV

In 1980, private citizens in the town of Hobro installed CCTV on a public street. This incident generated heated controversy between a technological framework related to using CCTV to enhance security, and the interpretation of CCTV as a threat to democracy. The controversy resulted in political action and legal regulation of the use of CCTV (Folketingstidende tillæg a 1983: 3825-3860). It is in this controversy that the ‘Big Brother’ argument against surveillance is first observed.³

A street in the town of Hobro had, for some time, experienced a lot of vandalism. Benches, awnings, lamps, trees, and flagpoles were vandalised at night. In order to end this, a local trade organisation installed CCTV in an attempt to identify the perpetrators (Politiken July 22, 1980). The CCTV system consisted of three or four (the sources disagree on this matter) cameras (‘TV eyes’) and a recording device that would record from 23:00 to 4:00. No monitors were installed. If nothing happened, the tapes would be erased every morning. Otherwise, they would be handed over to the police (Berlingske Tidende August 31, 1980). However, problems occurred even while the cameras were being installed. For example, a trade union encouraged its members to stop shopping in shops that allowed cameras to be installed on their façades. Therefore, it was decided to install the cameras in private apartments. The installation was approved by the authorities, and it was up to the local police chief to evaluate the quality of the recordings, and see whether they could be used as evidence in court (Politiken September 5, 1980). After a period of time the cameras were removed. According to Jørgen Hansen, who was in charge of the project, this happened following pressure from his employer (a bank), who believed that his involvement in the project harmed their image and could result in a loss of customers.

The installation of the cameras drew national attention. A poll was conducted, showing that 65 per cent of the adult population supported CCTV on public streets (Tidsskrift for dansk politi 1981: nr. 2, 39-40). A citizen who supported the cameras argued that, “then, they cannot cause trouble”, whereas an opponent said “No one should be recording if I follow home a person tonight who is not the one I followed home the other night” (Berlingske Tidende August 31, 1980). Meanwhile, the businessman in charge of the project argued that the cameras were not violating people’s private lives, because there were no monitors.

Opposition grew, and a petition against CCTV was organised (Politiken July 22, 1980). Solicitor and criminologist Oluf Jørgensen pointed out that CCTV was not effective in preventing crime. This requires a focus on the roots of criminality, he argued. Therefore, CCTV would most likely just move the problems to other areas. He also stated that CCTV could violate personal dignity, because it was not possible to control who watched and used the recordings (Politiken February 16, 1981).

Deputy Police Commissioner Erling Christensen called the use of CCTV evidence of ‘a Big Brother mentality’. However, Christensen saw the use of CCTV as a natural consequence of the failure to incarcerate criminals (Berlingske Tidende September 14, 1980). The risk of a ‘Big Brother society’ is also stated in an editorial in the newspaper, Politiken:

We cannot accept that you, sneakily, transform society from the perspective that all humans are potential criminals to be registered and monitored.

(Politiken July 13, 1980)

³ The Hobro case contrasts with another case from the Copenhagen area, where two surveillance cameras monitored a local shopping centre, including public streets, since the 1970s. No records were taped. Instead, the surveillance cameras filmed in real time, and this was transmitted to a monitor near the shopping centre (Berlingske Tidende August 26, 1980). Apparently, the Albertslund case did not provoke public outbursts concerning privacy, Big Brother, or legal issues.

Politicians were also divided on the subject. A high-ranking member of a right-wing party (*Det Konservative Folkeparti*) agreed that CCTV was unpleasant, but considered it necessary, as long as there were not enough police on the streets (Politiken August 7, 1980). Other politicians were far more skeptical, and made references to George Orwell's *Nineteen Eighty-Four*, which was “just around the corner” (Politiken July 27, 1980). Similarly, the prime minister, Anker Jørgensen, was highly critical of CCTV, and promised that the government would make it illegal to use it: “the tendency is dangerous, and must be stopped” he stated (Politiken September 6, 1980).

Creating effective regulation of CCTV was a rather complex matter. According to the minister of justice, the law should not limit the work of press photographers or television stations. Also, the minister wanted to allow CCTV on private property, including shops and offices, and public authorities would be exempt from the law (Folketingstidende 1983, tillæg a: 3834). Accordingly, a law was passed, where the first paragraph reads: “TV surveillance must not be used on a road, site, or the like, that is used for ordinary coming and going” (Folketingstidende 1983, tillæg a: 3842). However, the second paragraph exempts law-enforcement agencies from this constraint:

The condition in §1 does not apply to: TV surveillance that is conducted by law enforcement authorities, or is conducted by other public authorities regarding traffic, or protects military installations.

(Folketingstidende 1983, tillæg a: 3825)

The law was ratified, and from 1 July 1982, ordinary citizens were prohibited from using CCTV on public streets.

Several members of parliament were dissatisfied with the law, mainly because it placed no restriction on police use of CCTV, and thereby failed to protect citizens. One politician stated that: “... all ordinary people must go around feeling like potential criminals”. Another feared that this was a true Big Brother society emerging (Ekstra Bladet April 1, 1982).

To a large extent, the law of 1982 still regulates CCTV in Denmark. In general, private citizens are still not allowed to carry out surveillance of public areas. However, the law has been modified a number of times (in 1998, 1999, 2002, 2006, 2007, 2010, and 2011 (Blume 2008; Retsinformation.dk)), and today, many surveillance cameras are found on the façades of banks and shops, for example. Housing associations have also been allowed to conduct surveillance of their own areas, provided that they obtain permission from the police.

Discussion

The intention in this article has been to highlight historical shifts in the technological framing of CCTV in Denmark from 1954 to 1982.

As described, CCTV was initially framed as an ‘industrial technology’, replacing workers in carrying out dangerous work tasks, and holding the potential for rationalising work processes. This frame emerged in the 1950s, and continued to exist alongside two other use-directed technological frames that also developed. One of these was ‘CCTV in traffic’, where CCTV was seen as a way of taking care of the safety of road users, and of making traffic flow more smoothly. The other was ‘CCTV in security practices’, in which the technology was interpreted as a way of enhancing security in a range of situations, ranging from preventing prison escapes to fighting vandalism in the streets. However, alongside this development, a fourth technological frame emerged. Thus, already at the beginning of the 1960s, CCTV was interpreted as not only a valuable tool, but also as a ‘democratic threat’ that should be handled with

care. The culmination of this framework may be found at the beginning of the 1980s, when CCTV had become so pervasive that politicians found it necessary to set controls on the technology.

The transition of CCTV into various practices may be clearly seen as an example of surveillance creep, because “[a]rrangements intended for one function migrate to other functions” (Pierpoint 2011: 150). However, at least in our study, the ‘creep’ cannot be understood as merely a linear or natural progression, where the cameras unproblematically migrate from one context to another.

Firstly, there is the question of how the various technological frames are related. In fact, our material does not tell a story of CCTV moving from one technological frame to another. For example, actors working with traffic were not inspired by the use of CCTV at factories. At least, we have found no evidence that this was the case. Instead, they were inspired by how CCTV was used in traffic in other countries. Thus, one could say that the development of CCTV in Denmark cannot be described as one single ‘creep’. Rather, there seem to be several, multidirectional ‘creepings’ at work. The result is that CCTV mushroomed into different practices at different periods in time.

Secondly, these ‘creepings’ have not always progressed in a straightforward manner. Resistance, or at least hesitation, seems to have been an important element in the shaping of CCTV in Denmark. Perhaps surprisingly, this resistance has been most obvious amongst politicians. Thus, already at the beginning of the 1960s, concerned politicians argued that CCTV might damage the relationship between citizen and state, and at the beginning of the 1980s the first references to Orwell’s *Nineteen Eighty-Four*, and to Big Brother in particular, are found. With these references, CCTV becomes a tool that might be effective, but may also be a threat to democracy and citizens’ rights. Because Danish politicians bought into this frame of CCTV as a democratic threat, CCTV in Denmark has been—and still is—strictly regulated.

Our writing about the early history of CCTV in Denmark is based on insights from what Bijker (1995) calls ‘socio-historical technology studies’. This perspective requires meticulous work with empirical data, it enforces a focus on the technology in various contexts, and it effectively prevents the researcher from presenting conclusions that cannot be supported empirically. However, socio-historical technology studies also come at a cost. In which institutional and larger political context is a specific use of CCTV embedded? And, what is the long-term dynamic behind the use situations, and are they part of the development of a surveillance system? From a position in modernity studies, Brey states:

To ignore this larger context is to leave out part of the story that can be told about that technology. It would be like staging Wagner’s Parsifal with only the actors on stage, without any settings, costumes, or props.

(Brey 2003: 34)

The extent to which this criticism is justified is being debated, and several attempts have been made to bridge the gap between a focus on ‘the local perspective’ found in socio-historical technology studies, and ‘the wider context’, made explicit in modernity studies (Bijker and Pinch 2012; Misa et al. 2003).

No matter how one sides in this debate, it is clear that writing the history of a surveillance technology may be done from various positions, each with its own propositions and implications. To scholars working within an interdisciplinary field such as Surveillance Studies, this comes as no surprise. However, it reminds us that when we call for more studies of the history of surveillance, which we think are very much needed, this must be accompanied by a theoretical and informed discussion of how this history may be written.

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