



## Controlling CCTV in Public Spaces: Is Privacy the (Only) Issue? Reflections on Norwegian and Danish observations.

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### Abstract

This paper examines data from an observation study of four CCTV control rooms in Norway and Denmark. The paper asks whether issues other than privacy might be at stake when public spaces are placed under video surveillance. Starting with a discussion of what values public spaces produce for society and for citizens and then examining CCTV practices in terms of those values, we find that video surveillance might have both positive and negative effects on key 'products' of public spaces. We are especially concerned with potential effects on social cohesion. If CCTV encourages broad participation and interaction in public spaces, for instance by increasing citizens' sense of safety, then CCTV may enhance social cohesion. But the discriminatory practices we observed may have the opposite effect by excluding whole categories of the populace from public spaces, thus ghettoizing those spaces and hampering social interactions. Though tentative due to limited data, our analysis indicates that structural properties of CCTV operations may affect the extent of discriminatory practices that occur. We suggest that these properties may therefore present 'handles' by which CCTV practices can be regulated to avoid negative effects on social cohesion.

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### 1. (New?) Themes Regarding Control of CCTV

It is said that we live in an age of technology. And indeed, as stated for example by Bijker, "science and technology do play key roles in keeping society together, and [...] they are equally central in all events that threaten its stability" (2003: 444). Science and technology are the means we often turn to in seeking solutions to our problems, and in turn are often the apparent sources of new problems. Thus it is not surprising that we have a love-hate, optimist-pessimist relationship with our technologies, and that we often attempt to anticipate the problems they may cause and regulate against these early in their deployment.

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CCTV has been presented to us as a technical solution to security problems. With the help of CCTV, its providers claim, we can more effectively prevent, detect, and/or prosecute crimes ranging from major terrorism to minor vandalism. With the help of CCTV, both public and private spaces can be made more secure. But of course, CCTV also has a down side. The down side most prominently anticipated has been loss of privacy. It is largely this potential problem with CCTV that has been regulated against. For instance, in Norway CCTV regulations are incorporated within the Personal Data Act (Wiecek and Sætnan, 2002), an act specifically directed towards the preservation of privacy of personal data.

And yet, many of these regulations concern the deployment of CCTV into public spaces, spaces where we expect to be visible to anyone present, spaces where we do not expect a high degree of privacy in the conventional sense<sup>4</sup>. Privacy may not be an issue here in the same sense that it matters when discussing deployment of CCTV for surveillance of private spaces. And indeed, when members of the general public are asked what they think of video surveillance in public spaces, answers such as this are common: "I'm not doing anything secret anyway. If people see me face-to-face or via a camera is all the same to me."<sup>5</sup> This is not to say that privacy is irrelevant in public spaces. Survey results also show that some spaces that are publicly owned and/or to which the public has access are nevertheless seen as intimate spaces in which CCTV is seen as an invasion of privacy.<sup>6</sup> Survey results also show strong support for regulating public space CCTV<sup>7</sup>, regulations that go far beyond those generally accepted when it comes to the literal public eye. This too supports the idea that the public sees CCTV, even in public spaces, as a potential threat to privacy. But mightn't there also be other issues than privacy at stake?

One way to check whether other issues might be at stake is by taking a closer look at the role of public spaces in society. What do public spaces 'do' for us as a society? What characteristics are critical for what public spaces can achieve for us? How might CCTV contribute to and/or detract from those characteristics? This article will explore what criteria we might have for a well-functioning public space and relate this to how CCTV might contribute to and/or detract from such public spaces. We will then attempt to apply this as a background against which to

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<sup>4</sup> Webster's Encyclopedic Unabridged Dictionary of the English Language (1994) lists as its first definition of privacy, "the state of being private; retirement or seclusion." In public spaces that are wide open such as parks or streets, we do not expect to be secluded.

<sup>5</sup> Translation of an actual response to a survey study we conducted in Oslo, June 2003. 67% of respondents to the survey agreed with the statement "People who have nothing to hide have nothing to fear from CCTV" and many added comments of their own such as the one quoted here. For a more thorough discussion of the survey results, see Sætnan, Dahl, and Lomell, 2003.

<sup>6</sup> The survey mentioned in footnote 2 included a list of 12 spaces, ranging from wide open publicly owned spaces such as public streets to intimate spaces such as dressing rooms or sports centre changing rooms. For each type of space, respondents were asked if they felt CCTV was a good thing, a bad thing, or neutral. Responses ranged from over 90% acceptance of CCTV in privately owned, open spaces associated with needs for security (e.g. bank teller windows, shops) to 55-65% for open, public spaces such as streets, to under 20% acceptance and over 60% opposed to CCTV in intimate spaces such as sports centre changing rooms (*ibid.*, Tables 3 and 4).

<sup>7</sup> Similarly, the survey asked respondents what regulations they thought were important concerning CCTV. A vast majority of respondents (73 – 90%) said almost all the regulations mentioned were important, aside from the suggestion that divulgence of CCTV observations to the police be restricted (48% 'important', 45% 'not important'). (*ibid.*, Table 13)

evaluate CCTV practices in four settings we have studied in some depth. Finally we will discuss whether our observations from these settings might provide us with new ways of regulating CCTV with an eye to the functionality of public spaces.

## 2. The role of public spaces in society

Public spaces serve many social functions. They are spaces for a range of shared and individualized economic activities: tourism, public markets, grazing, busking, begging. They are spaces for cultural activities and identity formation. And they are spaces for socializing in at least two senses of the word: mingling sociably with others as well as communicating social norms to one another. Public spaces can thus represent shared economic, cultural, and social capital. While Bourdieu (1986) uses these terms to refer to resources that can be acquired by and converted and exchanged amongst individuals, when we apply them to social spaces we can readily see how these three forms of capital are also, at least potentially, shared resources. As shared resources they can serve to generate individually attainable forms of capital (e.g. spaces where one can make new friends, thus increasing ones social capital, or sell goods, thus increasing ones economic capital), as well as being resources for producing the common good.

One common good public spaces may help produce is social integration. Research has shown that shared spaces do, or at least can contribute to a sense of community (e.g. Skjæveland and Garling, 1997; Kuo *et al.*, 1998; Talen, 1999; Lund, 2002; Jutras, 2003), which in turn can contribute to personal well-being (Farrel, Aubry and Coulombe, 2004). Conversely, research has also shown that exclusionary spatial practices contribute to dis-integration, social exclusion, hate and intolerance (Madanipour, 1998; Flint, 2004).

Some of this research goes on to explore the characteristics of shared spaces that tend to encourage social inclusion and community building. For instance, it has been found that spaces with vegetation are perceived as more attractive and safer, and that neighborhoods with such spaces develop a greater sense of community than otherwise similar neighborhoods with more barren shared spaces (Kuo *et al.*, 1998; Jutras, 2003). In another study, enclosed spaces were found to be less conducive to interaction than spaces open to pedestrian traffic (Al-Homoud and Abu-Obeid, 2003). Several studies also caution against regressing into material determinism: Spatial form does not determine the amount or outcomes of social interaction in a public area, it only encourages or discourages various forms of sociability. Our own summarizing hypothesis would be that in order to contribute to social integration, shared spaces should be perceived as attractive, safe, welcoming, and invite a broad range of activities. We would also hypothesize that not only the form of a space, but also social actions within a given space are significant factors.

How might CCTV – as a material spatial element and as a set of practices – affect the functionality of a public space in terms of its contribution to social integration? Building on our initial hypothesis, we could expect that if the deployment and use of CCTV led to a space being safer, or perceived as safer, then that could lead to the space being used by a broader segment of the public for a wider range of activities. If so, then it could contribute to greater social

integration. By contrast, if CCTV were used to categorically exclude members of the public from access to the space, or if CCTV were perceived as threatening to individuals or as a signal that the space was dangerous, then that would detract from the space as a resource for social integration.

We propose that the role of public spaces as a resource for social integration, and the role of CCTV in those public spaces, should become a theme for public discourse on and possibly also regulation of CCTV. However, a discussion of public spaces in terms of inclusion versus exclusion should not preclude the continued discussion of privacy versus protection. In fact, we see the two discourses as related on at least two counts. The safety and perceived safety of public spaces is an issue not only at the personal level (for victims of crime) but also at the social level, since spaces that are unsafe or are perceived as such will have reduced value as economic, cultural, and social capital. We also see the question of access to public space as an extension of the issue of privacy: the right of access to public spaces regardless of personal traits and actions that fall within the realms of privacy/personal choice/equal rights, e.g. ones appearances, views, gender, etc.

In the remainder of this article, we wish to contribute empirically to a discussion of CCTV in terms of social inclusion in vs. exclusion from public spaces. We have recently conducted an observation study of practices at several CCTV systems in Oslo, Norway and Copenhagen, Denmark. In this article we analyze our data in terms of the following questions: To what extent were these CCTV systems used as instruments for social exclusion? Further: to the extent that we found exclusionary practices, were these related to system features that are amenable to regulation? In other words, should and could we regulate against the use of CCTV as an instrument of social exclusion in public spaces?

### 3. A Brief Presentation of the Study

This article is primarily based on our observations of work processes in the control rooms of four CCTV systems: three in Norway and one in Denmark. The studies were part of a larger international project called UrbanEye.

Several studies of CCTV control room work were published prior to our study (e.g. Norris and Armstrong, 1999; McCahill, 2002). All of these had been conducted in Great Britain; all had studied control rooms of open street or shopping mall video surveillance systems<sup>8</sup>. A key finding in these studies is that, because operators are limited to what they can see on the screen, they almost of necessity target suspects on the basis of appearances. This leads to the over-representation of groups common local assumptions link to criminal deviance, i.e. men, particularly if they are young and/or black (Norris and Armstrong, 1999: 196). People thus categorized were mostly targeted 'for no obvious reason', as opposed to because of their

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<sup>8</sup> In addition to these British studies, there is also an ongoing study by Lomell of the first open street CCTV in Oslo, also focusing on control room activities. Lomell has followed this open street CCTV system from its beginning, and has both observed control room activities and interviewed operators and management. This study will be published in 2005, but some of the findings are included in this report.

behaviour. At the same time, Norris and Armstrong also found a low rate of deployment: CCTV was mainly used to track rather than mobilise deployment (*ibid.*: 200). Their conclusion is that CCTV has a potential of becoming a tool of injustice through the amplification of differential and discriminatory policing (Ibid: 201). McCahill found, in his observation study of the CCTV control rooms in two shopping malls, a much stronger exclusionary practice. He concludes that there was a fifty-fifty chance that teenagers would be ejected when a guard was deployed (McCahill, 2002: 146). Also in this study it was found that both suspicion and exclusions were based on categorical rather than behavioural targeting.

One of our goals in UrbanEye was to find out whether control rooms in similar settings in other countries were operated differently. This is because our research earlier in the project had shown that CCTV operated within quite different frameworks from country to country. Would that also result in different practices within the control rooms?

To explore this question, we used a similar design to the earlier control room observation studies: We sought permission to sit beside or behind CCTV operators over a period of about two weeks per system. While watching we would fill out a data record for each episode of ‘targeted surveillance’ (TS), i.e. each time the operator tracked or zoomed in on an individual or group or place for 30 seconds or more. For each such episode, we would register what or who the operator was watching, for how long, for what reason, what had triggered the TS, whether the operator deployed anyone to intervene in the field, and what was the outcome of the TS.

Our plan was to study one open street system and one shopping mall system in the capital city of each country participating in the project. This plan had to be modified as we ran into difficulties recruiting study sites. In Norway and Denmark we eventually found 14 organizations with staffed CCTV control rooms that were willing to have us study them at least briefly. Our study thereby became more a comparison across site types within more or less similar national frameworks rather than across countries for similar site types. Table 1 shows an overview of the sites in our study in Oslo and Copenhagen respectively. This article will focus on the four sites where more than 20 targeted surveillances occurred during our observations.

<b>Systems</b>	<b>No. of cameras</b>	<b>Management interviews</b>	<b>Operator interviews</b>	<b>Observation hours</b>	<b>Targeted surveillances</b>
Open street system (O)	6	2	4	30	78
Major public transport center (O)	ca. 300	1	-	24	35
Inner city shopping mall (O)	ca. 100	1	-	21	61
Department store (C)	160	1	2	38	68
<b>Total</b>	ca 570	5	6	113	242

Table 1: Four main data sources in Oslo (O) and Copenhagen (C)

#### 4. Exclusionary Practices of CCTV?

These four CCTV systems were similar in many ways. They had overlapping functions and were located in fairly similar urban settings. The three Oslo systems are even immediate neighbours, all facing the same public square, sharing contiguous building space and much of the same population who use the building and square:

- commuters and long-distance travellers using the transport centre;
- shoppers, browsers, workers, and shop-lifters/purse-snatchers/etc. visiting the shops in the malls (one in the transport centre, one in the commercial complex contiguous to the transport centre, and a few open-air stands on the square); and,
- a prominent characteristic of the area – the illicit drug trade area on one corner of the square.

The Copenhagen department store is, like the three Oslo sites, located on a square at the end of a pedestrian mall. Though this is not the primary site of the Copenhagen street drug scene, there is a certain presence of drug users and activities in the vicinity here as well. Like the Oslo mall, the department store also has one entrance directly from a transport centre. And like the mall and parts of the transport centre in Oslo, the main social function of the space is shopping, which implies some risk of shop-lifters and purse-snatchers.

But even with these similarities in mind, there are significant differences in the roles of the spaces and the structures of the CCTV systems:

*The department store* has its own security force as well as some out-sourced security guards. The security guards are in uniform, stationed by the entrances. The in-house security officers collaborate with the private guards, but only in-house security operates the CCTV system. They also move about within the store doing 'real-time' and 'real-space' detective work. The security department sees their task as protecting the store against theft while enhancing rather than detracting from the customers' shopping environment. They seek to be discreet, not leading shoppers to feel distrusted and/or suffering loss of privacy. They also seek to protect shoppers from purse-snatchers and other offenders. They do not see it as in the best interests of the store to exclude anyone who might be a legitimate shopper. They watch many people from a discreet distance, either via the camera or out on the shop floor, but unless they are confident that they can document a crime they refrain from interventions.

The in-house security employees here were highly trained, some with police training, some with many years as store detectives. They considered their own knowledge of what and who to look for superior to that of the rented guards, who they felt often judged people on general appearances, as witness this episode from our field notes:

Operator A is alone on duty. Guard calls in to report suspicious person entering the store. A scans with a PTZ camera near the entrance while checking the description and location over the radio connection with the guard. She confirms that she now has the person on screen and hangs up. Suspect is a shabbily clad

man, apparently Danish, apparently in his 30's. A tracks him on camera from above and behind. When he turns, A recognizes him as a known alcoholic and switches to another camera, explaining to me "I can't be bothered watching him; he's just on his way to buy something in the food and wine section."

Since operators depend on the uniformed guards for assistance with arrests and other deployments, they do not overtly criticize the guards when they point out suspicious persons. Instead, they follow these suspects briefly and sometimes phone back to the guards with their conclusions. They hope that the guards, if stable on the job, will eventually learn more sophisticated ways of identifying suspects. They have also made a training video for sales staff with the same goal in mind. The video is put together of clips from actual arrests, showing some of the behaviours and theft tools that trigger their attention: lifting up goods and looking over rather than at them, bulky shopping bags lined against alarms, oversized coats, etc.

The main goal of the shops in *the inner city shopping mall* is also sales and profits, but the main goal for the mall owners is profitable rental of space, and it is the mall ownership who have contracted with a private security firm for CCTV and other security services.

In keeping with the interests of profitable rental of space, the owners of the inner city mall have set themselves the goal of maintaining an image as a high class shopping mall, in spite of the potentially unfavourable location. This may be one motivation behind their attempts to keep those the guards amongst themselves call 'scum' out of the mall. But there are other factors as well.

One of the values they sell to their tenants is security. However, this does not include operating CCTV within the shops; that choice and the expenses it entails are left to the shop owners. What the mall management does offer is an alarm button in each shop whereby the shop staff can call the security guards. Many of the shops have young clerks working alone, and many of these tend to push the alarm button as soon as someone who looks frightening enters the shop. This too becomes a motivation for the guards to escort the apparently undesirable out of the mall before they even reach a shop: every such person is an alarm waiting to happen. What the CCTV operators cannot do is watch suspected individuals inside the shops and wait until they see actual criminal behaviours before they react. Here is one of many such episodes from our field notes:

Operator sees a druggy/scruffy at the convenience store. Calls to a guard in the control room: "Can you go down there before we get an alarm?" The guard goes out. The druggy leaves the convenience store as soon as the guard appears. The operator can't see well into the convenience store, but follows the druggy with the cameras once he leaves the store and until he is out of the mall, headed for the transport center. The episode lasts 3 minutes. There ensues a discussion about druggies in the mall. The operator has worked at other malls and knows of some where druggies are barred. He feels it's important to be kind, that some druggies do their shopping at the mall's grocery store, and that they should in principle be allowed to do so. He is aware that there are grey zones here. The convenience store is defined as such a "grey zone": Some

druggies “sneak in and shop there.” This results in many alarms as the convenience store is mostly staffed by young girls.

In other words, ejection of scruffy-looking individuals, simply for looking scruffy, were frequent at the mall. Those same scruffies also frequented the *major transport centre* in the same building complex. The CCTV system there is organizationally located within the management functions of the (formerly public) railway company and the operators are railway company employees. It is a very busy, multifunctional control centre, as indicated by its name (the ‘Service telephone’). The operators spend much of their time switching off (mostly false) alarms, admitting people through doors and gates, answering telephones, checking service vehicles in and out. All these functions are ‘multiplied’ by the requirement that each activity be logged in a computer record. They do not, however, have security duties out in the area under surveillance. Those tasks have been outsourced to a security firm, but the surveillance operators can deploy security guards to deal with a situation. They can also call for police assistance. Surveillance is, however, given low priority relative to other ‘service telephone’ tasks, especially on weekends when there is only one operator per shift.

As mentioned, the transport company was once a publicly owned company. It is now privatized, with the State as the majority stockholder. The public, including the ‘scruffy’ public, is well aware of this difference from the privately owned shopping mall. They consider themselves to have a right to be at the transport centre -- at the very least when booking a ticket, waiting for a train, or waiting for someone arriving by train, but also simply as a place to duck indoors during a rain shower. Thus although scruffies were an issue here too, there was a higher threshold for attempting to oust them. After all, there was always the possibility that they were passengers going somewhere. And even when the attempt was made they were not that easily ejected. It also seemed as if the shops in the transport centre had higher tolerance for scruffies than those in the shopping mall. Although these shops also have alarm buttons, the alarm didn't go off as soon as a scruffy entered a shop. But then too, the shop staff may call the security guards without going via the CCTV control room.

All in all, the transport centre is more ‘public’ than the mall, and also more attractive, because of the seating areas, public restrooms, and platforms. In the mall, there was nowhere to rest or sit down except in the cafés. Thus, not only the structures and practices of the CCTV systems, but also of the buildings themselves, affected the nature of the spaces in terms of public access. This episode from our field notes highlights both the differences from and similarities to the mall:

2:15 pm. Man from railway company enters control room and asks for help removing two scruffy addicts in their 30's who are sitting on a bench on a platform. He has spoken to them. Two guards are sent. “They said they were waiting for a fiend coming in by train from Lillestrøm.” “That’s what they’re always waiting for.” The two are very intoxicated, and one seems to have vomited. It takes a long time to show them out. Camera on them the whole time. Guards are calmly persistent. 11 minutes.

The police have a station room in the transport centre, along with which they also have a control



room for Norway's first (and so far only) *open street CCTV system*. Although the police patrol both inside and outside the transport centre, the cameras are all directed at the squares and streets outside, especially the corner where the druggies hang out.

The open street system, running since November 1999, is still defined as a trial project. Three of the four operators have worked there since the beginning, and all four are highly dedicated and proactive in their work, doing more than their job descriptions require.

The door into the control room is open to the police station, and often the police officers use the control room as a sort of headquarters, informing the operators of their activities. Sometimes the operators directly ask the police officers to do something, at other times they call the Operations headquarters at the central police station. This depends on who (both operators and police officers) is on the shift. Formally, the police officers are directed by the main Operations central, but the lines of command are at times blurred. The operators are not police officers and rank below them in the internal social hierarchy.

The control room is fairly large, compared with other control rooms, and does not have multi-functions such as alarms, calling systems etc. There are four main monitors, and six small ones above these. The six show images from all six cameras in the system. One of the main monitors records the chosen images on that screen on a 3 hour video tape, and the images on this screen are also transferred to the Operations central at the police headquarters in Oslo. All six cameras are also recorded (in a sequence of short 'snapshots') on another videotape. There is a TV in the room, mostly turned on, and three PC's where the operators access various police registers, such as a register of convicts, a continuous log of police activities, the census roles, a search register (missing persons or wanted suspects), a stolen vehicle register. The registers are actively used during shifts, often in order to identify persons they watch on CCTV. The police radio is on, and is actively listened to. If operators hear about something happening in an area they can see on camera, they zoom in and transfer the image to the police headquarters.

The following episode from our field notes illustrates some of the complexity of collaborations between the civilian CCTV operators and the police:

Open street operator sees a suspect, apparently Norwegian (he later turns out to be a Russian asylum-seeker), selling pills to a young girl on the square. Operator's working screen also transfers images to a screen at Operations central (at the main police station). At this moment Operations central (O-1) happens to be watching; not much else seems to be going on since the police radio in the control room is quiet. Now we hear O-1 call the local station asking them to respond to the episode. They are busy with another episode, so O-1 calls other patrols. Some time passes as the nearest available patrol is some distance away. Meanwhile, operator follows the suspect with the cameras; the suspect has moved up the street where he meets another woman. Together, these two bike back to the square where another pill sale takes place. The woman enters the railway station. Operator continues to follow the suspect, shifting cameras, zooming in and out as she follows O-1's comments on the

radio. O-1 is directing the patrol car, which is still on its way. When O-1 seems unclear about the suspect's location, operator zooms out a bit so O-1 can get reoriented. But O-1 does not give direct instructions to operator. Nor does operator offer advice over the radio connection to O-1. The operators are only allowed to listen on the police radio; they are not supposed to send on it other than in emergencies. Finally, the patrol arrives. The man is arrested, but his customers have disappeared into the crowds. The area is densely covered by CCTV and on-site guards, but coverage is distributed among several systems. There was no coordination with other control rooms or security guards in the area.

Though the open street CCTV system was directed in large part at the drug scene on the square just outside its windows, exclusion was not much of an option. Over the years, the Oslo drug scene has been driven from the palace park (about a mile away) step by step down to one corner of this square. At the time of our study, the police had to some extent come to the defence of the druggies: They too were citizens. They too had a right to be *somewhere*. Better they should be gathered in a place under surveillance than driven further. Therefore, although the operators could observe drug deals being made every few minutes, they did not intervene in small-time dealing amongst the addicts. They concentrated on intercepting young children who appeared new to the scene, on eruptions of violence, on major dealers if they made an appearance, on stolen cars brought to the area, etc. But for better and for worse, police policies, and CCTV policies as a sub-system of these again, are susceptible to political discourses.

The four systems studied share some characteristics and differ on others. How similar and how different were they in terms of discriminatory surveillance and social exclusion?

*Table 2* (overleaf) shows the visible characteristics of persons we saw targeted for surveillance. Summing up the table, we could say that the typical suspect targeted for surveillance is a youngish adult male, wearing scruffy clothing, and apparently of a minority ethnic group. For all categories except ethnicity, the shopping mall, transport centre, and open street systems seem to have a more discriminatory pattern of suspicion than the department store.

On our second day at the department store, one of the operators brought up the issue of ethnic discrimination. It had struck him, and troubled him, that the previous days targets had been predominantly dark-skinned. He wondered if this might be an effect of calls from the security guards. And indeed, when we checked back through our data, surveillances triggered by calls from the security guards had a higher percentage of dark-skinned targets than did surveillances initiated by the CCTV operators themselves.

	Department store	Shopping mall	Major transport centre <sup>9</sup>	Open street	Total
<b>Sex</b>					
Male	66 %	72 %	82 %	82 %	75 %
Female	34 %	24 %	19 %	18 %	25 %
Don't know	-	4 %	-	-	1 %
<b>Total</b>	(n=71)100%	(n=50)100%	(n=27)101%	(n=76)100%	(n=224)101%
<b>Age<sup>10</sup></b>					
Child	-	2 %	-	-	-
Teenager	16 %	14 %	19 %	18 %	17 %
Twenties	28 %	18 %	22 %	40 %	29 %
Thirties	34 %	42 %	48 %	29 %	36 %
Middle-aged	18 %	10 %	7 %	11 %	13 %
Elderly/frail	1 %	2 %	4 %	-	1 %
Don't know	3 %	12 %	-	3 %	5 %
<b>Total</b>	(n=71)100%	(n=50)100%	(n=27)100%	(n=76)100%	(n=224)101%
<b>Appearance<sup>11</sup></b>					
Smart/formal	-	-	-	1 %	-
Uniform	-	-	4 %	8 %	3 %
Subcultural/fashion	11 %	4 %	15 %	4 %	8 %
Casual Indistinct	78 %	40 %	52 %	54 %	58 %
Scruffy	6 %	54 %	30 %	30 %	28 %
Don't know	6 %	2 %	-	3 %	3 %
<b>Total</b>	(n=71)101%	(n=50)100%	(n=27)101%	(n=76)100%	(n=224)100%
<b>Ethnicity</b>					
Dominant ethnic group	59 %	72 %	74 %	78 %	70 %
Minority ethnic group	32 %	22 %	22 %	20 %	25 %
Don't know	9 %	6 %	4 %	3 %	5 %
<b>Total</b>	(n=71)100%	(n=50)100%	(n=27)100%	(n=76)101%	(n=224)100%

Table 2: *Characteristics of the primary person under surveillance*

<sup>9</sup> Percentages in this column should be read 'with a grain of salt', since the total number of targeted persons is only 27, making each instance a substantial percentage of the whole.

<sup>10</sup> Age, appearance, and ethnicity are coded according to the researchers' impressions. In Oslo, where drug addicts are a major target at all three sites, we may have overestimated age as drug addicts 'grow old' faster than the general population. The Open Street site was conducting a project of interventions directed towards youth in danger of being recruited into the drug scene. If indeed we were overestimating age in this population segment, that might explain why the 20's group seems especially overrepresented as targets of the Open Street system. Another explanation may be that while Open Street targets are almost exclusively from the drug scene (where the 20's age group is predominant for any number of reasons), populations and targets at the Mall and the Transport Centre more resemble the general populace.

<sup>11</sup> It is also striking that scruffies were more overrepresented in the Mall system than in the Open Street and Transport Centre systems. One reason may be that the Mall was concerned with more than one category of scruffies (for instance alcoholics in addition to drug addicts), resulting in a higher percentage among targets. Another may be that not all the addicts on the street corner appear scruffy and that those who do are more familiar and less of a concern to the observers than the 'newcomers'.

Table 3 shows the reasons for targeting, as far as we could surmise as we watched or were told by the operators as they conducted their work. The key category here that might indicate social exclusion on the basis of appearances alone is the last category: ‘no obvious reason.’ The first eight categories and the eleventh (drugs) all indicate that the operator saw or was alerted to some form of suspicious, possibly criminal behaviour (e.g. a person dropping something into an open bag) or the material evidence of some earlier undesirable behaviour (for example fresh tagging on a wall). The ninth category (person in need of help) would be a response to e.g. an apparent medical emergency or lost child. ‘Personnel management’ refers to tasks like checking the screen when admitting employees through controlled entrances. ‘No obvious reason’ means that someone was targeted for no reason we could discern other than their appearance. This was the case for nearly half the TS instances at the shopping mall, over a third of those at the transport center and nearly a quarter of those in the open street system, but only 4% of those at the department store.

	Department store	Shopping mall	Major Transport center	Open street	Total
Theft from store	87 %	15 %	-	1 %	29 %
Theft from person	1 %	2 %	-	3 %	2 %
Vandalism/criminal damage	-	2 %	-	-	-
Other property crime	-	-	-	1 %	-
Violent theft from person	-	-	-	1 %	-
Assault/fight	-	-	3 %	1 %	1 %
Unruly/disorderly/nuisance behavior	6 %	8 %	29 %	6 %	10 %
Traffic violation/problem	-	-	3 %	-	-
Person in need of help	-	2 %	6 %	3 %	2 %
Personnel management	-	-	11 %	-	2 %
Drugs	-	3 %	-	46 %	16 %
No obvious reason	4 %	48 %	34 %	23 %	25 %
Other	1 %	21 %	9 %	14 %	11 %
Don't know	-	-	6 %	-	1 %
Total	(n=71)99 %	(n=61)101%	(n=35)101%	(n=78)99%	(n=245)99%

Table 3: Reasons for targeting<sup>12</sup>

Watching can be a pretty passive and unobtrusive form of intervention. Surveillance becomes far more noticeable and effectfull (literally full of effects), when used as a basis for deployment and practical intervention. How often did the targeted surveillances we saw lead to deployments? And what practical interventions were effectuated?

<sup>12</sup> For more detailed discussion of this table, see: Lomell, Sætnan, and Wiecek, 2003 or Lomell’s article in this issue of Surveillance and Society.

In this regard too, the systems varied considerably at the four sites where we observed targeted surveillances. In total, 36 % of the targeted surveillances resulted in a deployment. Site by site, deployments as a percentage of targeted surveillances ranged from 69% at the shopping mall to 46 % at the major transport centre, 22% at the open street system and only 18% at the department store.

This variation in rate of deployment shows that the open street and department store systems, while highly proactive in finding persons to watch, were not so interventionist when it came to deployment. But as we shall soon see, once there was a deployment, in many cases the target was arrested. This was the case for over a third of deployments from the open street system.

It was also the case for one of the two deployments at the department store in which the suspect was contacted directly. Of the 12 deployments (18% of the targeted surveillances) eight were discreet follow-up investigations, e.g. checking what a suspect had thrown in a wastebasket, or checking a dressing room to see whether security tags had been removed and hidden. We saw only four instances in which a suspect was contacted even indirectly, plus a fifth that we observed only from out in the store. One of the four plus the fifth ended in arrests. In another, a possible arrest was avoided when the guard offered to hold a large unpaid item at the nearest checkout; the suspect later left without collecting the item. In two deployments, uniformed guards were asked to make themselves visible to the targets – once to check for a reaction (none came and the target was dropped) and once to serve as a calming reminder to some boisterous youngsters (they calmed down). In all, it would seem that surveillance at the department store is kept discreet unless and until a crime is pretty much proven. This is in keeping with their policy; they seek to be unobtrusive and thereby inoffensive to the store's customers.

The open street system is not so much discreet as understaffed on and/or under-integrated with the deployment end. Here it is only the police who are mandated to act in the field of view. If the police are busy with other tasks, then there is not much point for the operators to call for a deployment to incidents they have spotted on the screen -- not unless the incident constitutes an emergency situation. Furthermore, the video operators are not themselves police officers and have therefore little authority with the police.

The mall, in contrast, had a high rate of deployment, most of which ended in ejections. *Table 4* (overleaf) shows the number of deployments at each site and their outcomes. Note that at the shopping mall and transport centre there is a high percentage of 'don't know' outcomes in this table. Our experience with the systems tells us that many of these probably resulted in an ejection, but unless we saw the outcome on screen we couldn't be certain enough to code it. The operators were often 'through' with the TS as soon as the security guard came to the scene. These systems were often very busy, and the operators had other things to do. Probably because many of these TS were about scruffies being routinely ejected, the operators were also not very interested in the outcome. In contrast, arresting someone is more exciting as well as important to document. At the department store, however, guards were not mandated to eject suspects on their own. All deployments were followed from the control room and we have no 'don't know' outcomes.

	Department store	Shopping mall	Major transport center	Open street	Total
Target(s) let go	92 %	21 %	25 %	47 %	37 %
Target(s) made to leave (ejected)	-	36 %	31 %	6 %	24 %
Targets(s) arrested	8 %	2 %	6 %	35 %	10 %
Don't know	-	41 %	38 %	12 %	30 %
Total	(n=12) 100 %	(n=42) 100 %	(n=16) 100 %	(n=17) 100 %	(n=87) 101 %

Table 4: *Outcomes of the deployment*

## 5. Conclusions, and some new hypotheses as to regulatory strategies

A CCTV system is a powerful system when it comes to spotting people with certain characteristics in a crowd. A CCTV system in effect multiplies the number of security guards in a space – at least in terms of the number of ‘eyes’ watching, or the number of spots within the space being watched at any given time. If deployments are effectuated on the basis of what all those eyes see, and if deployment times are quick, then it is also as if there were more guards’ bodies, feet, and hands available. One of the key aims of our study was to see whether CCTV thereby becomes a tool for categorical social exclusion. We have found that social exclusion did take place, confirming earlier findings that this might be an effect of CCTV. We have also found that the extent of CCTV-assisted social exclusion varied across sites. By studying several types of publicly accessible spaces, we can compare across a variety of structural aspects and raise new hypotheses as to the factors affecting social exclusion and other functions of video surveillance.

The shopping mall was the site with the most merciless ejection practice. We experienced several cases where scruffies were ejected without any prior incident; they were just not wanted in the mall. In several episodes others (information desk, shop staff) alarmed the operator about an intoxicated person, but when the guard reported back, they often reported that the suspects were not visibly intoxicated. While an intoxicated person is often a nuisance to others, and can be ejected on those grounds, and whereas fashionable restaurants and hotels often have dress codes that would exclude someone clad in ragged, dirty, or ill-fitting clothes, there is no tradition for excluding people from public streets or from ordinary shops on such a basis. At the department store we saw no such ejections, but at the mall and the transport centre we saw many.

By excluding scruffies from the mall, this street-like space changes character; and as more and more shops are located in private malls, so too does the character of whole cities change. At the transport centre, the main station of a publicly owned railway, now with several of its functions privatized and a mall within the station – such a change is perhaps even more dramatic: This was

once a publicly owned space where only criminal or nuisance behaviour would qualify for (temporary) exclusion. We claim that such changes could have far-reaching effects on the very fabric of society, thus making it worthwhile to discuss social exclusion practices, study their causes and effects, and look for ways to regulate them. In this section, we will briefly propose some directions such research and (if the needs and possibilities are confirmed) regulatory development might take.

### *Functions of the space under surveillance*

It is a legal requirement that video surveillance systems have a stated purpose, and that this purpose be reasonable when balanced against the public's interest in privacy. At the very least, our findings show that this requirement is not a guarantee for such balance. While we found that the primary purpose of these systems was as claimed for that particular system and/or for other systems in similar spaces, and while we found that some systems kept close to their stated purpose, we also found examples of both expansion and contraction of functions. Video surveillance in shops was directed primarily at shoplifting, in the open street system at street crime, in railway stations at service and safety functions, etc. However, surveillance functions were not restricted to those most obvious for the respective spaces. We found examples of both expansive and contractive 'function creep.'

One explanation for this may be the fit between mandated activities and available time. Thus mandate expansion may occur when operators find few occurrences of the events they are directed to watch for. Correspondingly, a control room with an overload of tasks relative to available staffing will have to find some order of priorities. Could this point towards a means for regulating against CCTV 'function creep'? Could the existing regulation requiring a reasonable balance against other public interests be followed up by a requirement that applicants for CCTV permits submit statistics on the frequency of occurrences they aim to target with CCTV?

### *Placement of video surveillance operations in the social structure of the space*

Another factor that seemed to create dissonance between the functions of a space and the stated functions of surveillance in that space was the organizational placement of surveillance operations. Was surveillance run by employees of the organization responsible for the primary functions of the space? Or was it out-sourced? Or rented along with a lease on the space? Or delegated to the police?

The shopping mall is a case in point. While one might expect shoplifting to be the primary target of surveillance in the mall as in the shops themselves, the mall surveillance systems we observed could not actually view what was going on in the shops. They could respond to calls from the shops, for example to track a suspected shoplifter leaving a shop, but could not catch a shoplifter in the act and move to intervene. Instead, they tended to take pre-emptive action by excluding whole categories of the public seen as likely thieves or nuisances. This can also be interpreted as acting in the interests of the property owner rather than those of the shop-owning tenants. This may help explain why we saw so many categorical suspicions and evictions at the shopping mall while the department store's CCTV operators only evicted persons actually observed stealing and even declined to watch some scruffy persons reported to them by others.

Could this too provide a means of more closely evaluating the balance between CCTV goals and other public interests? Could we require that applications for CCTV permits show how the layout of their proposed CCTV installation addresses the claimed goals of the system? Could we require that they show those goals to be the responsibility of the system owner?

### *Video surveillance policies and leadership*

Official policies also seem to count. The operators we met spoke with considerable admiration of their immediate supervisors. They were well aware of their supervisors' policies and lauded these as exemplary. For instance, the head of security at the department store was quite explicit about the need to guard against racial prejudice. A man with a multi-national background himself, he was personally aware of the odious nature of such prejudice and proud of the cosmopolitan atmosphere of the store. In this, he clearly set the tone among the store's surveillance operators. Of course, avoiding prejudice is always a careful balancing act when registered criminal behaviours make it statistically reasonable to suspect some groups. The operators at the department store, in their running commentary as we observed their work, while crediting their boss with the goal of achieving that balance, were reflexively aware of their struggle to maintain it.

Could we require that applications for CCTV systems be accompanied by a policy document? Could we require that this document always be available for inspection? That operators be trained in its contents? That system activities be accountable according to the approved policy document?

### *Surveillance operator training*

The department store operators relied on their skills in observing subtle behaviours, to help them maintain non-prejudicial practices. By targeting behaviour rather than appearance, and by refraining from direct intervention unless and until a criminal act was clearly recorded, they avoided much of the tendency towards social exclusion we saw at some of our other sites. However, targeting behaviour while observing with the sensory limitations of a video screen requires a good deal of training. Two of the department store operators had police training and experience; the third had been a store detective for many years. The private security officers at the same store had substantially less training, and although working without the distance and sensory limitations of the CCTV system were far more likely to raise categorical suspicions towards scruffy- and/or foreign-looking persons.

Of course, police or detective training may not be the only training relevant to CCTV operations. At the transport centre, most of the operators' time was spent on access control functions, and security tasks might more reasonably be directed at nuisance-type disturbances, at accident prevention, and at customer service functions rather than at theft. Here we were told that operators were recruited from among the ranks of long-term railway security staff and also among people with a broad range of relevant skills and training (e.g. in logistics, public relations, etc.).

In terms of regulating the actual practices of video surveillance, our findings raise the question of whether it might be equally important to demand relevant operator training as to demand relevant



system goals. Could this be made a requirement for a CCTV operations permit?

*Organizational relationships of surveillance operators to actors in the field of view*

Finally, we will point to one more structural feature of the systems we studied that seemed to be consequential for their effectiveness and functions: the relationships of surveillance operators to operators in the field of view. Each of the cases we studied represented a different structure of such relationships. Taking the four we studied most closely:

At the department store, video surveillance operators also went out onto the shop floor as detectives or guards. However, in large part they depended on collaboration with shop clerks and private security officers for deployments out among the public. In these relations there was a complex hierarchy: In-store security outranked private security. In security issues they also outranked shop clerks, but in general security was a service function to sales, which were the primary function of the store. Thus the surveillance operators sometimes acted as consultants, sometimes requested assistance, and always followed up at least briefly when surveillance requests were phoned in even though they often disagreed with the suspicion raised.

At the open street system, surveillance operators, as civilians in a police organisation, had lower status than the police officers. They could not direct police officers to take action, nor could they explicitly direct police action underway in their field of view. In order to capitalize on the advantages of camera-enhanced vision, they had to diplomatically, discreetly, subtly use the cameras and radio as directive devices without seeming to take control over the situation. They also had to allow some episodes to go unaddressed when police were otherwise occupied or uninterested.

At the shopping mall, private security staff alternated between video monitoring and guard duty out in the mall. Collaborations were close and could be initiated in either direction. This made for rapid and effective response to situations, but, as we have seen, for socially uncritical response in many instances.

At the major transport centre, video surveillance operators were organizationally separate from railway security staff, private security staff, and police – all with overlapping patrolling/monitoring mandates within the same space. Collaborations were at times tense and reticent, especially between private security and video surveillance.

None of these organizational structures seems ideal, but then probably none could. Various, potentially conflicting interests are in play here, each with some legitimacy – e.g. economic efficiency and belief in outsourcing vs. job security; effective protection against shoplifting vs. a congenial, non-suspicious environment for shoppers, and so forth.

Summing up, our findings confirm earlier results that point to social exclusion from public spaces as a potential negative consequence of the spread of video surveillance. Our findings also bring that issue a step further by indicating that this may not be simply a consequence of the technology itself, of the distance and sensory limitations it entails, but may be a consequence conditioned by

various structural aspects of surveillance systems. Of course, with only a brief study of a handful of cases to build on, our findings are more hypotheses than conclusions.

Nevertheless, these hypotheses are worth pursuing, not only for the intrinsic value of knowledge itself, but because if structural features of surveillance systems have predictable consequences for the social effects of surveillance, then they may provide 'handles' via which to regulate surveillance practices. In earlier phases of our project we found that many countries required, or had the legal basis that would allow them to require, that organizations apply for a permit before installing and operating CCTV. If structural features are shown to relate to more or less desirable social consequences of CCTV operation, then these could provide a basis for evaluating applications for permits.

CCTV is a technology that holds out the promise of helping to solve certain social problems. But the use of CCTV in turn can create new problems. Therefore, societies have sought to control the use of CCTV. Structural features may provide a handle for improving the control of CCTV. But that will not, cannot, break the cycle of solutions leading to new problems. Although we have not discussed those problems here, let us end by acknowledging that controlling CCTV via structural features is neither a completely effective nor a completely benign solution.

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