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CCTV: BEYOND PENAL MODERNISM?

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In recent years, a number of writers have suggested that contemporary strategies of crime control have called into question some of the central features of 'penal modernism'. The return of punitively orientated 'ostentatious' forms of punishment whereby state representatives try to bring penal policy more in line with public sentiment is implicated (Pratt 2000; 2002). For other writers, the apparent erosion of state power accompanied by 'new modes of governance' based upon 'risk management' rather than the normalization of individual offenders is at the centre of a shift towards a 'late modern' or 'postmodern' penality (Feeley and Simon 1992; 1994; Smandych 1999; Garland 1996). This article draws upon research conducted for the EU-funded URBANEYE project to ask how the rapid growth in the use of CCTV in the United Kingdom fits in with contemporary debates on the emergence of a 'postmodern' penality (Garland 1995; 1996; 2001; Hallsworth 2002; O'Malley, 1999; Simon 1994). We begin with a review of the theoretical literature on visual surveillance. Next, we draw upon our empirical research to provide an account of the extent and sophistication of CCTV usage in publicly accessible spaces in London. Finally, we examine the 'practice of video surveillance' in four different settings—an open-street CCTV system, a transport system (mainline railway station), West London Mall and South London Mall.

The debate concerning the transition from 'modernity' to 'postmodernity' has been a central, although at times implicit, theme in much of the writing on 'new surveillance technologies'. A number of writers, for example, have asked whether the emergence of 'new surveillance' technologies represents an extension of the 'disciplinary power' associated with the rise of 'modernity'. For instance, much of the sociological and criminological literature on CCTV has been dominated by images of the Panopticon, Jeremy Bentham's proposal, written in 1787, for an architectural system of social discipline, applicable to prisons, factories, workhouses and asylums. According to Fyfe and Bannister (1996), the spread of CCTV across British streets represents a dispersal of an 'electronic panopticon', while Reeve has argued that open-street CCTV systems, like the panopticon, act as 'a device of total surveillance in a rationally ordered society' (Reeve 1998: 71). The similarities of CCTV with the panoptic principles embodied in Bentham's model prison with its central observation tower, staffed by an unseen observer, watching over the minutiae of a prisoner's behaviour, housed in transparent cells, is, of course, highly resonant. The spread of CCTV over city-centre streets represents the most visible sign of the 'dispersal of discipline' from the prison to the factory and the school, to encompass all of the urban landscape. Moreover, since it is impossible to know whether one is being monitored, CCTV, like the panopticon, has the

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potential 'to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power' (Foucault 1977: 201).

However, for other theorists, the emergence of 'new surveillance technologies' has given rise to forms of social control that take us beyond the disciplinary power associated with the panopticon. For instance, several writers have argued that surveillance is no longer about the observation of particular individuals whose identity is known beforehand; rather, it is about the surveillance of geographical places, time periods and categories of person (Marx 2002: 10; Poster 1990; Lyon 2002). For Feeley and Simon (1994: 173), these changes are part of a paradigm shift in the criminal process from the 'old penology' to the 'new penology'. The old penology was concerned with the identification of the individual criminal for the purpose of ascribing guilt and blame, and the imposition of punishment and treatment. The new penology, on the other hand, is 'concerned with techniques for identifying, classifying and managing groups assorted by levels of dangerousness' (1994: 180) based not on individualized suspicion, but on the probability that an individual may be an offender. For other writers, 'new surveillance' technologies are 'post-disciplinary' because they are based on a 'pre-emptive' or 'future-oriented' approach that involves an intervention before any deviant act has taken place. From this perspective, the introduction of video surveillance reduces 'the number of occasions of any conceivable need for Panoptical surveillance on account of simulation, prediction and action before the act' (Boyne 2000: 285; see also Bogard 1996; Graham 1998; Lianos and Douglas 2000). As Pat O'Malley (1996) has argued, this rejection of a concern with 'causation' and the 'individual offender' signals 'not merely a redirection of particular policies but rather a shift away from the disciplinary technology of power itself' (1996: 189; see also, Cohen 1985: 146–8).

While acknowledging that the literature reviewed above provides a useful starting point for situating the emergence of CCTV within the 'postmodern' penality debate, we would argue that much of this debate is conducted at a very high level of abstraction. Consequently, those who deploy these theoretical frameworks can often 'mistake rhetoric for reality' and fail to consider the aims, activities and values of penal actors themselves (Duff and Garland 1994; Lucken 1998: 108). In this article, we aim to bridge the gap between the 'grand theory' of 'postmodern' penality and the 'real world' of current penal practice by drawing upon empirical research conducted for the EU-funded URBANEYE project. Our analysis moves from the macro to the micro, beginning with an account of CCTV's rise to ubiquity in the United Kingdom. Next, we use our empirical research to provide an overview of the extent of CCTV surveillance systems in London. Following this, we go inside some of the capital's CCTV control rooms to examine the practice of video surveillance in four different settings: a public CCTV network (open-street and housing), a transport system (mainline railway station), West London Mall and South London Mall. Finally, we draw upon observational research conducted in a shopping mall control room to show how frontline operatives shape the operational procedures of CCTV systems. However, before doing any of this, we will give a brief outline of our methodological approach.

Methods

As part of the comparative work for the URBANEYE project, we collected data from a number of sources. We began by conducting two surveys of CCTV in a South London

Borough. In our first survey, we contacted the managers or security managers of 27 major commercial/civic (publicly accessible) institutions in the Borough and conducted short telephone interviews.[1] For our second survey, we were tasked to select a street (or streets) in a busy commercial/shopping district of approximately 1.5 kilometres in length. We then visited 217 publicly accessible premises, in order to identify whether or not they had a CCTV system and signage notifying the public of the operation of CCTV. We then contacted those with CCTV systems and conducted a short telephone interview, usually with the on-site manager. The fieldwork was carried out in March 2002 and the telephone interviews completed by the end of May 2002.

After completing our questionnaires in a South London Borough, we conducted more detailed case studies on the use of CCTV in four different settings: a public CCTV network (open-street and housing), a mainline railway station, West London Mall and South London Mall. These case studies were based on a total of 23 interviews[2] with managers and frontline operatives at the different sites and observational research in the CCTV control rooms. At three of the sites, we carried out 'flashlight' observations which involved brief visits to the control rooms and informal conversations with those working on-site. However, we also conducted more detailed observational research in the CCTV control room of South London Shopping Mall. Observations on this site were carried out by one of the researchers in the autumn of 2003. In total, 120 hours of monitoring were observed—the equivalent of 15 eight-hour shifts between 9 am and 5 pm. All days of the week were covered except Sundays, when the mall was not open for business. Only one CCTV operator monitored the system at any given time. During the 120 hours of observation, all ten of the security officers who worked the daytime shift were monitored as they sat at the control desk, although some of these officers worked in the control room for just an hour or so. A small notebook was used in the field, when appropriate and full field notes, including full descriptions of any 'targeted surveillance',[3] were written up, either immediately after they occurred or at the end of each shift. However, field notes on security officers' values and beliefs, work tensions and interactions in the control room were usually written up outside of the control room.

CCTV in the United Kingdom: The Rise to Ubiquity

One of the most striking features of contemporary penality is that it is 'characterised by an unusual degree of incoherence and volatility' (O'Malley 1999: 175; Garland 2001). Rising prison populations and the return of punitively orientated 'ostentatious' forms of punishment (Pratt 2002) sit alongside more pragmatic strategies, such as the 'commercialization of justice' and the shift towards 'situational' methods of crime prevention. For David Garland, these developments are the result of 'a new criminological *predicament . . . the normality of high crime rates* and *the acknowledged limitations of the criminal justice state*' (2001: 105–6). The government response to this predicament has resulted in a series of policies that are highly contradictory. Garland notes that on the

[1] For the purpose of the URBANEYE project, we were tasked to locate, from a list of 31 institutions, the nearest example of each institution from the central point of our commercial shopping district.

[2] These included tape-recorded interviews lasting approximately one hour and more informal conversations with security officers.

[3] In this study, we decided that a 'targeted surveillance' had taken place when the CCTV operators held a camera on a 'suspect' for 30 seconds or more.

one hand, the state appears to be attempting to reclaim the power of sovereign command by the use of phrases like 'zero tolerance', 'prison works', 'tough on crime' and 'three strikes'. However, at the same time, there has been an attempt to face up to the predicament and develop new pragmatic 'adaptive' strategies, including the 'rationalization of justice', the 'commercialization of justice' and a 'redistribution' of the responsibility for crime control (2001: 113). It seems to us that however one interprets these developments, one of the main reasons for CCTV's rise to ubiquity in the United Kingdom is because it straddles these conflicting discourses on crime control: on the one hand, the 'sovereign state' approach, with its 'expressive' gestures and 'punitive' sentiments, and, on the other, the 'adaptive' strategies, with their emphasis on 'prevention' and 'partnership'.

Expressive gestures

The first major expansion of open-street CCTV systems in the United Kingdom came in 1993 (see Bulos and Sarno 1994) after the tragic murder of the toddler, Jamie Bulger, by two ten-year-old schoolboys. The images of the little boy being led from the shopping centre were replayed night after night on television and dramatically launched CCTV into the public debate surrounding the control of crime. The *Bulger* case saw the return of openly avowed expressions of vengeful sentiment, as angry mobs took to the streets, demanding that something be done. The case also received enormous attention and dominated the headlines of both print and electronic media for many weeks.[4] The media attention gave an almost irresistible impetus to the introduction of CCTV and, in July 1994, less than a year after the case, a large-scale CCTV system 'went live' in the town centre of Liverpool.[5] In this context, the rapid introduction of surveillance cameras can be seen as a form of '*acting out*—a mode that is concerned not so much with controlling crime as with expressing the anger and outrage that crime provokes' (Garland 2001: 110). It was a populist measure, designed to send a message to the public that the government was *doing something* about the crime problem. It reasserted the old myth of the sovereign state and its plenary power to punish. This was reflected in the language of politicians who claimed that CCTV was a 'friendly eye in the sky' that will 'put criminals on the run'. Moreover, unlike offender-centred approaches, which take place away from the public gaze in prisons, drug rehabilitation centres and young offender institutions, CCTV is highly visible. The cameras are on the streets for all to see and the public are constantly reminded of their presence by local media, hungry for a 'good news story' which can be dramatically visualized through the use of recorded images from the CCTV footage (McCahill 2003). Politicians at both the national and local levels are also eager to be associated with the introduction of new CCTV systems. Thus, while it is unusual to find politicians boasting about the introduction of prisons or half-way houses for young offenders into the neighbourhood, when it comes to CCTV, they are queuing up to be associated with this 'wonderful new technology' (Norris and Armstrong 1999).

[4] 'For Goodness Sake Hold Tight to Your Kids', *The Sun*, 16 February 1993.

[5] While the case originally provoked anger at the inadequacy of the fuzzy recorded images, once these had been subject to computer enhancement, claims were made in the press that they had 'been a vital and unexpected source of information in the investigation of James's murder' (Kember 1995: 120).

Adaptive strategies

Running alongside the 'sovereign state' approach are a series of more pragmatic statements that are less bullish about the possibility of winning the 'war against crime'. For instance, in 1993, the Audit Commission published a report that was scathing about the inability of the police to stem rising crime rates. It stated, given current trends in crime figures and clear-ups, by 2002, the number of recorded crimes will have exceeded nine million and the overall clear-up rate could drop to 18 per cent (Audit Commission 1993: 8–9). Worried that society was in danger of losing the 'battle against crime', the Commission called for a massive expansion of proactive, intelligence-led policing, and singled out CCTV as having a major role to play in crime prevention. The idea that the government was beginning to acknowledge the limits of the sovereign state in the area of crime control is also evident in government-initiated 'responsibilization' strategies, which increasingly are addressed not to central-state agencies such as the police, 'but *beyond* the state apparatus, to the organisations, institutions and individuals in civil society' (Garland 1996: 451; O'Malley 1992). Once again, the rapid growth in the use of CCTV surveillance systems would appear to fit neatly with such developments. In 1994, the Conservative government announced the first of four CCTV Challenge Competitions to support the expansion of open-street city-centre CCTV. Bids had to be in the form of a partnership with matched funding from other sources, particularly the business sector, the local authority, the police or even other government agencies. The competition would only fund up to 50 per cent of the total capital costs and no contribution would be made for the annual running costs which could be as much as £250,000 (Webster 1998). In this respect, the introduction of CCTV devolved the responsibility for crime control onto local partnerships and dovetailed neatly with the government's ideological demands for privatization of the public sector. These developments have continued under 'New Labour', where the use of partnerships in the delivery of CCTV has become entrenched in the Crime and Disorder Act and Home Office funding mechanisms (Webster 2004). Despite this proliferation in the use of surveillance cameras, we still know very little about the exact number of cameras currently operating in this country. In the following section, we draw upon our empirical research to extrapolate the extent of CCTV in London and the country as a whole.

CCTV in London

The original catalyst for CCTV expansion in central London came in 1993, in response to the IRA's terrorist attack on Bishopgate. Following this, a network of cameras was introduced to monitor the entrances to the City of London known as the 'ring of steel'—a symbolic gesture designed both to reassert the power of 'sovereign command' and to reassure international finance about the security of the city. This system was soon integrated with many of the cameras operating in the City's banks and offices. 'Camerawatch', as it is known, was set up following a meeting with some 400 organizations and involves 373 systems with over 1200 cameras (*CCTV Today* 1995: 28). Meanwhile, the number of open-street CCTV systems operating throughout London has grown dramatically following the success of London Boroughs in the bidding process for centrally funded CCTV. For example, in the second round of the Crime Reduction Programme (announced on 31 March 2000), awards amounting to £79million were

made to partnerships. The successful partnerships included a total of 22 London Boroughs, who made bids ranging from £15,000 in the Borough of Merton to £2,718,450 in the Borough of Tower Hamlets (for improvements to the Docklands Light Railway). Between them, the 22 London Boroughs bid for a total of £17,883,343.

CCTV in a South London Borough

To get a more precise account of the use of CCTV in publicly accessible spaces in London, we conducted two surveys in a South London Borough. In our first survey of commercial/civic (publicly accessible) institutions, we found that out of a total of 27 public institutions, 15 (56 per cent) had a CCTV system in operation.[6] We obtained information on the number of cameras from 14 institutions. Between them, these premises had a total of 127 CCTV cameras. On average, there were nine cameras per institution. In our High Street survey, we identified 217 publicly accessible premises. These included 76 (35 per cent) chain stores, 48 (22 per cent) small shops and 41 (19 per cent) eating/drinking places. In total, 92 premises appeared to have cameras. However, in six of these cases, these were 'dummy' cameras. Thus, 86 (41 per cent) out of 211 of the institutions in our sample had CCTV systems in operation. Our sample gained information on the number of cameras in 60 of the 86 institutions with CCTV systems. In total, there were 246 CCTV cameras in our High Street sample. The average number of cameras in these institutions was 4.1.

What do our surveys tell us about the extent of CCTV in London? We can see from our High Street sample that 41 per cent of premises had CCTV systems in operation and that the average number of cameras per institution with CCTV was 4.1. If we begin by assuming that the extent of CCTV coverage in our sample is broadly representative of CCTV coverage across the whole of London, we can estimate that 41 per cent (102,910) of the 251,000 businesses registered for VAT in London[7] would have a CCTV system. Between them, these businesses will have 421,931 surveillance cameras. If we add to these the number of surveillance cameras operating in other public institutions (open-street systems, transport, hospital, schools, etc.), it would not be unreasonable to 'guesstimate' that Londoners are monitored by at least 500,000 CCTV cameras. This would mean that in London (with a population of 7.2 million residents), there may be as many as one camera for every 14 people. Tentatively, extrapolating these figures to the United Kingdom as a whole, there may now be some 4.2 million surveillance cameras in operation.

While our surveys may give us an indication of the ubiquity of CCTV in London, we cannot make any generalizations about the nature and impact of CCTV from the mere existence of these systems. For instance, the majority of systems in both our samples are small operations, with very little technological or organizational sophistication. In our High Street sample, 45 out of 59 (76 per cent) institutions had fixed cameras only, 36 out of 50 (72 per cent) systems were monitored by a single person, 38 out of 49 (78 per cent) were monitored 'irregularly', and only five (10 per cent) systems were monitored

[6] The hospital, public school, social welfare/benefits office, unemployment office, metro/underground, car park, shopping mall, chain store, pharmacy, bank, post office, hotel, cinema, petrol station and pub all had a CCTV system. However, the kindergarten, college/university, court, leisure centre, public library, church, cemetery, public toilet, small shop, restaurant, park and high-density residential area did not have CCTV systems.

[7] See London Research Centre (2000), *Focus on London 2000.* London: The Stationery Office.

on a continuous basis (i.e. 24 hours a day, seven days a week). Similarly, in terms of system integration with outside agencies, only two (3 per cent) institutions had the facility to relay pictures captured by their system to the police, and less than a third (29 per cent) had electronic communications links with other police/security systems (see McCahill and Norris 2003: 62–3).

Inside the CCTV Control Rooms

Based on our High Street sample of CCTV systems, there would appear to be very little scope for proactive surveillance carried out in conjunction with the police. However, as part of our comparative research for the URBANEYE project, we also looked at the 'practice of video surveillance' in several major institutions with more (technologically and organizationally) sophisticated CCTV networks. These included, first, a local-authority-controlled open-street CCTV system in a South London Borough, with a network of approximately 250 cameras located to monitor the borough's five town centres and public housing areas; secondly, a mainline railway company with a network of 1,385 (mainly fixed) CCTV cameras situated to monitor the entrances and exits, ticket machines, barrier gates, and Help Points in 65 train stations; thirdly, West London Mall, which has a brand new digital CCTV system consisting of 75 CCTV cameras (50 'pan/tilt/zoom' and 25 'fixed' cameras); and finally, South London Mall, a 1960s building in a busy shopping district, with a small system consisting of 14 cameras which monitor the malls, the entrance points, the lifts and five service-yard areas.

From normalization to risk management

Several security managers explained how their CCTV systems were used in a 'proactive' way to monitor geographical spaces, time periods and categories of people rather than individual suspects. In our public CCTV network of 250 cameras in a South London Borough, many of the cameras were placed strategically to target particular spaces, as the Borough's Crime Watch Manager explained:

> The five areas are our main shopping parades. They also happen to be where the majority of the rail and bus interchanges are. So it's the five areas in the borough that have the highest concentration of what you call non-resident public conglomerations of people coming together for whatever reason, be it shopping, be it commuting, be it just travelling through one place to another. So the five areas are where CCTV is most needed and most likely to be effective.

At London Trains, 131 train stations have CCTV systems in operation. The images from 623 CCTV cameras (out of a total of 1,385) are relayed back to a central control room that displays the images on a bank of 33 monitors. One of the main uses of the system on this site is to monitor specific time periods when large congregations of people are in the stations. As the Control Centre Manager explained:

> When Twickenham (an international rugby match) is on we can get over-crowding and safety problems. You could have 2,000 people trying to get on the platform at once. So we liase with the platform staff and get them to limit the number of people coming into the station or close the station. . . . Also at 3.30pm we have 'schools out', you know, Monday to Friday when there's a lot kids in the station.

Meanwhile, at West London Mall, a brand new digital CCTV system consisting of 75 CCTV cameras is used mainly to deal with 'categories' of people who disrupt the commercial image:

> The main problems encountered on the malls stem from groups of youths congregating and generally causing a nuisance. . . . Should anyone be banned from the centre this information is relayed through the shifts so that all security officers on the malls are aware of who is and isn't banned. (Operations Manager)

As the above quotation illustrates, the growth of CCTV in semi-public spaces brings with it an increasing emphasis on exclusion as the dominant strategy of social control. At West London Mall, information on 'banning orders' was relayed through the shifts so that all security officers knew who was banned. The exclusionary potential of CCTV was also evident at South London Mall, which has a battered old system consisting of 14 cameras (eight internal cameras and six external cameras). South London Mall was built in the late 1960s and is only a short walk from some very affluent housing. However, there are also pockets of extreme deprivation nearby. One of the primary functions of the security system on this site was, from the Marketing Executive's point of view, to monitor certain 'categories' of people while, at the same time, attracting other categories of people (i.e. more affluent consumers) to the mall:

> We've got around 500 residents in these blocks in total [there are several blocks of high-rise council flats on the premises of South London Mall]. We look at them as sort of our core catchment really in so much as they're the immediate catchment. But they're not really a sustainable catchment because they're fairly low income. . . . If you actually look at the over all demographics of the Borough, on the east and west sides of the high street it's very affluent. You've got high percentages of A's, B's and C1's,[8] the more affluent socio-economic groups, and you've got lower percentages of C2's, D's and E's—much lower than the national average. . . . What we tend to find from a marketing point of view where you have a mass of people that are primarily D–E spectrum and you have mass of people that are sort of A, B, C1, the D's and E's are quite territorial and what they try to do is because they are quite loud and quite aggressive they tend to sort of push out the A's and B's. Now unless the mass of A's and B's is large enough to sort of maintain their status, they tend to be sort of pushed out. So the area, although it is predominantly A, B, C1 (you might have a lower amount of D's and E's) because they're so loud and aggressive they tend to push out the A's and B's. So you end up with a nightmare situation, and it's only policeable by security and CCTV.

One problem with these practices, as von Hirsch and Shearing (2000: 90) have argued, 'relates to the possible unfairness of the procedure for determining that a criminal violation has occurred'. On some occasions, for example, it appeared that exclusionary practices at South London Mall were based more on the whim of the security officers than on the behaviour of those who were ejected. As one CCTV operator put it, when asked whether a suspect was banned, 'if he's looking really scruffy or he's drunk, then we throw him out of the centre'. The use of these practices represents a shift from formal and legally regulated measures of crime control and order maintenance towards private and unaccountable justice.

[8] Here, the Marketing Executive is referring to the 'ABC1' scale of social stratification.

Policing 'beyond-the-state'

Our interviews with system mangers also revealed that the development of CCTV networks in London is giving rise to new forms of 'hybrid policing' which blur the boundaries between 'public' and 'private' policing. For instance, the CCTV operators (a combination of local-authority employees and the police) in our public CCTV network have a Retail Radio Link which allows them to communicate with private security officers working in 175 businesses (around 35 in each of the borough's five town centres) throughout the borough. Also on the Retail Radio system are the borough's Street Patrollers, who have the power to enforce local by-laws. Meanwhile, the images displayed on the screens in the council's CCTV control room can be relayed to three local police stations. Similarly, the CCTV operators at London Trains have a radio handset that allows them to communicate with some of the retailers in the local town centre. As the Security Manager explains, 'basically, what happens is if someone steals something from Marks and Spencer's they can get on the radio and say, "we've had someone in our shop stealing and they're heading towards the train station, this is what they look like" '. On this site, there is also close liaison between the CCTV operators and the police, as the Security Manager explained: ' . . . the police request videos all the time. I'd say we hand over about 150 tapes per month to the police to do with instances on the stations or near the stations.'

There is, therefore, an increasing tendency for CCTV systems to become embedded in a complex social and technological web of surveillance that extends and diffuses the impact of the surveillance gaze to a range of other control agencies. In this respect, 'new modes of government' are not simply about the central state off-loading the responsibility for crime control. Instead, the composition of such networks can, in some contexts, extend the central state's capacity for action and influence (Garland 1996). In his book, *The Surveillance Web*, for example, McCahill showed how the privately owned CCTV control room of a local shopping mall was used by the police as an 'intelligence base' to target suspected drug dealers.

Neither does the development of policing 'beyond-the-state' lead to the demise of the 'normalizing' strategies associated with old penology. For instance, police use of 'semi-private' CCTV systems often involves the targeting of 'suspected' or 'known' individuals so that they can be arrested and punished:

> One major problem with not having the police [in the control room] would be not having police intelligence. The police know who they're looking for. They've got people who they're looking for even before they've done something. (Crime Watch Manager, South London Borough)

> We've got a problem with 'ticket touts' and 'aggressive beggars' at [one station]. You can see we've got three cameras on there at the moment. The police ask us to monitor and pass on information, and we've had ASBO's [Anti Social Behaviour Orders] issued against known people. (Control Centre Manager, London Trains)

> The police use the system a lot. There was a bank hold-up a few weeks ago and the police had a suspect who they had been told used the mall and so they sat in the control room to see if they could identify them. (Duty Manager, West London Mall)

We can see here not the replacement of the old penology with a new penology, but their fusion. While there is clearly a concern with groups and categories, with proactive

targeting and the expansion of non-state forms of surveillance, simultaneously, we see a concern with identifying known individuals and the co-option of private systems for the purposes of state policing. However, as we show below in our case study of a London Shopping Mall, the incorporation of commercial security into policing networks is by no means straightforward.

CCTV Operators in a London Shopping Mall

As a number of writers have shown, the operation and impact of CCTV systems have to be understood as the outcome of the complex interplay between technological, organizational and cultural factors (Norris and Armstrong 1999; McCahill 2002). For instance, in his study of the use of CCTV in shopping malls and the industrial work place, McCahill (2002) found that the ability of system managers to mobilize a response to monitored non-compliance was constrained by local cultural traditions and class solidarities amongst low-level security officers, who often identified more with those under surveillance than with their superiors. In this section, we draw upon 120 hours of observational research conducted at South London Mall to show how the operational procedures of CCTV control rooms are shaped not only by cultural traditions and organizational practices, but also by the individual concerns of those working within the same organization. In particular, we want to look at how the ideas of 'partnership' and 'prevention' are mediated by those responsible for monitoring the systems. When we do this, we find that the idea of a 'post-modern' or 'late-modern' penality begins to unravel.

South London Mall is situated in a town centre in South London and is surrounded by a number of high-rise council flats, the occupants of which make up the shopping mall's main clientele. The first cameras were installed in the 1980s and the system has been up-dated periodically with, for example, the introduction of dome cameras. There are eight internal cameras (a combination of pan/tilt/zoom and dome cameras) situated to monitor the malls, the entrance points and the lifts, and six external cameras (five pan/tilt/zoom and one fixed) used to monitor the entrance points to the shopping mall's five service-yard areas. The control room is manned for 24 hours a day, 365 days a year by security officers (seven Black, one Asian and two White operatives) employed by a UK private security company. In theory, everything on this site was in place for 'proactive' or 'pre-emptive' policing, conducted in close cooperation with the police. The CCTV operators in the control room had the facility to pull down images from the councils' network of 250 CCTV cameras onto a TV monitor. There was a retail radio link that allowed the CCTV operators to communicate with the police and other security officers working in the town centre. Also, police officers based in the local Crime Prevention Shop (located in the mall) had been given a radio handset that allowed them to communicate with security officers during unfolding incidents. However, as we shall see below, organizational conflict and low staff morale had a major impact on the way the system worked in practice.

Organizational conflict and the limits of 'partnership'

One of the most important determinants of surveillance practice on this site was the level of conflict within the organization. Conflict between the security officers and the

management, for example, was intense. During our brief spell in the control room, one guard was dismissed, two were demoted (moved from the mall to service-yard duty), two received written warnings and there were several disputes over pay, all of which generated a hostile atmosphere in the control room. The general mood amongst the officers is summed up in the following statement:

Extract from field notes: This company is shit man. They don't care about us, they don't do anything for us. I've done so much for this company. They've rang me at twelve at night and asked me if I could work and I've said, 'yes, no problem'. And the staff here don't give a shit. They're all lethargic and lazy; they're not on the ball. We (Tarrik and Harry) used to come in here on our night off and help out the night staff. I came in here the other night because I'd left something in my locker and X was asleep down there, Y was asleep over there, and Z was bringing his TV upstairs. And none of these guys are trained. They don't give a fuck. I've done my Sito, Health and Safety, Fire Procedures, People Management, the lot man. When the old security manager was here it was really good, you know. He put me through all the proper training courses. But Stephen hasn't got a fucking clue.

Organizational conflict also existed between the security officers and the police. Some security officers, for example, had 'out-of-work' problems with the police. During one shift, Graham was very annoyed about the treatment he received after a minor car accident:

Extract from field notes: When the police arrived they checked my car very thoroughly man. They looked at the foot pedals and tyres but never bothered to check the other vehicle. They asked me to perform a breathalyser test and started to ask me stupid questions. They said 'how long have you lived in this country?' So I said, 'how long have you been in this job?' But they said nothing to the other guy. Then they said, 'what year were you born?' So I told them and they said 'so how old are you?' So I said, 'didn't you go to school? Don't you know mathematics? Stop asking me stupid questions' And then I said, 'go on arrest me; put handcuffs on me'.

Other security officers had experienced 'on-the-job' trouble with local police officers. For instance, the TV monitor that allowed the security officers to relay pictures from the council's open-street CCTV system was removed because, as one of the security officers explained, 'some of the guards were being a bit naughty and miss-using the cameras so they took it down. You know, watching things they were not supposed to be watching; girls walking down the street and things like that' (Security Officer). Tensions between the security team and the police came to a head when Tarrik was arrested for assaulting a police officer. One Saturday afternoon, a fight broke out on the mall. A man had stolen a mobile phone, it turns out, from his girlfriend. When confronted by several guards, the man began to lash out. In the ensuing melee, the suspect managed to headbutt Graham (security guard) and land a right hook on Tarrik's chin. Following this, Tarrik grabbed hold of the man and repeatedly smashed his face down on his knee. When describing the incident in the control room, Tarrik told me that he took great care to ensure that the man's face was landing right on the end of his knee-cap, rather than on the softer area just above the knee. There are conflicting views about what happened next. Harry says that during the fight, a police officer from the Crime Prevention Shop in the mall tried to intervene and as Tarrik pulled his arm back to lay another punch, his elbow hit the police officer in the mouth and knocked out a couple of his teeth. Following this, the police officer stood back and shouted 'ASSAULT'! 'So the man on the mall who had assaulted three guards,' Harry says, 'walked off and the police came and arrested Tarrik.'

As one can imagine, these developments were not entirely conducive to the formation of a 'partnership' approach to crime prevention. For instance, following Tarrik's arrest, the security team removed a radio handset (which allowed the police to listen to the security officers on the shopping mall radio link) from the Crime Prevention Shop to stop them from 'interfering' during incidents that take place on the mall. Tensions between the security team and the police were also having an impact on operational procedures, as the following incident illustrates:

Targeted Surveillance 1 (Shift 6 at 12.00—suspect not identified)

At 12.00 Darren (the main CCTV operator on duty today) has gone for a break and Harry and Tarrik are sitting at the control desk. They receive a message on the shopping mall radio link from the 'Crime Shop' (police): 'Control we've just had a radio message from WH Smiths that two IC 3 males have been acting suspiciously in their shop. One of them is wearing jeans and a black baseball cap . . . ' Harry interrupts before hearing the end of the message: 'WH Smiths have got their own security', and then, on the radio says, 'yes, received Crime Shop'. No attempt is made to find the suspects on camera.

During another incident, Harry spotted a suspect on camera placing a knife up his sleeve. When the police used their radio to ask Misha (female security officer) if she was okay, Harry, on the radio, said, 'Yea, Crime Prevention can you keep out of this please?' When they continued to interject on the radio, Harry snapped, 'Crime Prevention can you shut up?'

Mediating the image: the limits of 'proactive' surveillance

For CCTV systems to operate in a way that reflects the aims of the 'new penology', we would expect those working in the control rooms to use the system 'proactively' to prevent crimes from occurring in the first place. However, the main theme to emerge from our observational analysis was the extremely low level of 'proactive' use of the CCTV system by frontline operators. For instance, our findings showed that in 120 hours of observation, there were just 84 'targeted surveillances'. This represented just over five targeted surveillances per eight-hour shift. Moreover, only 29 (35 per cent) of these were the result of 'proactive' use of the system by CCTV operators. In other words, there was a proactive CCTV operator-initiated targeted surveillance in this control room once every four hours (two per eight-hour shift).

The lack of proactive use of the CCTV system on this site was partly due to the high level of organizational conflict that produced a divided and disillusioned work force. The disillusionment amongst the guards was reflected in their use, or rather non-use, of the CCTV system. During shift one, for example, Harry saw what he described as a 'known shoplifter' but didn't bother following him. On another occasion, he saw a man leaving the mall with stolen books but didn't bother to deploy a security officer because he thought there was not enough staff on duty. On another occasion, he tried to contact a guard but, on receiving a muffled and incomprehensible response in broken English, threw down his radio in disgust. During another incident, Harry tried frantically to deploy one of the guards to a shop that had been burgled at the back entrance. However, after making six or seven attempts to contact a security officer, Harry got so fed up that he decided to deploy himself to the scene, leaving the control room 'un-manned' for 15 minutes.

A typology of CCTV operators

A combination of intense organizational conflict and weak management structure meant that operational procedures were left almost entirely in the hands of the security officers. However, not all security officers responded in the same way to this situation. In Table 1, we have adapted Robert Merton's (1938) famous typology in an attempt to examine the orientation of different security officers to their job.

First, we have the 'technophile–work embracer', who accepts both the organizational goals and the technological means of achieving those goals. Second is the 'technophobe–work avoider', who rejects both the organizational goals and the technological means of achieving those goals. Third is the 'technophobe–work embracer', who is committed to the organizational goals but rejects the technological means of achieving them. Finally, we have the 'technophile–work avoider', who rejects the organizational goals but accepts the technological means of achieving them (or has a level of technological sophistication required to achieve the organizational goals if he or she wished to pursue them).

The technophile–work embracer

Harry is a 24-year-old white male who has worked at the shopping mall for around four years. Harry, who was formerly employed as the Security Manager of the mall, is the most experienced and knowledgeable of all the security officers. In terms of technological sophistication, Harry is easily the most experienced guard. He is very quick and efficient when using the control panel and he knows how to programme the cameras, change default positions, take hard-copy printouts, etc. In terms of organizational goals, Harry is basically a 'crime fighter'. He was the only security officer who managed to spot offences in progress on the CCTV system, including a man trying to put a book in his inside jacket pocket, a teenager putting a knife up his sleeve and two boys stealing what he thought were DVDs. However, he also uses 'economic' forms of reasoning (Garland 2001), choosing to monitor 'vulnerable' targets and 'time periods' rather than individual suspects:

Targeted Surveillance 2 (Shift 3: 11.45–11.46)

At 11.45 Harry is in the control room and is using one of the internal dome cameras to zoom in the doorway of Basic Clothes (clothes shop). He sees a white male in his early forties looking at three-quarter length suede coats. As Harry watches the man trying on one of the coats he says, 'this time of year everyone nicks coats 'cos they're expensive you know.'

Targeted Surveillance (less than 30 seconds and suspect not identified)

Harry zooms in on Boots the Chemist and tells me that it was usually a good idea to monitor those shops selling sandwiches across dinnertime.

TABLE 1 *A typology of CCTV operators/security officers*

	Organizational goals	Techno means
Technophile–work embracer (conformist)	+	+
Technophobe–work avoider (drop-out)	–	–
Technophobe–work embracer (innovator)	+	–
Technophile–work avoider (ritualist)	–	+

The technophobe–work avoider

The technophobe–work avoider is epitomized by Winston. Winston is a Jamaican in his early 40s. He spends more time in the local bookmakers trying to back a winner than he does on the mall trying to catch the criminals. Moreover, on the rare occasion that he does come to the control room, he lacks the technological sophistication required to use the system effectively:

Targeted Surveillance 4 (Shift 11 at 16.18—not identified)

At 16.18 Winston is sitting at the control desk when the telephone rings:

Winston (on the telephone): 'Hello, South London Mall how can I help you? Erm, he's er, he's er, not in er at the moment. Okay, no problem. Er, what I'll do . . . . ' (while Winston is talking on the telephone he receives a message on the radio from one of the patrol guards).

Romeo 17: 'Romeo 17 to control over.'

Winston (on the telephone): 'Can you er hold the line please?' And then, on the hands-free receiver, Winston says, 'Stand by control (Winston is in the control room). Sorry, stand by Romeo seventeen.'

Winston (on the telephone): 'I'll get him to call you back okay?'

Winston (on the hands-free receiver): 'Come in seventeen.'

Romeo 17: 'Control a small girl has been mugged. She has had her mobile stolen outside the "Snoozestore" over.'

The telephone rings again and a buzzer for one of the five intercom phones goes off. Winston picks up the intercom receiver for the F Service Yard area: 'Hello security.' There is no reply because Winston has picked up the wrong receiver. He tries again on the receiver for E Service Yard: 'Hello security. Okay,' he says, as he reaches for the button to open the gate for E Service Yard.

In the incident above, Winston stammers on the telephone, grabs the wrong intercom receiver and, on the hands-free receiver, says, 'Stand by control' when he was addressing a guard on the mall. Winston is rarely on the mall when needed and when he comes to the control room, operational procedures quickly descend into chaos. During another incident, Winston contacts the control room because he is concerned about the behaviour of a group of boys:

Targeted Surveillance 3 (Shift 4 at 10.18—not identified)

At 10.18 Winston calls Tim in the control room:

Romeo 4: 'Control there's a group of IC 1 males causing trouble on the South Mall.'

Tim: 'Yes, what are they actually doing Romeo four, are they just messing about?'

Romeo 4: 'Actually, it's a . . . it's a lot more than that control. They're throwing stuff around and it's getting out of control, control over.'

Tim: 'Okay, I'll keep the cameras on them.'

Romeo 4 to Misha (patrol guard on the mall): 'Romeo 5 can you keep those kids out?'

Misha: 'Romeo 4, I spoke to them earlier they're just kids, they're okay.'

In the incident above, neither Tim (CCTV operator in the control room) nor Misha (patrol guard on the mall) takes Winston's concern seriously. Winston is a 'technophobe–work avoider', who is never around when trouble commences. When he sends messages to the control room, therefore, his colleagues question his judgment as to the seriousness of the unfolding incident.

The technophobe–work embracer

Misha is the only female security officer at the shopping mall. Born in Morocco, she speaks in broken English and has lived in the local flats for eight years. Misha has previously worked as a security officer for two national retail stores on Oxford Street. During one very brief stint at the control desk, she told me that the security system at one of these stores was excellent and that I should have carried out my study there instead of the 'rubbish system' at South London Mall. I ask her about her experiences on the mall and she says, 'If you treat the people here with respect then they'll respect you. I live on the estate you know, so they know me and they respect me.' Misha, unlike most of the guards, takes her job very seriously and is very conscientious. The other guards often rib her because of this. Graham, for example, describes her as 'fussy'. On one occasion, Misha was due to finish at 4 o'clock. She arrived in the control room at 3.55 to collect some things but refused to leave until the clock struck 4. Winston, who was sitting at the control desk, said 'Leave now Misha, don't be a chicken.'

While Misha was very committed to her job, she hated working in the CCTV control room. As she explained, 'People don't understand me (on the telephone and intercom) so they always ask me to repeat things. And they take advantage because I'm a foreigner.' Misha's dislike of working in the control room was so intense that on one occasion, when called to the control room, she stood at the doorway and refused to enter:

At 15.00 Graham calls Misha to the control room. When Misha arrives she finds that Graham has sneaked out to an area at the back of the control room to make a telephone call on his mobile phone. 'I'm not staying in here,' Misha shouts to Graham as she stands at the entrance to the control room refusing to sit at the desk. As I sit in the control room on my own several requests for access to the service yard areas are made via the intercom systems. Misha walks into the control room, presses one of the buttons to raise the access control barriers and then walks out and resumes her position by the entrance to the control room. As Misha enters once again to answer the telephone, Graham returns but quickly leaves again when he receives another call on his mobile telephone. As Graham heads towards the control room exit, Misha grabs her things and sprints out of the control room. As she runs for the door she shouts to Graham, 'Don't you leave me in here!'

The technophile–work avoider

Darren is the security team's second Supervisor. He is in his mid-40s, married with four children, and speaks in a thick Jamaican accent. Having worked at the mall for around 10 years, Darren is one of the more experienced officers. However, although he has a high level of technological sophistication, he very rarely uses the CCTV system in a proactive way, relying instead on incidents to be called to his attention by the security officers who patrolled the mall. He spends most of his time reading tabloid newspapers, particularly the horseracing section:

Shift 5: Monday 21 October 2002

I arrive in the control room at 09.00 on Monday morning to begin a very uneventful day. Darren is back from his two-week holidays and spends most of the day reading his newspapers. The CCTV system is not used proactively during the entire eight-hour shift. Darren sat for what seemed like hours at the control desk and at one point it looked like his head was nodding and it sounded like he was snoring. During these long periods of inactivity he was occasionally brought to attention by the buzzing sounds of the intercom systems, and, startled, he would reach across the control desk to press a button to open the remotely operated access control gates to allow vehicles into the shopping malls delivery areas.

When an incident is brought to the attention of the CCTV operator from someone outside of the system, he or she can respond in three ways. First, the CCTV operator can use the system to provide information that will help those on the mall during a targeted surveillance. Secondly, the CCTV operator may acknowledge the message that has come from outside the system but provides only a 'tokenistic' response to the unfolding incident. The third level of response to incidents brought to the attention of CCTV operators is no response at all. Here, incidents are completely ignored, regardless of the 'seriousness' or 'urgency' of the message that comes from outside the system. Take Darren's response in the following incident:

Targeted Surveillance 7 (Shift 9 at 15.07—not identified)

At 15.07 Darren is sitting at the control desk with his eyes closed when he receives a call on the Emergency Telephone from the 'Crime Prevention Shop' concerning two missing boys. He leans forward and presses the button on the hands-free receiver: 'Control to all guards. Can you be on the look out for two IC3 males? If you see them can you take them to Crime Prevention?' Darren sits back in his chair and makes no attempt to find the two boys on camera. Out of the four guards on the mall, only Misha responds to his message. A couple of minutes later an urgent sounding message comes across on the radio from Stephen, the Senior Contracts Manager, who is on the mall: 'Control, Charlie Mike speaking. Could you and all guards look out for two IC3 boys? One of them is wearing blue trousers and a purple top. The mother is very distraught.' Once again, only Misha responds to this message and Darren makes no attempt to find the boys on camera. At 15.21 Stephen contacts the control room on the radio link: 'Control and all stations. We've found the two boys over.'

Darren: 'Yes, received that.'

As our typology shows, there is a wide variation in the extent to which individuals accept or reject organizational goals and the technological means of achieving those goals. For instance, one of the main reasons for 'non-use' of the system is that Darren, the shopping mall's main CCTV operator, is a 'technophile–work avoider'. During the period of observation, Darren sat at the control desk during 13 of the 15 eight-hour shifts. However, he was only responsible for four (14 per cent) of the 29 targeted surveillances initiated by a CCTV operator. During the period of observation, Darren was relieved periodically for breaks, usually by Harry, who is the other main CCTV operator. Harry, as we know, was a 'technophile–work embracer' or 'crime fighter', who used the system proactively. Thus, although Harry only sat at the control desk while Darren took his breaks, he was responsible for 22 (76 per cent) of the 29 targeted surveillances initiated by a CCTV operator.

Of course, it may be that, in time, the concerns of particular individuals become subsumed by the general 'occupational culture' of the organization. If this is the case, it may be that the whole work force eventually falls into line behind the dominant

organizational and occupational ethos of 'crime fighting' or 'work avoidance'. At South London Mall, for example, it became clear towards the end of the period of observation that Harry ('technophile–work embracer') and Misha ('technophobe–work embracer') were becoming increasingly disillusioned with their jobs. By the end of the period of observation, Misha expressed a desire to leave the mall, while Harry began to arrive late for work. Moreover, when Harry did arrive, he usually read the newspaper and began to visit the health centre during working hours. He even joined Darren in the bookies on one or two occasions. In other words, Harry became a 'technophile–work avoider'. This may be only temporary though, because he is planning to leave the mall to become a real 'crime fighter' when he joins the Metropolitan Police Force.

Taking our case studies as a whole, we can see that the issue of whether visual surveillance systems mirror the principles of new or old penology in their operation and effects is highly context-dependent. At South London Trains, for example, a combination of railway employees and police officers used the system in a 'pro-active' way to monitor specific time periods and 'flows' of people. In stark contrast, at South London Mall, the technological infrastructure introduced to facilitate cooperation between the police and private security officers was eventually dismantled due to intense organizational conflict. Moreover, the issue of whether 'new surveillance' technologies facilitate a proactive or pre-emptive approach to policing is mediated not only by conflicting organizational goals, but also by the individual concerns of those working within the same organization.

Conclusion

CCTV sits at the meeting place of the 'old' and the 'new' penology. From the perspective of the new penology, the appeal of CCTV is that it facilitates expressive gestures by visibly demonstrating that something is being done about crime. CCTV also fits easily with the new 'responsibilization strategies' pursued by the central state, which encourages private-sector involvement in crime control (Johnston and Shearing 2003). This new technology has further appeal because it reflects the logic of the 'new criminology of everyday life', with its stress on the rational actor and situational crime prevention: for 'situational man', the deployment of CCTV increases the likelihood of being caught and therefore increases the 'cost' to the offender.

But simultaneously, from the perspective of 'penal modernism' or the 'old penology', the appeal of CCTV is that it represents an extension of state power. As Webster (2004) has pointed out:

> Although the emergence of partnerships and co-regulation in the CCTV policy arena point to the growth of an independent self-governing network, these developments have been carefully steered and co-ordinated by key central government institutions. Crucially, the evolving network relationships have been shaped by powerful institutional interests to secure the desired diffusion of the technology. Formal and informal 'tools of government' have been utilised to ensure that the diffusion of the technology and appropriate networks are in the interests of the state. (2004: 24–5)

Thus, for some writers, the development of public–private CCTV surveillance networks is not about the state 'off-loading' the responsibility for crime control, rather the construction of these networks is part of a 'social ordering strategy' which augments and extends 'the sovereignty of local and nation-state decision-making structures'

(Coleman *et al.* 2002: 96). Similarly, while the expansion of CCTV in the semi-public space of the mall and other retail environments is driven by 'beyond-the-state' interests of loss prevention and commercial image, these systems can be easily and routinely co-opted for traditional policing. In this respect, the deregulation and privatization of crime control provide 'extra eyes and ears for the police' and extra 'pieces of evidence for prosecutors', and what we are witnessing 'is a "rolling out" rather than a "rolling back" of the state' (Hudson 2001: 156). But, as we saw in our case study of South London Mall, even this is contingent upon the interpersonal dynamics of local partnerships.

The growth of CCTV may also reflect the increasing importance of the actuarial techniques emphasized by the new penology. Actuarialism promotes a concern with preventing future crime rather than managing past crime; it involves the classification of individuals and groups as particular bearers of risk who, once identified, can become the target of proactive intervention. In the case of CCTV, proactive targeting by operatives is indeed possible, and some have suggested that proactive techniques are reflected in the growth of computer simulation whereby software can analyse the flow of digitalized images to plot possible future outcomes. This information can then be used to signal when intervention is necessary, before an event takes place (Graham 1998; Norris 2003). However, proactive monitoring is not an inevitable consequence of utilizing CCTV. This will depend on the technological sophistication of the system and the organizational environment in which it is placed. Our findings show that over two-thirds of systems relied on fixed, rather than pan-tilt and zoom, cameras, making proactive targeting difficult and less than one in 20 systems recorded data in a digital form that would allow computerized analysis of the images. Even where the technology does allow operatives to proactively track and target, it is still dependent on the organizational context and predilection of individual operatives. In our study, 120 hours of observation yielded only 29 instances of proactive targeting and three-quarters of these of these were initiated by a single operative (see also McCahill and Norris 2002: 20).

For the new penologists, one of the key shifts marking the break with the old penology is from individualized to generalized suspicion. Since risk is a statistical attribute of populations, it is necessary to collate information on the whole population rather than those who are already defined as deviant. In this way, the general diffusion of CCTV reflects this trend as the unmediated gaze of the camera monitors the entire population. However, although CCTV operators are using 'post-modern' technology, they interpret the images on the screen through a mind's eye that is steeped in a modernist conception of crime: operators do not see 'risk' or 'responsibilization'; they see 'scrotes' and 'scallies' and people who are 'out of place' and 'out of time' (Norris and Armstrong 1999). In practice, then, the gaze is mediated by the selective concerns of the operators and as studies of the routine operation of control rooms have shown, the targeted gaze of CCTV cameras does not fall equally on all sections of the population. It is stratified along dimensions of age, ethnicity and gender. Thus, rather than representing a radical break with the past, the operation of CCTV merely gives an electronically mediated twist to that very old-fashioned mantra of 'round up the usual suspects' (see McCahill and Norris 2002; McCahill 2002; Smith 2004; Lomell 2004; Urbaneye 2004).

In line with the old penology, CCTV can be disciplinary in the sense that it enables capture, censure and normalization of particular offenders. It is also disciplinary in that it fosters 'habituated anticipatory conformity' by a population that believes it is permanently

under surveillance. However, the claim that the growth of CCTV represents a general dispersal of discipline through the panopticization of public space needs to be treated cautiously. First, the disciplinary potential of the panopticon derives not just from the power to observe, but also in the power to classify. In the panopticon, observation of a known offender is linked to a unique individualized record that forms the basis of classificatory judgment. But CCTV surveillance is generally characterized by anonymity; in our study, only 6 per cent of observations were based on personalized knowledge and similar findings have been reported by Lomell (2004). Similarly, CCTV can only foster anticipatory conformity if people are actually aware that they are under surveillance. In Glasgow, Ditton's study found that after 15 months of operation, only 40 per cent of people were actually aware of the cameras (Ditton *et al.* 1999) and, in Berlin, out of 35 shopping malls with video surveillance, two-thirds of them did not advertise their presence (Helten and Fischer 2004). Finally, the power of the panopticon is also based on the certainty of an authoritative response to acts of non-conformity. But as our data show, the majority of systems are monitored irregularly by staff who have a host of other responsibilities. Even where dedicated monitoring staff are available, there is no guarantee that they will be actually watching the screens.

The development of public–private CCTV networks also facilitates the targeting of known offenders and a return to pre-disciplinary ideas of expulsion and exclusions (McCahill 2002; von Hirsch and Shearing 2000). In the context of the shopping mall, Wakefield has shown that exclusion can become the dominant strategy of control. In her study of one English mall, 578 people were excluded over a five-week period and 65 per cent of these exclusions involved 'known offenders' (Wakefield 2000). However, in his study of a shopping mall in the North of England, McCahill found that it was anonymous groups of teenagers who were most likely to be targeted, deployed against and ejected. Moreover, this was not because of any past or present legal infraction but because they were, in dress and demeanour, seen to be disrupting the commercial image of the mall. Similarly, in an Oslo mall, Lomell (2004) found that unkempt appearance, rather than criminal behaviour, was most likely to attract the attention of the operatives and result in deployment and ejection.

Finally, just as the rapid rise of CCTV can be explained by the duality of its appeal to the principles of the 'old' and the 'new penologies', the practice of CCTV surveillance also reflects this duality. This is because when we speak of CCTV, we are not speaking of a technology; we are speaking of a socio–technical system. In themselves, cameras, cables, lenses, video-recorders and display monitors have little social or criminological significance. It is only when CCTV becomes embedded in a set of enculturated organizational practices that it impinges on the social. Whether CCTV represents an extension of discipline or a post-disciplinary technology and whether it epitomizes the values of the 'old' penology or the 'new' cannot be known in advance—it all depends on how it is used in practice.

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