



Behind the Screens: Examining Constructions of Deviance and Informal Practices among CCTV Control Room Operators in the UK

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Abstract

Hitherto, limited empirical research has focussed on the micro-level dynamics and social interactions forming a typical CCTV control room's everyday operational culture. As such, the 'human element' behind the monitoring of the cameras has been largely ignored in much CCTV analysis to date. Drawing upon ethnographic observation conducted within a privately funded CCTV control room, this paper questions the accuracy of a central assumption made in much of the general literature on CCTV, namely that surveillance cameras are not only controlled and monitored constantly, but also operated effectively and efficiently. A consideration of the types of person monitored, and why certain individuals attracted attention from the operatives, is also given. More specifically, and drawing on knowledge gleaned from studies of workplace culture, the article also identifies subtle forms of workplace resistance occurring in the observed control room's informal organisation. This involved strategies such as time wasting and game playing being adopted by the operators, largely in response to the effects of tiredness, boredom, derision and the difficulty of effectively monitoring up to fifteen television screens simultaneously. Indeed, the findings from the research suggested that the operatives felt alienated from their job, due to the imprisoning confines of the CCTV control room, the long hours worked, the high expectation levels placed upon them and the low pay and lack of acclamation received from their employers. Reflecting on these findings, it is concluded that, taken together, the above factors seriously undermine the effectiveness of CCTV surveillance *per se*.

Introduction

For those who promote CCTV as the panacea to the crime and disorder on our city streets and for those who warn of the spectre of the dystopian surveillance state, there is a common assumption: CCTV actually produces the effects claimed for it ... In this way, both share a tendency towards technological determinism: an unquestioning belief in the power of technology, whether benign or malevolent.

(Norris and Armstrong, 1999: 9)

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As the above quote suggests, much of the discourse on CCTV has been written by both pro and anti-CCTV commentators from either a theoretical or quantitative, statistical position, and merely assumes the technology's actual operational efficacy. As such, much of the literature is characterised by a naïve form of technological determinism, whereby the 'human element' (which has always the potential to be resistive, irrational, dysfunctional and prejudicial) behind the actual operation of the cameras is largely overlooked. Most writers seem almost to forget that, by and large, CCTV cameras are neither conscious, nor autonomous, and require, in order to be effective, constant monitoring and control by human beings in a work-like situation, so that the millions of images produced can be watched, interpreted and acted upon. Indeed without this latter three way process of observation, interpretation and response, CCTV surveillance, it could be argued, is completely futile.²

At present, only a limited number of qualitative studies have been conducted in a CCTV control room setting. Indeed, the unwillingness of academics and public officials alike to directly engage in observational research on the micro-level dynamics of this particular workplace culture, has led to a distinct lack of rich, empirical data on the actual operation of such systems. This clearly is a significant shortcoming, as surely the way in which the cameras are operated, monitored and controlled by human operatives on a day-to-day basis, is fundamental to any claims regarding the overall effectiveness, sustainability and usefulness of such technological systems of surveillance. Therefore, in order to provide the ongoing debate on CCTV with further empirically grounded research, this paper seeks to document the formal and informal day-to-day workings, organisation and operation of a typical 'Little Brother' CCTV system (Graham, 1998: 50). The originality and importance of this study lies in the fact that it has been researched and written from a micro sociological and ethnographic level, using knowledge taken from the sociology of work, in order to test some of the dominant assumptions made in the general literature, provide greater insight into this particular type of workplace setting and give the current debate a more empirical angle.

Review of Key Literature

There is fast developing a vast literature on CCTV, but it is not my intention to systematically review it here.³ Instead, I merely seek to present a brief overview of the main theoretical responses which academics have penned to CCTV's introduction, coupled with a short outline of the central findings of previous research conducted on CCTV control room operation.

² If the cameras are not being watched rigorously or are being used for 'unofficial' and informal ends such as satisfying the male gaze or in the over-targeting of marginalized groups, then, drawing on the work of Short and Ditton (1998) i.e. criminals not bothered about the cameras' presence, and Ditton (2000) i.e. the general public being largely unaware of the cameras, I would argue that CCTV is generally ineffective as a crime prevention tool. This is because the cameras, in these examples, are clearly not producing 'anticipatory conformity' in the population, deterring criminals, nor are they offering Big Brother protection to those under their gaze. Their use, in this type of scenario, is limited to the reconstruction of events for post crime police enquiries.

³ Comprehensive reviews of this literature can be found in Norris and Armstrong (1999) and McCahill and Norris (2002a; 2002b).

Consumerism, CCTV and the flawed consumer

The rapid rise of CCTV in the United Kingdom is, for some, intrinsically bound up with the development of the 'consumer city' and the recasting of formerly public, heterogeneous space for the purposes of mass consumption (Bannister *et al.*, 1998). The recessions of the 1980s and early 1990s, coupled with an escalation of out-of-town retail units, meant that many high street shops at this time endured a dramatic reduction in consumer spending (McCahill and Norris, 2002b: 12). The concomitant financial pressure placed upon many of these stores seemed to exacerbate the feeling that town centres, as opposed to shopping malls, were dirty, threatening places to shop (Norris and Armstrong, 1999). This promptly led to the formation of Town Centre Management groups (TCM), to economically revitalise and regenerate town and city centres (McCahill and Norris, 2002a: 13).⁴ In a bid to tackle problems of crime and security, and to reintroduce a 'feel-good' factor back into the city centre, many such schemes sought to install extensive CCTV systems (Bannister *et al.*, 1998). Indeed, businesses, local authorities and a host of other public institutions have been encouraged by TCM organisations and others to invest in the latest CCTV equipment in order to protect stock, consumers and employees from the perceived threat of a growing 'underclass', and to produce a general feeling of safety (McCahill, 1998: 51-3; Parker, 2001: 74). It is increasingly feared, however, that this technology will be used not only for criminal surveillance, but also to monitor a number of socially discredited and 'unruly' groups who are viewed by TCM officials as a potential threat to the serenity and escapism of the 'shopping experience' (McCahill, 1998: 51; McCahill and Norris, 2002a: 14).⁵ Among these flawed consumers are beggars, prostitutes, drunks and gangs of youths whose mere presence, according to one TCM spokesman, "is a nuisance to those who want to use the streets and shopping centres in a more conventional way" (quoted in Graham and Marvin, 1996: 20).⁶

CCTV and the Panopticon

Academics have also taken issue with what they perceive to be the rise of an increasing 'disciplinary society', encapsulated in the all-seeing gaze of the camera (Lyon, 1993: 654-5). Drawing on the work of Michel Foucault (1977), individuals such as Fyfe and Bannister (1996), Bannister *et al.* (1998) and Reeve (1998) have extended the 'Panopticon' concept to describe the effects produced by CCTV systems on individuals. Essentially, the Panopticon was a revolutionary prison design by Jeremy Bentham consisting of a:

⁴ For an excellent outline of the rationale behind the formation and expeditious growth of TCM schemes, see Alan Reeve (1998: 79-84).

⁵ Zygmunt Bauman (1997: 14) terms these marginalized individuals 'flawed consumers', and 'the dirt of postmodern purity', as many do not possess the economic capital to actively take part in conventional, socially acceptable forms of consumption. Similarly, their appearance, behaviour and attire often run contrary to the 'family' image which TCM organisations are trying to promote (McCahill, 1998: 52).

⁶ Indeed, this has led a number of TCM groups to press for new local bye-laws which will empower them legally to disperse gangs of 'rowdy' youths, and remove drunks, beggars and the homeless from their present location on the high street, so they no longer threaten the flow of consumerism (Reeve, 1998: 80). Writers such as Bannister *et al.* (1998) cite the work of Norris and Armstrong to claim that TCM schemes, in order to facilitate this process, are using CCTV surveillance in a racially and ethnically discriminatory manner. As Reeve (1998: 84) rather pessimistically concludes, "to create a safe shopping and leisure environment [nowadays] is to be socially exclusive".

... building on a semi-circular pattern with an ‘inspection lodge’ at the centre and cells around the perimeter. Prisoners, who in the original plan would be in individual cells, were clearly open to the gaze of the guards, or ‘inspectors’ but the same was not true of the view the other way. Control was to be maintained by the constant sense that the prisoners were watched by unseen eyes. There was nowhere to hide, to be private. Not knowing whether or not they were being watched, but obliged to assume that they were, obedience was the prisoners’ only rational option (Lyon, 1993: 655-6).

The Panopticon design facilitates and indeed endorses the watchers’ power over the watched by enabling, “swift intervention to displays of non-conformity and through the promotion of habituated anticipatory conformity” (Norris and Armstrong, 1998: 5). Put very simply, the panoptic argument suggests that most rationally-thinking individuals entering an area with CCTV cameras, will modify their actions and follow and comply with socially accepted behavioural norms, as it is difficult for them to ascertain whether they are being observed or not (rather like Bentham’s prisoners). In other words, by anticipating the disciplinary gaze of the CCTV cameras, individuals will conform to various contextual rules and regulations by displaying appropriate, controlled behaviour (otherwise they are likely to be acutely observed and/or apprehended). It is this subjective element (i.e. monitoring and controlling one’s own actions) which, for proponents of the panoptic argument, represents the most rational and efficient form of power. This argument is further augmented by the numerous signs erected in and around town centres and other public institutions, making people aware that they are entering a ‘CCTV zone’ and thus warning them to regulate their behaviour. For many writers, the Panopticon concept, as epitomised in the gaze of CCTV surveillance, helps create an automatic functioning of voyeuristic power, assisting in the production of docile, passive, self-monitoring and rule-following bodies.

CCTV and criminological discourse and evaluation

Criminologists such as Feeley and Simon (1994: 180), view the growth of CCTV as indicative of a broader paradigm shift in the discourse of criminal justice policy, from an ‘Old Penology’ (based on identifying the individual criminal for the purpose of ascribing guilt and blame, and then subjecting the offender to punishment and treatment) to a ‘New Penology’ (based on identifying and managing groups classified by levels of ‘dangerousness’).⁷ Due to chronically high crime rates and the failure of previous criminal controls, justice, according to Feeley and Simon, is becoming ‘actuarial’, based upon risk assessment calculation and opportunity reduction, rather than on the identification and detection of specific forms of criminal behaviour, and with tackling the central reasons for offending. In a sense, the exponential deployment of CCTV provides further evidence of a change from resources being used for detection and rehabilitation, to those of risk management and preventative surveillance (McCahill and Norris, 2002a: 8). More pragmatically, some criminologists are also highly critical of CCTV, viewing it as little more than a short-term, ‘technological fix’ to the problem of crime (Skinns, 1998). These writers generally feel that the installation of electronic surveillance both erodes and undermines the more natural (and, they argue, effective) forms of surveillance rooted in human interaction, and is an approach limited to dealing with the symptoms, rather than the root causes of crime (Graham, 1998: 100-

⁷ Definitions of the two Penology paradigms provided by McCahill and Norris (2002a: 8).

6). Still others feel that the statistical tests conducted on the actual effectiveness of CCTV are inconclusive, being carried out largely by the untrained, 'self-interested practitioner' (Pawson and Tilley, 1994).

CCTV and the privacy protestors

An increasingly robust critical discourse on CCTV has emerged, espoused largely by independent bodies such as 'Privacy International', 'Liberty' and 'The UK Public CCTV Surveillance Regulation Campaign'.⁸ These organisations are passionately anti-CCTV, viewing the technology, ominously, as the next step towards a growing 'Big Brother', totalitarian police society. They are largely concerned with the removal of privacy, the insidious nature of the cameras, and the general threat to civil liberties and human rights that CCTV's expansion allegedly encapsulates. Others worry about CCTV operators abusing their voyeuristic positions,⁹ not to mention the uses to which new digital systems, and the images gathered, may be put both by the police and the government.¹⁰ Some of the more extreme groups actually give out tips on the best ways to destroy public space CCTV systems¹¹, whilst others, more passively, seek to resist and mock the cameras' gaze by acting out Shakespearean tragedies whilst being simultaneously recorded!¹² What these organisations all seek to do, however, is to raise public awareness of CCTV technology's sinister side and, in so doing, attempt to challenge the hegemony of the pro-CCTV culture we currently live within.

Academic research conducted on CCTV

Criminologists have administered most of the actual academic research on CCTV, in order to assess critically government and police claims that the cameras are highly effective, both in reducing crime and the 'fear of crime' among the general public. As such, it is predominantly quantitative and evaluational in nature. Jason Ditton *et al.* (1999), for example, discovered that, in the year following the introduction of CCTV in Glasgow, recorded crime rates effectively rose by 9 per cent, with detections falling by 4 per cent. Moreover, others found that although CCTV generally reduced crime in areas covered by the cameras, it was not eradicated, merely displaced to other locales lying outwith the electronic gaze (see Skinns, 1998; Parker, 2001: 68). Despite some disparity in findings as to the exact effectiveness of CCTV, no academic research, however, seems to support the police's general assertion that CCTV installation usually brings around a '70 per cent reduction in crime' with 'little or no displacement effects'.

In order to evaluate the government's contention that the general public 'overwhelmingly support CCTV', academics have also researched individuals' perception of, and attitudes toward, CCTV (Ditton, 1998: 221). Jason Ditton (1998; 2000) found that people's support for CCTV depends entirely upon the questions asked. By asking more 'neutral' questions, Ditton

⁸ Privacy International, <http://www.privacyinternational.org/issues/cctv/index.html>; Liberty, <http://www.liberty-human-rights.org.uk/>; and The UK Public CCTV Surveillance Regulation Campaign, <http://www.spy.org.uk/>

⁹ See <http://www.schnews.org.uk/archive/news232.htm> & <http://www.spy.org.uk/cctv5.htm>

¹⁰ Systems now have the capabilities to store, in limitless databases, faces, images and intelligence to be used in future auto-facial recognition and intelligent scene monitoring programmes etc. (Paton Walsh, 2001).

¹¹ <http://www.schnews.org.uk/diyguide/guidetoclosedcircuittelevisioncctvdestruction.htm>

¹² <http://www.notbored.org/the-scp.html>

discovered from his sample that support for CCTV was actually around only 49 per cent (1998: 227). Criminal attitudes towards CCTV have also been analysed, in order to gauge how those meant to be deterred from committing offences, actually feel about the technology (Short and Ditton, 1998). The results were ambiguous, with some claiming that the cameras “calmed things down”, others suggesting that many public order problems and criminal offences were merely geographically displaced to back streets and alleyways out of the cameras’ gaze. Researchers have, in addition, attempted to measure whether the ‘fear of crime’ is reduced by the introduction of CCTV systems. Ditton and colleagues (1999) found that the introduction of CCTV actually heightened people’s awareness of the reality of crime, making them feel, quite unintentionally and paradoxically, less safe. Interestingly, however, Ditton himself also discovered that out of his entire sample only a third were actually aware of the cameras’ presence (2000: 704).¹³

To date, there have been only two major empirical studies of CCTV control room operation. Norris and Armstrong (1997; 1999), shadowing operators for a total of 592 hours, found that out of almost 900 targeted surveillances, the police were deployed only 45 times, resulting in a mere 12 arrests. As the last sentence seems to indicate, the two researchers argue that it was operator prejudice, rather than actual criminal behaviour, which determined the vast majority of surveillances. Their main findings are as follows: 40 per cent of people were targeted for no obvious reason, largely on the grounds of belonging to a particular or subcultural group; black individuals were disproportionately over-represented in targeted surveillances; individuals were chosen for observation primarily on the basis of the operators’ negative attitude to male youth in general, and black youth in particular; those considered to be ‘matter out of place’ – e.g. drunks, street traders and gangs etc. – in the consumer dominated streets, were all subjected to concentrated, higher levels of surveillance; operators were drawn to those whose orientation to the locality suggested unfamiliarity or showed signs of unease. Thus people who appeared lost or confused were targeted, as were those who suddenly changed direction, as such behaviour was seen as indicative of criminal intent; women were observed mainly for voyeuristic reasons, so as to satisfy the male gaze; and those challenging (by gesture or deed) or trying to resist the cameras’ gaze were deemed to be ‘troublemakers’, and as such, were especially scrutinised.

The two conclude:

The gaze of the cameras does not fall equally on all users of the street but on those who are stereotypically predefined as potentially deviant, or who through appearance and demeanour, are singled out by operators as unrespectable. In this way youth, particularly those already socially and economically marginal, may be subject to even greater levels of authoritative intervention and official stigmatisation, and rather than contributing to social justice through the reduction of victimisation, CCTV will merely become a tool of injustice through the amplification of differential and discriminatory policing (1997: 8).

¹³ This finding is extremely interesting, as it calls into question much of the Foucauldian analysis of CCTV which holds that the technology functions by producing a ‘panoptic effect’ on the population. If, however, people are largely unaware of the cameras’ presence, and thus unaffected by the gaze, then the key disciplinary notion of ‘anticipatory conformity’ becomes redundant.

Similarly, in a second major study of CCTV control room operation, Mike McCahill (2002: 135) found in his research of 'City Centre Mall', that it was individuals in groups, especially those in their teens, who were most likely to be targeted and subsequently ejected from the shopping centre complex by security staff. This, according to centre management, was due to the propensity of groups of youths to 'hang around' conveying a negative image, whilst disrupting the ambience and flow of family orientated consumerist space, rather than the aforementioned individuals partaking in actual criminal acts. However McCahill, drawing on extensive observations in a variety of control room settings, goes on to show persuasively how the human mediation of technological systems of surveillance, actually places limits on the disciplinary potential of CCTV. Many operators of CCTV, for instance, use the technology informally, carving out 'spaces of resistance' to counter or ignore constraining structures of managerial power (McCahill, 2002: 145-6&164-5). Indeed, using numerous examples, McCahill's central contention is that the overall effectiveness of CCTV (i.e. how it is employed in practice), and extent and level to which different security systems are integrated within one another (i.e. the strength of the surveillance 'web'), depends entirely upon how the technology fits in with existing social, political, cultural and organisational relations, in different institutional contexts. Moreover, his research usefully details the growing 'mutability' of such systems, showing how management, in certain settings, are employing the technology in a variety of subtle, non-crime preventative ways, as a tool to detect health and safety risks, potential fire hazards, lift breakdowns and unauthorised individuals on site, and to monitor staff performance levels, productivity and employee/customer relations etc. (ibid: 144&159-62).

Methodology, aims and intentions

The research for this paper was conducted at a relatively large science, technology and educational establishment in the southern UK, called 'Midtown College'.¹⁴ This institution has a state-of-the-art, CCTV system on its main campus, consisting of 11 fully functional CCTV cameras (i.e. cameras with pan, tilt and zoom capabilities), and a control room which is manned 24 hours a day, 365 days a year. In order to acquaint myself with every shift, and hence meet all the CCTV operatives, I varied the days and times that I carried out my observations. This strategy also enabled me to see how the cameras were operated at different times of the day. It gave me the chance, moreover, to compare 'busier' times on campus with 'quieter' spells (e.g. evenings, weekends and holidays).

The originality of this study is that it is operator based,¹⁵ has a distinct sociology of work focus,¹⁶ and employs micro sociological methods of research, in order to: critically investigate a

¹⁴ For obvious ethical reasons, I have changed the name of the setting where the research was conducted. Therefore, any further identities or locational references given in this study will be entirely fictitious.

¹⁵ Thus far, CCTV operatives really have not been given a voice with regard to how they personally feel about CCTV. This is quite strange since it would appear that almost every other group in society (e.g. criminals, police officers, public officials, the general public, business sector management, academics etc.) has either been interviewed, or commented in some way or another, on CCTV. This study has enabled me to partially fill a gap in the literature, by giving a voice to those closest to CCTV; a first person account from 'those who know best'.

fundamental assumption made in the general literature on CCTV – i.e. that the cameras themselves function almost automatically and, therefore, work highly efficaciously; discover whether the CCTV operators in this study felt empowered through their voyeuristic, watchmen-like positions; and examine and document what really goes on ‘behind the scenes and behind the screens’ in a Little Brother system.

This particular research focus led to the construction of a number of specific field questions. These were, namely: what goes on inside a CCTV control room? By this I mean the job structure, length of shifts, pay, forms of management and interaction between co-workers etc. How does the system work – i.e. who is targeted and why? Are the cameras effectively and rigorously monitored at all times? How are the operators trained and do their social backgrounds and personal prejudices influence who is monitored? Is the interaction between human beings and hi-tech, state-of-the-art computerised technology really as smooth, effective and straightforward as the literature seems to suggest? Or, taking into consideration the relatively poor structural conditions attached to such a job, do operators find resistive, informal ways to lessen the general monotony of working long shifts and watching hours of routinized televisual footage and images? How do CCTV operators interpret and make sense of a series of random images? Are CCTV cameras on the campus mainly for political-economic reasons, that is, to make the college *appear* a safe place to study so as to encourage potential students to pursue an education there? What do the operators themselves think of the cameras and their alleged effectiveness and proficiency in tackling crime?

In order to find answers to the above questions, achieve the aforementioned research aims and present an authentic account of the day-to-day, interactional workings and informal organisation of the chosen CCTV control room, I had to conduct a small-scale ethnography. My principal research instrument for data collection was through systematic, investigative observation, where I adopted the ‘observer-as-participant’ technique (Gold, 1969: 36). This method is generally employed in short ethnographic studies, as it allows for relatively brief spells of formalised, overt observation, rather than prolonged periods of informal, covert observation or regular group participation (May, 1997: 141).¹⁷ I did, in addition, amass data through the general conversations I held with the operatives. Indeed, I turned many of these wide-ranging discussions into an informal style of interviewing.

¹⁶ In brief, a sociology of work perspective focuses on the diverse ways in which human beings generally manage to cope with, and make sense of, the experience of work, how they interact with the setting and individuals around them, and more specifically in this particular case, how CCTV operatives operate (and perhaps resist) hi-tech machinery and deal with psychological and socio-structural factors such as boredom, long hours and low pay rates.

¹⁷ Interestingly, throughout this study I had great difficulty working out what my ‘role’ was in relation to the observed CCTV operators. I felt compelled to both systematically observe and critically ‘inspect’ the operatives whilst also empathise, form friendships and actively ask them questions in a bid to better understand their job and the general CCTV ‘control room culture’ (i.e. the pressures and boredom inherent within it). Hence during the research, I experienced a great deal of tension and disquietude as I simultaneously adopted and moved between the somewhat conflicting positions of ‘control room inspector’ and ‘group empathiser’.

Findings

Initial observations

The CCTV control room at Midtown College is centrally situated on the ground floor of a major college building. All 11 external campus cameras are fully functional and have fibre optic cables which run directly into this location. The room itself is small, artificially lit and relatively featureless.¹⁸ At one side there is a table with a computer and telephone where the shift supervisor works. Across the room, a second table (where the operator is based) holds the controls of the CCTV system, a telephone and three televisual monitors.¹⁹ The room is supposed to be manned on a continuous basis 24 hours a day, 7 days a week. However, due to regular staff shortages, tea breaks, or any problems which occur on campus, this is not always the case. Indeed, as one operator informed me: “We’re frequently a man short due to sick calls and staff taking holidays. This means we’re stretched to the limit in here [the control room] ... It can be a bloody nightmare” (‘Jim’, shift 1 CCTV operator).

Each security shift at Midtown College should have eight men on duty. Six of these are patrolmen who either police the campus grounds on foot, or inhabit and protect the college buildings, some of which are open for use at night. The other two members – the college CCTV operator and the shift supervisor – are housed in the control room. All of the supervisors on the three separate shifts can operate the cameras if required,²⁰ but leave the general running of the system to the ‘specialist’ operative. Each shift also has a patrolman who is camera trained and, on longer workdays (e.g. at the weekends), this person tends to swap roles with the operator halfway through the shift. Similarly, the same individuals usually cover the operator’s longer breaks (i.e. at breakfast, lunch or supper times). Shift lengths for the CCTV operatives vary, depending on the day of the week.²¹ However the rate of pay, regardless of the shift, is only around £5 per hour.

The shift supervisors conduct training for the CCTV operators internally. As ‘Davie’ (shift 2 supervisor) explained:

It’s on the job training. The operators are trained by someone who is already established and experienced as a CCTV operator. Any new operator is taken through the basic steps first, and then we give him the chance to operate on his own under the supervision of a member of staff. It’s a stage-by-stage progression until he’s confident enough to follow someone round the campus.

¹⁸ Indeed, a large, restrictive blind permanently covers a solitary window.

¹⁹ Two of the monitors display a number of ‘split-screen’ CCTV camera images, whilst the other shows the chosen camera’s outlook in an enlarged format.

²⁰ They often do so when the operator is on his ‘official’ tea break which is for approximately fifteen minutes every four hours.

²¹ On weekdays, for example, there are 3 rotational 8-hour shifts consisting of a 12am to 8am night shift, an 8am to 4pm day shift, and a 4pm to 12am twilight shift. Within these 8-hour shifts, a solitary operator monitors the cameras. At the weekends, however, there are two 12-hour shifts. On these shifts, the operator normally swaps roles with a patrolman after 6-8 hours monitoring.

Interaction between the staff was regular, largely informal and usually consisted of a range of non-work matters. These varied from in-depth discussions about football, to light-hearted arguments and disagreements over cars, celebrities and bars in the Midtown district.²² Interestingly, the conversation usually revolved around the shift supervisor who, due to his symbolic and actual position of power, was always the final judge on any unresolved matter.

How the system works

For most of the day, the cameras are left on an 'automatic' setting. This means that they follow a pre-programmed, computerised time-pattern schedule by rotating round full circle approximately every 2 to 3 minutes. Despite the fact that they are not being manually controlled, each camera still records everything that comes across its path in a time-lapse format. Hence, in a 24-hour period, the 11 cameras at Midtown College record 264 hours of footage. Each day this footage is stored on a special videotape, allowing anyone with a legitimate complaint the chance to review a tape from the day of a particular incident. However, this can be a lengthy process: "It usually takes us about 3 to 5 hours to do, and it has to be done on the central monitor ... which means the operator [while this process is going on] can only monitor the little, split screens to watch the campus" ('Bob', shift 1 supervisor). Perhaps more importantly, and echoing findings taken from previous research (McCahill, 2002: 171), when tapes are being reviewed, *none* of the cameras actually record. Hence, if an incident was to occur on campus at these times, not only would it be difficult to spot, there would also be no compelling video evidence to help in a later inquiry. The tapes are kept, by law, for a maximum of 31 days after which time they must be wiped.

The computerised, automatic setting enables the operator to monitor a single camera (the image from which appears in real-time enlarged on the central screen), and to systematically 'ignore' footage from the other cameras. However this 'prioritising' process does have its drawbacks as one operator pointed out:

I can't tell you how many things we've missed when we huv not been watching the other screens. Break-ins, assaults and car thefts huv been going on whilst we've been operating the other cameras ... It's really annoying ('Andy', shift 2 CCTV operator).

Who was targeted and why

CCTV operators in general face difficult decisions regarding how they decipher legitimate forms of behaviour and appearance, from those which are understood to be deviant and potentially dangerous (Norris and Armstrong, 1999). However, for college operatives these problems become dramatically magnified and enhanced. Students are historically and culturally renowned for their heterogeneous, multicultural dress sense. Further, on an average day in a college campus, there will be individuals present from a plurality of ethnic, religious and social backgrounds. How does one effectively pick out those who are 'criminal', from those who are lawful?

²² It should be noted that every member of the security team was male, middle-aged and white.

My observations led me to believe that specific socio-cultural constructions of deviance were being used in the control room, so that operators perceived certain *dress codes* as being inherently deviant. The majority of the security team at Midtown College were between the ages of forty and sixty-five. My discussions with them seemed to suggest that they no longer understood contemporary adolescence in general, and youth culture and fashion in particular. Concomitantly, certain operatives seemed to link particular items of fashionable clothing²³ to subcultures associated with crime and deviance (e.g. football casuals, ravers, drug addicts and American ‘gangster rappers’ etc.). Andy, for example, referring to the thieves on the campus, informed me that:

Most of them know we’re watching, so they wear ‘em American baseball caps to try an’ hide their identity ... Also you get them who wear those designer puffer jackets or jerseys with hoods on them to try an’ cover up their identity ... Yeah, anyone wearing those sort of dodgy clothes and looking a bit shifty is a legitimate target for surveillance.

Indeed, there appeared to be a general consensus within the room that individuals wearing anything which remotely distorted their identity, were deliberately up to ‘no good’, and so justified further examination.

Hence, when an operator controlled a camera in general surveillance, it seemed that clothing and appearance became the main criteria by which individuals were either judged as orderly, lawful students or as being ‘out of place’ on the campus, thus warranting additional scrutiny. I noted, for example, the operators following and particularly focusing on young males (i.e. those in their mid to late teens), who were either wearing ‘puffer’ jackets, hooded sweatshirts or baseball caps. These people were generally followed until they entered a building²⁴, left the campus or were deemed to be law-abiding citizens. Thus, it was males who seemed to warrant the most suspicion from the operators, particularly if they were wearing a certain type of clothing or appeared to be ‘deliberately’ resisting, hiding from or avoiding the camera’s gaze. This might have had something to do with the men’s preconceptions of the ‘stereotypical’ criminal. The operatives, largely from the same socio-economic backgrounds and previous security service occupations, shared a common belief that it is youth in general, and males in particular, who are to blame for the majority of crime. Echoing the work of Norris and Armstrong (1997: 8; 1999), from my observations, therefore, it certainly appeared that the operators’ personal prejudice – which correlated young males with crime – played a significant part in determining who was targeted and then labelled as ‘dodgy’.

A further criterion, from which the operators made judgements about an individual, was based on his/her behavioural patterns. I was informed:

²³ Designer label garments (e.g. ‘Diesel’, ‘Thomas Burberry’ and ‘Full Circle’), baseball caps, ‘baggy’ jeans, puffer jackets and hooded sweatshirts, for example, were all seen by the operatives as having subcultural, criminal affiliations.

²⁴ At which point the operative would sometimes alert the patrolmen or building janitor to check their identification.

If someone's acting strange around the car park ... they're obviously doing it for a reason ... Students have timetables to follow don't they? Yer average student hasn't the time just to stand around. So yeah, anyone 'hanging about' without any obvious purpose immediately warrants suspicion (Davie).

A similar view to Davie's was shared by Jim who informed me that, "What I look for when I'm panning the cameras around, especially at night, is any sort of behaviour that is strange or out of the ordinary. You know, someone who doesn't look as if they know where they're going or is obviously waiting for something ... People who are running or loitering around the car parks and shops are an obvious target". It was apparent, therefore, that a consensus existed within the control room which held that a person on campus who was not on the move, was moving too quickly, or did not appear to be going in any particular direction, was a potential deviant, and hence deserving of surveillance.

Operators' thoughts on CCTV

The general concord surrounding the CCTV cameras, was that they were a useful tool in the fight against crime: "They [the cameras] certainly make life a little bit easier ... I mean it's much easier to follow someone with the cameras than it is to follow them on foot, cos most of the time they don't even know that they're being followed" ('George', shift 3 CCTV operator). Although this was the 'official line' given by the operators when formally questioned, in practice they were frequently cursing the cameras due to targets continuously 'giving them the slip' (e.g. when they went down alleyways or into buildings where the camera's gaze could not penetrate). Moreover, the operatives also complained about the poor positioning of some cameras: "Look at this camera ... I mean how the bloody hell are we supposed to see anything from it ... there's a great bleedin' tree in the way ... In the winter it's alright, but in the summer when it's got leaves, it completely blocks our view o' that part of the campus ... The jobs know that as well" (Andy). Likewise, in the evening, the orange glow from the streetlights severely limited visibility, leaving a number of blind spots on the campus where the operators simply could not see. Interestingly, when asked if he would prefer more cameras or more men on the ground, Davie replied:

Definitely more men. I mean the cameras are useful an' that, but they can't go inside buildings and actually step in and physically remove the criminals. They can't stop an assault happenin' either can they? They can watch an' record it, but they can't intervene like my men can.

Certain operators felt that a significant reason for the cameras' presence on the campus was to make it *appear* a safe and security conscious place to study. Indeed, one supervisor informed me:

Without doubt, one of the purposes for the cameras on campus is to make it look safer and more attractive for the students to study here ... It's important

to make them feel that Midtown College is a good, safe place in which to study (Bob).²⁵

CCTV monitoring and the 'boredom factor'

The key finding from the study was what I termed the 'boredom factor'. The boredom factor arises principally from the monotonous viewing of hours of routinized, uneventful televisual images. On weekdays, as stated earlier, the operators are employed to control and monitor the cameras for eight hours: "My shift during the week is to watch em' [the cameras] from 12am to 8am ... it's awful" (George). However, as I soon realised, even 60 minutes spent in the control room was enough to make one's mind wander. In all the time I carried out my observations, not one incident was captured on camera. As Jim pointed out, "95 per cent of the time nothing happens in here ... you're wasting your time if you're looking for any action. We haven't caught a single incident on camera in the last three weeks". As one can clearly imagine, this is an extremely long time to be sitting staring at essentially nothing. Indeed, the lengthy shifts and imprisoning, featureless room seemed at times to frustrate the men: "I can't wait to get out of here and down to the pub ... I hate being cooped up in here all day long" (Andy).

On some shifts I even noticed my own attention span becoming lessened after only a brief spell watching the screens, so I could understand the operators' position.²⁶ It is hard comprehending how CCTV operators in this particular setting are supposed to function effectively and efficiently on an eight-hour shift, especially through the night.²⁷ On top of this, there is little job motivation or satisfaction for them. As already stated, they are paid just over the minimum wage, and there is little chance of job flexibility or career advancement. Moreover, the security team as a whole felt unappreciated and undervalued by students and college staff alike: "We're treated like dirt at times by the students ... especially when we do identification checks on the campus and when we're doing fire drills. Some of the staff are not that much better either. They continuously ignore our advice and leave their doors unlocked after we have told them the risks. We're only trying to do our job and make the place safer. We're not trying to hinder anyone" (Davie).

The informal side of CCTV operation

To alleviate the routine and tedious nature of their work, I noticed that the operatives adopted a number of unofficial 'time wasting' strategies. These procedures helped to break up the long shifts and became a regular feature in the informal workings of the control room. Indeed, along with the continual conversation and general 'banter' which flowed in the room between the

²⁵ This statement did appear to strike a chord with the work of Alan Reeve (1998). Perhaps the business-orientated college administration, like the TCM schemes, perceive contemporary students not as citizens but as consumers, and see campus safety as a key way of 'selling' the college to, and attracting, potential students.

²⁶ It must be noted that this is a 'Little Brother' private system, monitoring space which is only really populated at certain times of the day. Perhaps in hospital, city centre, international airport and shopping mall control rooms the boredom factor would be less, as there would be action occurring at all times, and continuous events to focus on.

²⁷ Drawing on findings taken from Newburn and Hayman's (2001) study of the introduction of CCTV into the custody area of a police station, it could be argued either that excessive busyness or extreme boredom can significantly distract the attention span of the operators, and ultimately preclude the continuous, effective monitoring of the screens.

operators, supervisors and staff on patrol (via walkie-talkie), there also existed a number of other, more subtle strategies which effectively eroded time and apathy. For example, most of the control room staff smoked. Concomitantly, I noticed that every so often, the operator would leave his desk and head outside the room to enjoy a cigarette. Similarly, most of the staff drank either tea or coffee. Thus, the operator regularly made a new pot of tea or coffee for himself, the patrolmen (who frequently popped in for a quick 'fly-cup') and for the duty supervisor. Toilet breaks were also a relatively regular event and again meant that the controls would be left unattended for a short duration. An additional way of fracturing the time was by reading the paper and completing the daily crossword. A tabloid newspaper was often in close proximity to the operator's controls.

The operators also overcame the boredom factor through a process of 'secondary adjustment' (i.e. using the cameras for informal and unofficial ends). Secondary adjustment, I would argue, can be seen as an overt form of workplace resistance to the long hours worked, the poor wages received, and the low motivation and satisfaction levels offered by the job (Jermier *et al.*, 1994; Ackroyd and Thompson, 1999). Hence, adopting this strategy enabled the operatives to symbolically reassert *human* control over a heavily computerised, alienating system. For example, I observed the operators using the cameras to zoom in on cars that they liked. Similarly, the cameras would be used to monitor the patrolmen on the ground and to play 'hide and seek' games with them. An excellent example of this unofficial, 'secondary adjustment' procedure can be clearly demonstrated through one of Jim's admissions:

What I usually do in the evenings when I'm on duty is to swing camera 8 round on to the car park so that I can watch my own car. I jist leave it on it the whole time I'm working to make sure none of them little shits try and break in to it or vandalise it. Gives me a bit more peace of mind y'know.

Brief discussion of key themes

Limitations of research design

It is important to highlight the weaknesses of my study, as each has the potential to undermine the strength of the observations made.

Firstly, it should be made clear that this was an examination of but one Little Brother system, hence the study's findings cannot be claimed to be representative of *all* CCTV control rooms. It would be methodologically inaccurate to simply apply the findings from this paper to the general population. Although the author does not believe it to be the case, perhaps the setting researched is an exception to the rule. Due to the lack of locations examined, I can only tentatively *suggest* that other control rooms of similar structure may function in comparable fashion.

Secondly, this was only a very short-term study, with a lack of real and deep engagement between the operatives and myself, and between the research site and myself. Some may plausibly argue, therefore, that the research constitutes a mendacious form of ethnography, being

based upon limited observation. In short, it could be claimed that the restricted time spent in the control room invalidates and makes unreliable my overall research findings and key arguments.

A third methodological criticism is that as a qualitative interpretivist, I have to accept the argument that the narrative I present is but *one* view of social reality, written from *one* particular perspective. Another individual, researching the same setting, may well have uncovered an alternative set of findings, due to his/her philosophical standpoint, political orientation, personal values and prejudice.

Fourthly, and more pragmatically, I had often to resort to the taking of mental notes when I was in the control room, as the operators frequently became suspicious and more 'guarded' when they noticed me jotting things down. Remembering and reciting all the above quotes verbatim when it came to writing up my field notes however, was a far from easy task. Therefore, some of the citations and observations given in this paper may not be exactly word for word and may, at times, be slightly misrepresented.

Setting aside the above problems, the study nonetheless raises some interesting issues and questions and it is to a brief consideration of these that I now turn.

CCTV operators: symbolically empowered or slaves to the system?

It would initially appear that CCTV operators hold a relative position of power over the general public due to the one-way, in-depth monitoring they can administer, and through their physically removed location in publicly inaccessible observatories. Indeed, it could be plausibly hypothesised that the operatives' role as god-like 'watchers' and guardians of public and private space is particularly empowering. This argument does initially appear persuasive. Operators can choose, for example, who is monitored and in what detail. Moreover, due to the technological abilities of the cameras, they can, silently and secretly, follow, track and zoom in on their targets without the latter ever knowing. Even if the watched *are* conscious of being observed, there is very little they can do about it. Norris and Armstrong (1999), for example, have shown that to demonstrate overt resistance to the camera's gaze worked only to justify the operator's prior suspicion, and inevitably, led to the individual facing increased surveillance. Hence, because the operatives cannot be directly challenged nor watched themselves, they are free to monitor anyone without having to defend their motives. Similarly, the lack of universally approved or standardised rules and regulations governing the operation of CCTV systems, further enables the operatives themselves to choose who and what they monitor, and, if they so wish, to abuse the system's capabilities.

However, before completely accepting this view, a closer look at the operatives in my study suggests that, while they can be *empowered* by the cameras, they can also be *imprisoned* by them. The college operators – as described earlier – work very long shifts in front of often featureless televisual screens, in the confinement of a small, prison-like control room. Their task is to systematically monitor the screens for up to 12 hours at a time, and to pick out suspicious individuals and actual or potential crimes taking place on and around the campus. The pressure on the operatives to capture any crime on video and react is constant and great. There is little scope for autonomy, spontaneity or diversity in their work; they simply come in and are paid

minimally to watch habitual televisual images for hours on end. Hence, their job is frequently the epitome and quintessence of routine, in that it is standardized, mundane and predictable. Nonetheless, the operatives must continue to operate the system at all times in case an incident does occur. In a sense, the operatives are the ‘prisoners’ of the cameras and their images, in that they are severely confined, lack autonomy and are under the complete control of the system. So whilst it is right to see CCTV operators as empowered through their role as watchers, one could argue that they are immured by it simultaneously.

Human resistance to an alienating system

A key point, largely absent in the related literature, is that CCTV operation, at the present time, still generally relies on a *human element* to both monitor and control the cameras, and interpret and act upon the images produced. It is here that theory and knowledge on informal workplace practice taken from the sociology of work, becomes pertinent. Donald Roy (1972), for example, conducted a micro-sociological study on the workplace culture of a plastic-producing production line. He employed concepts such as ‘banana time’ to show how a group of workers brought meaning and fulfilment to an otherwise tedious, unrewarding and unsatisfying job. The observed group ritualistically employed subtle, subconscious strategies of resistance such as game playing and time wasting to accomplish this goal. Similarly, using McDonalds fast-food outlets as an example, George Ritzer (1993; 2000) argues that despite in theory being highly rationalised, efficient and hierarchical bureaucracies – where every burger is standardised, calculated and made in exactly the same way – irrationalities still persist in the system, as subversive human behaviour has always the potential to disrupt the ‘flow of rationality’. He documents, for example, staff giving customers the wrong change, pilfering food, daydreaming, getting orders wrong and giving customers, especially friends, extra burgers and so on. After all, human beings are not objectively functioning, computerized machines. What both studies seek to do is to show the intricate, often seditious ways in which human beings interact with constraining, oppressive work environments and technology, deal with poor structural conditions, and perform and manage tasks which are routine, monotonous and unrewarding in nature.

One, however, can perceive a distinct resemblance between the conscious and subconscious strategies that Roy and Ritzer’s observed participants employed, and the ‘informal’ techniques which the operatives utilised in my research. I would argue that these strategies helped the operators cope with the general monotony, boredom and frustration of watching hours of uneventful footage. They may, however, also have been adopted as a subtle form of resistance to the wider, alienating socio-structural disparities the operators faced. Indeed, because the men were paid inadequately by Midtown College – yet held highly accountable for the crime rates on the campus, given poor workplace conditions and treated with contempt by lecturers and students alike (the very people they were supposed to be protecting) – there was no real incentive for them to monitor and operate the system efficiently. As George stated: ‘I sometimes ask myself, ‘why should we bother’? I mean, no one cares a damn about us. We don’t get any praise from anyone and we feel totally isolated’. It would appear, therefore, that a potential corollary of paying operatives low wages and treating them inadequately, is that the effective functioning of CCTV is severely diminished. Thus, the efficiency of CCTV operation that is assumed by many commentators (and hence the effectiveness of CCTV surveillance in general), appeared, in this study, to be undermined not only by the realities of a ‘control room culture’ (i.e.

the boredom, monotony and alienation endured by the operators), but also by wider economic and socio-structural factors (i.e. the low pay and general derision the operatives received).

Problems with the ineffectiveness of CCTV monitoring

If my case study is at all representative of other systems,²⁸ then it would appear that perhaps the central postulation, upon which much of the academic and public perspectives on CCTV rests, is misleading and, more importantly, that the general public should not invest blind faith in the efficiency of all CCTV systems. Despite the day-to-day safety of the students at Midtown College being largely dependant upon responsible and attentive camera operators, we have seen that, from time to time, the latter may not be watching the cameras. Thus, if an attack were to take place on the campus, there is a chance that an operator would fail to notice it. As the public are inundated with information from the government, the media and the police which continually highlights the effectiveness of CCTV²⁹, individuals might decide to walk somewhere alone, believing they are safe in a 'CCTV protected zone'. This false perception concerning the reliability of CCTV, could result in a number of individuals becoming unnecessary victims of crime. Indeed, by trusting and relying on technology so implicitly to do such a *fundamental* social job, "we are in danger of further absolving personal and collective responsibility for each other. The result may be a further spiral of social fragmentation and atomisation which leads to more alienation and even more crime" (Graham, 1998: 106).

It seems that CCTV in this specific context is also replacing manpower. Indeed, the college has refused to give the security team funding for additional staff. The electronic eye, however, cannot directly and physically intervene in a crime which is taking place, acting only as a psychological deterrent to a would-be, rationally thinking offender. A human being, on the other hand, can present a material challenge to, and act as a psychological deterrent for, a prospective criminal. Similarly, the usefulness of capturing on camera a violent crime taking place when there is no-one there to mediate and intercede, is also open to question. Although it may be useful in identifying and detecting the guilty and for securing criminal prosecutions, an individual being seriously assaulted would most probably rather have someone there to help him/her at the time of the attack, than be presented with the video evidence of it at a later stage.

Conclusion

This paper has sought to bring the reader's attention to a number of issues. First and foremost, it has shown that CCTV control rooms are perhaps not always operated as effectively as some public officials and academics assume. Indeed, the reality of CCTV operation would appear much more complex and ambiguous. The observed control room, for example, was soaked in playfulness, time wasting and at times, comedy, as the operators attempted to cope with socio-structural disparities, and the monotony of a routinized and largely unrewarding job. We have also seen that those who monitor the cameras are not robotic, computerised 'super humans'

²⁸ Until further research is conducted on other Little Brother systems, the representativeness of this project is open to question. Other CCTV systems may, for example, be highly functional.

²⁹ See Norris and Armstrong (1999: 63-88).

capable of watching televisual screens objectively and effectively for hours on end. Rather, CCTV operatives are subjective human beings who are open to natural and emotional factors such as tiredness, boredom, frustration, apathy and discrimination. Furthermore, this study has revealed that the job of CCTV operator, far from being empowering, is, in reality, physically imprisoning, mentally demanding and relatively poorly regarded.

I would like to see additional micro level research conducted on a multitude of CCTV systems – e.g. football stadia, hospitals, supermarkets, airports etc. This would not only give the surveillance debate a wealth of empirical data, but would also enable academics to gain a greater understanding of how contrasting Little Brother systems operate, the similarities and differences between them, whether they are integrated with one another, and how different operatives conduct and justify their observations. It would also allow us to decipher whether varying levels of public and institutional accountability determine the extent to which the systems are monitored and controlled effectively. Is, for example, a supermarket shop floor system watched as attentively and closely as an international airport system? It would, in addition, be extremely interesting to see whether or not the same type of individual, group and crime is ‘looked for’ across contrasting locations. This would further permit academics to uncover whether suspicion is predominantly constructed by the individual operatives themselves, or is more influenced by the institutional context the operator finds him/herself located within.

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