Surveillance, Order and Social Control

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Background

The rapid growth of publicly funded CCTV systems during the 1990s has also simultaneously led to a growth in research aimed at evaluating the impact of CCTV as a crime reduction measure. Much of this research has been 'post hoc shoestring efforts by the untrained and self interested practitioner' (Pawson and Tilley 1994) leading to results which are 'highly unreliable' (Short and Ditton: 1995, 10). However, as Tilley has more recently argued, there is increasingly evidence 'from various more or less technically adequate evaluations' (Tilley 1996, 5) of the crime prevention potential of CCTV. While this research provides a useful starting point, it is limited in focus for understanding the operation of CCTV systems as a mechanism for social control. The evaluation studies of CCTV as a crime prevention and order maintenance strategy have focussed on outcomes (the reduction of crime or fear of crime) rather than of processes (how information is selected, evaluated used and acted upon).

This concern with outcomes is also apparent in the Civil Liberties (Liberty 1989, Davis, S. 1996) and sociological approaches (Fyfe and Bannister 1997). These have stressed an Orwellian or Foucaldian vision of the total surveillance society, without regard to the limitations (economic, technological, and political) of the information processing capacities of such systems or the salience of panoptic metaphors in the context of city centre streets.

But CCTV is far more than just about the reduction of crime; it is about the power to watch and potentially intervene in a variety of situations, whether they be criminal or not. The question of who and what is watched and what warrants intervention have largely been ignored by existing research. In this context our research aimed to provide an analysis of the social construction of suspicion and its impact on authoritative intervention. It had five broad objectives which we will outline below and explain how each was met.

Objectives

a) To provide a detailed empirical account of the routine operation of three systems

Six hundred hours of observation was carried out in three control rooms and documentary material was collected for each site which included, minutes of meetings recording the process of implementation, the codes of conduct, operating instructions and so forth. This was used to produce three ethnographic case studies for each system.

b) To provide a sound quantitative basis for assessing the impact of CCTV enabling valid generalisations to be made about the nature and extent of selective enforcement and the extent to which this is socially differentiated.

As well as providing the basis for the ethnography, the 600 hours of observation yielded quantitative data on 888 targeted surveillances. In 711 of these surveillances, a person was identified and we have basic demographic data for each of them (age, race, sex, and appearance) as well as details of process and outcome pertaining to each of the targeted surveillances.

c) In the context of interactionist sociology to provide a micro-sociological account of the processes through which information becomes transformed into knowledge and then used as the basis for action.

The results of the quantitative observation study and the three case studies have have provided the basis for this analysis

d) With reference to recent writings on social control to document the rise of a new class of control professional and to analyse the nature of their vision of the growth of the surveillance society.

To this end we; carried out interviews with 30 people in key sectors of the CCTV industry including system mangers, marketing staff, technical development officers etc; created case studies of the history, development and operation of three other sites; collated over 450 newspapers articles concerning CCTV; collected promotional and advertising material from over 50 CCTV companies, and compiled a databases of articles in trade journals.

e) To locate and analyse the growth of surveillance systems in terms of the tensions between the exclusionary and inclusionary visions of social control and to explore this in relation to the central concerns of theorists of modernity.

This will be a central element in our forthcoming book with Berg.

Methodology

The sites

Observations were carried out in three sites between May 1995 and April 1996. One was in the commercial centre of a major metropolitan city with a total population in excess of 500,000. During the day it was a bustling shopping and business district and, as darkness fell, supported a thriving night life based on clubs, pubs and eateries. The next site centred on the market square of an affluent county town with a population of nearly 200,000. It thronged with shoppers during the day but at night was fairly quiet until the weekends, when it would attract revellers from the surrounding area for a night on the town. The third focussed on a run down but busy high street in a poor inner city borough with an ethnically diverse population of nearly 250,000. We have named these three sites Metro City, County Town and Inner City to reflect their contrasting features.

The systems contrasted in other ways. Metro City cost over £1 million pounds to install, consisted of 32 cameras and had running costs of over £200,000 per annum. Although the system was located in the control room of the local police station, it was run by an independent trust responsible for all aspects of its day to day operation, including the staffing of the control room and maintenance of the system. In contrast, the County Town system, cost around £500,000 to install and had annual running cost in the region of £120,000. It consisted of over one hundred cameras, although the main monitors generally only displayed the pictures from the 25 or so cameras focused on the town centre. The Inner City system cost around £450,000 with annual running costs of about £100,000 and had 16 cameras focussing on the busy high street and surrounds. County Town and Inner City were run by their respective local authorities, housed in purpose built control rooms in local authority premises, and both had sub-contracted the staffing of the controls rooms to private security firms. All three systems had 24 hour a day monitoring. In County Town and Metro City this involved three eight hour shifts and in Inner City two twelve hour shifts.

The observations

In total 592 hours of monitoring were observed - the equivalent of 74 eight hour shifts. All days of the week were covered, as were early, late and night shifts. On each shift the observer would 'attach' himself to one operative and shadow their work. In total 25 different operatives were shadowed. A small note book was used in the field when appropriate and full field notes, including full descriptions of any targeted surveillance were written up at the end of each shift. We defined a targeted surveillance as either one which lasted more than one minute on an individual or group of individuals, or where it was initiated from outside the system, (by police or private security for example) regardless of whether a target was identified. Full field notes were written up on each targeted surveillance which ranging in length from one paragraph to seven pages. The field notes also recorded key data for each targeted surveillance based on a checklist of salient features. Field notes were also recorded for general observations on the operation and control of the system, operatives' beliefs and values, work tensions, interactions with visitors to the system and included informal interviews with operators and managers.

The field notes of targeted surveillances also formed the basis for filling in the quantitative observation schedule. This recorded four types of data: **shift data** - including the number of operatives on each shift, the time screens were left unattended, who visited the system, whether and how many tapes were borrowed for inspection and for what purpose; **targeted suspicion data** - including the reason for the suspicion, type of suspicion, how the surveillance was initiated, how many cameras were used, whether the incident was brought to somebody else's attention; **person data** - detailing the age, race, sex and appearance of up to 4 people for each targeted surveillance, and finally **deployment data** - recording all deployments initiated by the system operatives, how the system was used during the deployment and what the outcome was.

In total this has yielded data on 888 targeted surveillances. In 711 of these surveillances, a person was identified and we have basic demographic data for each of them (age, race, sex, and appearance) as well as on another 966 people who were the second, third or fourth, person in a group being surveilled.

In addition we have:

Three ethnographic case studies, based on the field notes, of the operation of the each of the sites, these are on average 20,000 words each, they are however confidential as they are not anonymised, and are being used as the basis for producing the overall reports.

Carried out interviews with 30 people in key sectors of the CCTV industry including system mangers, marketing staff, technical development officers. and so on.

Written two extended case studies of the development of other systems. One of these sites involved us in two months of field work - attending development meetings, public consultation meetings and so on - and we were hoping to include it as one of our main research sites. Unfortunately they were repeatedly unsuccessful in attracting funds, so belated access to another site had to be negotiated.

Collated over 450 newspaper cuttings on CCTV including all the articles over a three year period from one local and one national newspaper.

Compiled a database of the over 150 CCTV systems which contains standard information on staffing, costs, funding, aims etc.

Results

In this key findings report we are going to concentrate on the four areas identified as our main objectives':

¥ who is surveilled and why and how this is socially differentiated

¥ the shared working rules developed by operators to determine who and what is surveilled

 $\ensuremath{\mathbbm{Y}}$ the outcome of targeted surveillance and whether it resulted in an authoritative intervention

¥The vision of the future of CCTV

Who is surveilled and why

In the absence of any concrete information as to who they should monitor, CCTV operators selectively target those social groups they believe, on the basis of 'common sense' to be most likely to be deviant. This leads to the over representation of men, particularly if they are young or black. Nine out of ten target surveillances were on men, and four out of ten on teenagers. Black people were between one-and-a-half to two-and-a-half times more likely to be surveilled than one would expect from their presence in the population.

Three out of ten people were surveilled for crime related matters, two out of ten for forms of disorderly conduct, but the largest category, nearly four out of ten were surveilled for 'no obvious reason'. This was echoed when we examined the basis of suspicion, with only one quarter of people subject to targeted surveillance because of their behaviour. In a further third of cases, operators' suspicion was alerted from outside they system, but the most significant was categorical suspicion where people were surveilled merely on the basis of belonging to a particular social or subcultural group.

The reason for the surveillance and the suspicion on which it was based were also found to be socially differentiated (all the correlations reported were found to be significant at less than the 0.01 level). The young, the male and the black were systematically and disproportionately targeted, not because of their involvement in crime or disorder, but for 'no obvious reason' and on the basis of categorical suspicion alone. When older people and women did become targets it was far more likely to be for crime or order related offences and because of their overt behaviour.

The intensity of surveillance was also found to be socially differentiated. The majority of targeted surveillances were short, four out of ten lasting two minutes or less and three quarters lasting six minutes or less. A person's gender played no part in influencing how long a targeted surveillance lasted. However, both race and age did have an influence - three out of ten targeted surveillances on black people, compared with just one in nine targeted surveillances on whites, lasted nine minutes or more. Similarly a quarter of targeted surveillances on teenagers lasted nine or more minutes compared to about about an eighth of targeted surveillances of twenty and thirty year olds.

Operators working rules used to determine suspicion.

In order to explain how CCTV systems produced this particular configuration we argued that it was necessary to examine the working rules operators developed in response to their key occupational concerns. For operators the most pressing problem faced was how, in the absence of prior knowledge as to a person's intentions, could they maximise the chance they would select those with deviant or criminal intent? (Sacks, 1978) Seven working rules were identified and the first three rules showed how suspicion was predicated on stereotypical assumptions as to the distribution of criminality, behavioural displays which operators associated with trouble, and prior knowledge as to a person's criminal record.

The first of these was seen to be most important, with suspicion being generated by operator's negative attitudes towards male youth in general and black male youth in particular. Visual clues as to a person's moral character were also read off from a person's and clothing and posture. Thus, if a youth was categorised as a 'scrote' they were subject to prolonged and intensive surveillance. Unsurprisingly, overt displays of disorderly conduct led to targeting, but more significantly so did running and loitering, even though these rarely led to the identification of any criminal activity. Personalised knowledge was found to be used rarely by operators as the basis for targeted surveillance, but was an important component in transmitted suspicions, especially from store detectives.

These three primary working rules, were accompanied by four other working rules which classified people and their behaviour in relation to their location in time and space and operator's normative conceptions of place. These rules were especially important in determining which particular young men, out of all those potentially available, were subjected to prolonged surveillance because they were deemed to be 'out of time and out of place'. The temporal and spatial classification served to compound categorical suspicion but was also based on a normative ecology of place which singled out certain people and behaviours as inappropriate. This was found to be less influenced by strictly crime related concerns than the commercial image of city centre streets which saw certain people being define as 'other'. Thus drunks, beggars, the homeless, street traders were all subject to intensive targeted surveillance.

Operator's attention was also drawn to those whose orientation to the locality suggested unfamiliarity or showed signs of unease. People who appeared lost or confused were targeted as were those who suddenly changed direction or backtracked as such behaviour was seen as indicative of criminal intent.

Finally, anyone who directly challenged, by gesture or by deed, the right of the cameras to monitor them was especially subject to targeting. Operators became particularly sensitised to the possibility that people maybe trying to conceal their identity and intentions and thus deceive them as to their true purpose or deny them the opportunity to identify them at a later time.

Outcomes

Although these working rules produced nearly nine hundred targeted surveillances, they only led to forty-five deployments, predominately for crime and order related incidents. The deployments produced an arrest of one or more persons in twelve incidents. The majority of arrests (seven), were related to fighting and involved charges for breach of the peace or assault and three related to theft. Moreover, there was significant variation in deployment and arrest frequency between the three sites. Inner City produced only three deployments and no arrests. In County Town there were ten deployments and three arrests and in Metro City thirty two deployments and nine arrests.

The low level of deployment was accounted for by two factors: that CCTV operators could not themselves intervene nor could they demand intervention by the police. This was compounded by the fact that suspicion rarely had a concrete, objective basis which made it difficult to justify to a third party such as a police officer why intervention was warranted.

The stark variation in deployment and arrests between the sites was found to be related to how integrated the CCTV system was with the police deployment system. This was dependent on the formal and informal organisational features which facilitated information sharing. In practice this meant it was not possible to understand operator or subsequent police behaviour merely on the basis of the evidence displayed on the monitors. Where there was low system integration, as in Inner City, even where there was clear evidence of offences, operators were hesitant to call the police and, when they did, the police often failed to respond. System integration, rather than evidence from the cameras, was shown to be more important in determining operational deployment practice.

Only twelve incidents, where police were deployed resulted in arrest, even though, in 21 cases there was evidence held on the tape which would have probably been sufficient to justify an arrest. Police discretion to resolve incidents informally was not undermined by the existence of CCTV systems. However the cameras were not irrelevant to police decision-making. The influence the CCTV system exercised over the outcome was shaped by the complex interaction between the CCTV operatives, police dispatcher and police patrol officer, and also dependent on system integration. Officers at times chose to ignore the existence of the cameras and make their decisions on the basis of what was immediately apparent; sometimes they asked whether the operators had any information or evidence which may influence their decisions, at other times operators or dispatchers proffered this without being asked; and finally officers occasionally used the system after they had arrested someone, often on a low level charge, such as breach of the peace, to see if a more serious charge could be sustained.

In the context of the general low level of deployment and arrest the net-widening and exclusionary potential of the three systems was limited. However, there was some evidence of more of net widening on relation of fights, with the cameras finding what would have previously gone unnoticed and facilitating arrest, even where, when police arrived the disorder had dissipated. The exclusionary potential

was most marked in Metro City, but only against street traders and other marginal entrepreneurs. However the exclusionary and net widening potential remains high, particularly in the context of 'Zero Tolerance' campaigns () which have been implemented in various cities, and seeks to specifically target low level disorder, public drinking and other incivilities.

This takes on added significance when it is seen in the context of the socially differentiated nature of targeting, and discretionary nature of deployment. The gaze of the cameras does not fall equally on all users of the street but on those who are stereotypical predefined as potentially deviant, or 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.

CCTV the Panoptican and the future

The sociological response to the rise of CCTV has been heavily influenced by the writing of Foucault seeing CCTV as an extension of panoptic principles to public space. There are three key elements to the power of the Panoptican as an instrument of social control and the production of discipline; the production of 'anticipatory conformity'; the certainty of rapid deployment to observed deviance and; the compilation of individualised dossiers of the monitored population.

Our study was not concerned with the production of anticipatory conformity, however it is important to recognise that the strength of anticipatory conformity is significantly lessened in public space, where citizens may be unaware that they are being monitored, and are likely to have been drinking (Squires and Lessor 1995). As such the relevance of deployment is heightened, both as a response to individualised deviance and as a general and symbolic reminder as to the presence and power of the cameras. Deployment, however, turned out to be a relatively rare event, particularly in Inner City and County Town, and the key panoptic element, the certainty of a disciplinary response to deviancy, was absent.

In Metro City deployment was more common and heavily skewed towards the late night revellers, who formed a loose knit subculture of interpersonal acquaintances. It is possible that through personal experience, 'war stories' told by friends, and media reports of interventions based on CCTV, that this group will come to see themselves as part of the panoptic machine and become the authors of their own conformity. It is in this partial, localised and diffuse way that disciplinary affects of the Panoptican may be said to be infiltrating city centre streets, rather than through omnipresence and omniscience implied by a simple translation of panoptic principles.

Another key difference between the Panoptican and the city centre CCTV systems was seen to be the virtual absence of any dossiers which would allow the identification and classification of those using the street. Unlike their institutional counterparts, street populations are largely anonymous. One consequence of this is, as we have shown, the development of an informal set of working rules which classifies people and behaviours as worthy of attention.

This however, is a poor substitute for the ability to record, store, and recall data about known individuals. As yet CCTV systems are still very much in their infancy, with system managers only just starting to understand their potential and try to find As our interviews with various 'professionals' in the CCTV ways to exploit it. business revealed, many shared an explicit panoptic vision of the future. system managers were keen on expansion through increasing the existing system or to introduce it to new areas of the city and a few had started to think about the potential for new technologies for automated monitoring and identification. present this is still limited by technological difficulties in exploiting the potential for the systematic identification, recording and classification of people in public space. However, various software companies, such as Memex and Dectel, are already supplying police forces with sophisticated image handling software. Scotland Police, for example, are currently installing a new force intelligence system based on Memex's computerised database handling software. This software not only enables the integration of all existing force, or even external databases, but can hold visual and audio data too. The potential to hold visual as well as textual information on computerised databases brings with it one mechanism whereby CCTV systems may increase disciplinary power, as they may facilitate the specific identification of those subject to surveillance.

This is still relatively limited as there is no automatic identification of suspects on the basis of their facial characteristics. However, the promise of this prospect is approaching and police forces have been quick to recognise its potential(see Norris et al 1996.) One consequence of this is that we are witnessing a proliferation of separate pictorial databases created for various subgroups of known or potential offenders, which can be matched through semi automated techniques. Following in the footsteps of the hooligan database, used during the Euro 1996 football competition (The Guardian, 10/2/96).), others are being compiled on demonstrators (Hook; 1994,11) and bank robbers (CCTV Today, July 1996, p6) and suspected illegal immigrants (Geake 1993) and these will no doubt will be augmented by pictorial databases of be compiled on animal rights activists, environmental campaigners, shop lifters and so on. However, the potential for creating a near national database of all citizens is moving closer with the proposed introduction of the new photo Drivers Licence which it has been argued will almost certainly be stored in digital form by the DVLA. (Davies, S. 1996, 196)

Where people are associated with vehicles, identification is already possible by running the license plate through the Police National Computer and this is now subject to complete automation in the City of London. This system, which relies on the integration of digital images, microcomputers and advanced image recognition

software, enables the recording and identification of every vehicle which enters the 'Square Mile' of the city. The license plate is photographed, automatically decoded and then automatically matched against a database of suspect or wanted vehicles (Dury; 1995, Potter; 1995).

The two central features of the Panoptican, an inevitable and rapid response to deviance and the compilation of individualised records, were seen to be largely absent from our systems. However, as we have noted, the potential that CCTV offers is only starting to be realised and there are various, moral and technological entrepreneurs who are seeking to develop system capacities to exploit its full potential. But we should not fall into the trap of technological determinism. As we have seen, CCTV in its operation and its effects is contingent on a host of social processes which shape how the technology is actually used. We simply cannot know in advance what CCTV is, means and does, and how effective it is since it is dependent upon its organisational implementation. Similarly, whether and how the new technologies will actually be used is an empirical question which necessarily should become the subject of detailed future study.

Future research priorities.

- An ethnography of those street populations most subjected to surveillance.
 This is needed for two reasons. First to explore the meaning of surveillance for targeted groups especially in terms of its legitimacy. Secondly to examine its impact in terms of changes to behaviour for instance avoidance, displacement and resistance.
- Detailed cases studies of the growth of visual and other forms of surveillance in different contexts, such as the workplace, schools, prisons.
- A long term study (or studies) as to the uptake and implementation of automated surveillance systems in a range of settings (e.g. traffic enforcement, retail stores, city centre streets) with particular emphasis on their exclusionary and net widening potential
- For the statistically minded and as more competent evaluations as to the effectiveness of CCTV are published a meta evaluation of effectiveness studies
- A ethnographically based study as to the effectiveness of codes of conduct in regulating the uses of CCTV.

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