Evaluating CCTV: Lessons from a Surveillance Culture

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Introduction

The deployment of CCTV surveillance in the UK provides an invaluable learning opportunity for other societies. Even this claim might be a too controversial starting point for some, for as Gras (2004) has argued, while the UK may have led Europe in terms of the scale of its CCTV investment, other commentators are not so convinced that the UK’s mechanisms of legal and political oversight have kept pace or that the UK model is one to be followed anyway (Riches, 2006). Over two decades the UK government has been a world leader in CCTV investment. In the bold words of the UK Home Office ‘In many ways, we have led the world from its early introduction in the 1970s to the massive growth in CCTV installation and use in the 1990s’ (Home Office/ACPO, 2007). During the latter half of the 1990s almost four-fifths of the entire Home Office crime prevention budget was spent on CCTV (Armitage, 2002; Goold, 2004: 40). Furthermore, between 1999 and 2003 alone, a total of £170 million CCTV funding was made available to local authorities following a competitive bidding process. This led to over 680 CCTV schemes being installed in town centres and other public spaces (Home Office/ACPO, 2007: 7).

Perhaps understandably, with the rapid rolling out of a relatively untried technology, many mistakes were made; lessons were often learned only slowly, and sometimes the hard way, about what CCTV could and could not achieve. Goold went so far as to note that, although the Government was prepared to fund the development of new CCTV systems in many British cities, ‘it apparently has no great interest in seeing whether they actually work’ (2004: 41). Accordingly CCTV grew very fast in the UK context, rather faster than was justified by any evidence of its impact or effectiveness for, as we shall see, CCTV appeared to have only a negligible effect on crime rates in the areas it had been deployed. Yet, despite this, a wholly unrealistic expectation prevailed, sustained in part by an unholy alliance of enthusiastic police entrepreneurs, security
industry marketing agents and fearful citizens, that CCTV could solve many of our public area crime and disorder problems. As a Home Office evaluation from 2005 concluded:

'CCTV was oversold – by successive governments – as the answer to crime problems. Few seeking a share of the available funding saw it as necessary to demonstrate CCTV’s effectiveness… Yet it was rarely obvious why CCTV was the best response to crime in particular circumstances’ (Gill and Spriggs, 2005).

As other countries increase their levels of CCTV investment, the UK experience can provide useful lessons, significantly improving the process of policy transfer, avoiding mistakes, developing better practice, clarifying issues, and even saving money. Learning from the UK experience, adding the evidence, can make a reality of the promise of ‘evidence-led’ policy development. More than this, in an area of policy-making that goes to the heart of questions of state power and security and citizen privacy and individual rights, the issues surrounding the management, governance and oversight of CCTV systems in the UK can be a useful basis upon which other societies can plan their own. As EFUS moves towards the development of a Europe-wide code of practice and ethics for CCTV, the British experience can provide a salutary lesson. In a wider sense the British experience of CCTV also bears out an uncomfortable truth of the politics of law and order: that ‘crime control strategies … are not adopted because they are known to solve problems’ (Garland, 2001: 26). Policies and strategies are often adopted because they are politically expedient, popular, cheap, consistent with existing priorities or favoured by dominant interests, amongst other reasons. As Savage has noted, much of the law and order politics of the 1990s were fundamentally driven by politics and ideology rather than research (Savage, 1998: 172). It is as plausible to argue (Squires and Measor, 1996a) that the various ‘CCTV challenge’ funding competitions organised sequentially by the Home Office from the 1990s – and the form that these took, matched funding-bids based upon public/private partnerships - were as much about kick-starting these local crime prevention partnerships (‘responsibilisation’ strategies) as they were about funding CCTV itself. It is arguable that the CCTV industry in the UK was a spectacular beneficiary of a unique combination of circumstances and its own slick publicity. We might proceed rather differently a second time around.

So, at a time when the perceived threats posed by crime, violence, disorder and terrorism are generating new demands for security and when the security industries themselves are sensing lucrative new markets (Loader, 2008),1 it is incumbent upon the research and evaluation community to do two things:

[1] to ensure that the measures of crime prevention adopted actually deliver the crime reduction benefits promised,

[2] to ensure that these measures avoid becoming expensive ways of intensifying an already tense and often dysfunctional law and order politics, for instance by augmenting the powers of the police vis a vis the rights of citizens; reinforcing problematic social boundaries between supposed ‘innocent citizens’ and ‘others’; demonizing youth and other ‘visible’ public groups (Squires, 2006); subsidising the security of the affluent and redistributing (displacing) crime risks onto the already vulnerable (Hope, 2001) and facilitating the emergence of more risk averse and ultimately less accountable public order.

French author and social commentator Loic Wacquant has catalogued such developments in the USA over the past decade and cautions against Europeans following suit, trying to tackle crime and disorder problems by criminal justice and security measures alone. He notes, ‘any policy

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1 ‘I have now lost track of the number of CCTV providers who say that Eastern Europe and the rest of the world is where they are headed because there is not much more you can do here (UK)’ (Loader, 2008: 223)
claiming to treat even violent crime solely with the criminal justice apparatus is condemning itself to programmed inefficiency... aggravating the malady it is supposed to cure (Wacquant, 2009: 275-6).

Accordingly, the adoption of CCTV in the UK, while resembling a search for the 'magic bullet' cure-all, accompanied by a populist, but ill-informed, wave of public support, does not represent a path one would recommend that any other countries should necessarily or blindly follow. This is not because the technology has simply not delivered the promised benefits (many of these were exaggerated, unrealistic and unreasonable anyway) but rather because the adoption of CCTV begs many other questions about law enforcement and the practice of policing, all of which require serious consideration if this technology is to be effectively integrated into the criminal justice and security infrastructures of different societies. In different societies, citizens and political authorities may answer such questions in quite different ways and they may want CCTV cameras to help solve different problems. This, in a sense, is the very first point. We should ask not what can CCTV cameras do for us but, rather, what problems do we want to tackle and how might CCTV surveillance help?

Policing perspectives

By 2007, while acknowledging that there was still a ‘debate’ over ‘how effective CCTV is in reducing and preventing crime’ (Home Office/ACPO, 2007: 11) the UK Home Office and the Association of Chief Police Officers (ACPO) were sufficiently forthright to acknowledge that while CCTV has made a contribution to ‘protecting the public and assisting the police’, this had occurred ‘despite CCTV systems being developed in a piecemeal fashion with little strategic direction, control or regulation [and] this approach has failed to maximise the potential of our CCTV infrastructure. This ‘lack of a coordinated approach to CCTV development,’ the report continued, ‘poses significant risks in terms of compatibility of systems, cost of accessing the images and the potential loss of operational effectiveness’ (2007: 1-2) Yet, as we have noted, beyond these essentially operational issues of utility, impact and effectiveness lie many further questions pertaining to democracy, rights, citizenship, oversight, accountability and redress, all of which have a bearing upon public trust and confidence in policing. Societies developing their own CCTV surveillance systems need to consider these matters too, not just the technical questions.

Whereas the police were now willing to acknowledge criticisms that the academic, research and evaluation, community had been making for a nearly decade or more (Brown, 1995; Squires and Measor, 1996a and 1996b; Norris, Moran and Armstrong, 1998; Norris and Armstrong, 1999; Short and Ditton, 1998; Skinns, 1998) the response has not entailed any unpacking of the complex CCTV systems currently in place, rather a ‘national strategy’ has been advanced to address the failings of the hitherto ‘haphazard and incremental’ CCTV expansion of recent years (ACPO/Home Office, 2007). Of course this would not be the first time that criminal justice policy-makers have called for ‘more and better’ of something to tackle the perceived failings of an earlier, seemingly insufficient, dose of the same solution.

Unsurprisingly perhaps, the British Security Industry Association was having none of it, their spokesperson noting that, while CCTV growth may have been piecemeal, the real faults lay with police forces which had not maximised the potential of their own systems (Jane’s Police Product Review, 2007: 1). It seems that, as in other areas of criminal justice, a troubling circularity of thought prevails. Whatever problems are associated with CCTV, more CCTV is the solution, both our police and our security industry seem to agree on this simple fact. The real issue, however, and this is the lesson for other societies, is to try to think outside this particular box – or even beyond the camera.

More recently, however, enthusiastic support has been voiced for CCTV from another policing source. In his controversial memoir, The Terrorist Hunters (Hayman, 2009) former Assistant Commissioner of the Metropolitan Police, Andy Hayman, wrote of the significant contribution that he believed surveillance technologies were making to contemporary policing:
'Despite the concerns of civil liberties groups, the surveillance society of CCTV cameras, listening devices and databases recording our e-mail and phone activity, our criminal and car records, and anything else we care to think of, is paying off big time when it comes to catching criminals and terrorists’ [246].

That brief comment, the points it makes explicit and those it doesn’t, connects with so many of the issues which run to the heart of many questions about the role of CCTV in effective public safety management. In the first place Hayman presents the contribution of surveillance technologies ‘despite the concerns of civil liberties groups’ as if there is always an inherent contradiction between policing and freedom. It is not necessarily so, although this debate takes us back to the first establishment of uniformed policing in London. As Robert Peel (founder of the Metropolitan Police in 1829) remarked, ‘Liberty does not consist in having your house robbed by organised gangs of thieves, and in leaving the principal streets of London in the nightly possession of drunken women and vagabonds (Sir Robert Peel, 1829). Properly established, appropriately managed and effectively monitored, surveillance can enhance safety, security and freedom.

Yet Hayman’s point also refers to surveillance technologies other than CCTV, making the point that this whole area of policing and security management has changed rapidly during recent years such that the social implications, the law and principles of governance have not always kept pace with the technological potential (Surveillance Studies Network, 2007). Yet when technology leads, in such a fashion, a kind of ‘mission drift’ can occur where technologies are used in ways that were never intended, resulting in costly and inappropriate investment and supposed solutions (‘technological fixes’) that are ineffective, leading to scepticism and disillusion all round when the system does not deliver the anticipated results (HO/ACPO, 2007). Some of these problems have been certainly been true of CCTV use in the UK, for example they also arose in the investigation of the 2005 London suicide bombings ‘in relation to the lack of [system] integration, the quality of images and the difficulties associated in retrieving digitally recorded footage,’ as ACPO has acknowledged (Home Office/ACPO 2007, 8-9). Furthermore at least one study has concluded that improved street-lighting could have a more significant preventive impact on crimes recorded than CCTV (Farrington and Welsh, 2002) – and street-lighting was much cheaper.

In a related fashion, Hayman talks of the use of surveillance technologies for ‘catching criminals and terrorists’ and yet the widespread adoption of public area CCTV surveillance systems in the UK was based upon the cameras’ crime prevention potential. CCTV, operating within the paradigm of situational crime prevention (Clarke, 1995) would, it was assumed, deter offenders by making them visible and identifiable and by bringing the principle of ‘guardianship’ from routine activity theory (Felson, 1998) to otherwise relatively unguarded areas. Both approaches suggested some connection between surveillance and rational choice, that the fact of being observed and caught on film would influence behaviour and deter offenders from offending (Clarke and Felson, 1993). In practice, however, CCTV proved to have relatively little impact on some types of offences, for example inter-personal violence (perhaps due to the influence of alcohol). In fact, of virtually all of the evaluation schemes established to monitor the effectiveness of surveillance cameras on town centre crime, few looked any further than to assess the impact of CCTV on recorded crime trends. Very few studies followed through to explore CCTV in relation to incident management, evidence development, case preparation and prosecution, even as police officers themselves were realising that it was here that some of the major benefits of CCTV might be found.

A final issue relating to Hayman’s observation concerns what we might call the ‘police point of view’. CCTV’s most enthusiastic supporters are often the police themselves and, when presented with a new crime control technology they may be keen to try it out. However the police are not necessarily the best equipped to undertake the problem analysis and, for a long time in the UK, CCTV was likened to ‘a cure looking for an illness’. Commentators may have had a strong intuitive sense that CCTV would – indeed should - influence crime levels, but there was little available evidence of its effectiveness. Some commentators have been sceptical arguing...
that police managers might adopt CCTV to allow them to save resources by reducing police patrol levels in certain areas (Deane and Sharpe, 2009). At other times the lobbying and marketing of CCTV by security industry representatives has been called into question (Loader, 2008). Thus, ‘marketing’ by vested interests may have generated unrealistic expectations about what security cameras could achieve. Facing two such sets of potentially vested interests the case for an independent evaluation of CCTV schemes might seem incontrovertible. However, the limits of the early CCTV evaluations were often restricted to simple questions of crime reduction impact. The potentially much wider role that CCTV technologies might play across a wide range of policing activities was rather overlooked: a case of restricted vision, perhaps. When future CCTV systems are considered or when systems are to be modernised and developed these issues need appropriate consideration – systems may need to be fit for a variety of purposes as the Home Office and ACPO have acknowledged (HO/ACPO, 2007: p.13). There are further complaints, here emanating from the ACPO CCTV survey team itself, that ‘the quality of images recorded by CCTV systems varies considerably’, whilst anecdotal evidence also suggests that ‘over 80% of the CCTV footage supplied to the police is far from ideal, especially if it is being used for primary identification’ purposes. (HO/ACPO, 2007: p.12).

Finally, the case for civilian oversight, public accountability and independent monitoring is as important in relation to CCTV as in other areas of contemporary policing. Not only is this important in terms of the public understanding of the purpose of CCTV but it also helps establish its acceptability and, while enhancing public trust and confidence, can improve the effectiveness of policing systems (Honess and Charman, 1992; Gill and Spriggs, 2005). This is an area often overlooked, even in the recent UK Home Office CCTV strategy document. While the document considers the necessity for inter-agency collaboration, the importance of local stakeholders and partners and the need for effective governance and oversight of CCTV planning, it is rather silent about the systems of local accountability to which such surveillance systems might be subject. Reference is made to national processes of inspection and oversight such as the UK Information Commissioner and the Surveillance Commissioner but local arrangements are overlooked, even though there are many good examples or templates to draw upon (ICO, 2009). Conversely, this may be an area in which different political cultures or contrasting policing traditions suggest alternative solutions. After all, the point here is not to impose ‘one size fits all’ solutions across diverse European cultures, but rather to raise issues that experience has shown are important when CCTV surveillance is considered. As Gras has argued (2004), a number of other cultures, amongst them Germany, France, the Netherlands and Sweden might lay claim to rather more stringent regulatory regimes than the UK, and Riches (2006) adding that CCTV developed in a largely pragmatic fashion in the UK with little thought given to the monitoring and accountability issues until systems were already up and running.

Drawing conclusions

Problem analysis and Implementation

Taking these issues together we can draw some important lessons from the best available UK experiences of CCTV installation and use. First of all it is worth noting the somewhat surprising conclusion draw by Gill and Spriggs in their 2005 evaluation for the UK Home Office:

‘It would be easy to conclude from the information presented … that CCTV is not effective: the majority of the schemes evaluated did not reduce crime and even where there was a reduction this was mostly not due to CCTV; nor did CCTV schemes make people feel safer, much less change their behaviour (Gill and Spriggs, 2005: 115).

With such a conclusion the main surprise might be why CCTV systems ever took off in the UK to the extent that they did. As we have noted already however, there are other dimensions to this story. Some of the wider political issues we have already noted, here we will consider some of the more implementation-related questions that security managers and police, in particular, have often been slow to acknowledge and with which they are sometimes rather reluctant to engage.
As Gill and Spriggs noted, however, a simple story of apparent ‘CCTV failure’ is just as misleading as the security industry’s over ambitious claims for CCTV’s ‘success’.

To take a more nuanced and evidence-led view we need to bear in mind a number of issues. First, as part of an appropriate problem assessment, there are a number of factors to consider.

Crime rates or criminal incidents alone are not necessarily a good indicator of crime and disorder problems, or of public fears and concerns in an area or of the quality and experience people have of their community safety. Policing and crime prevention initiatives have to take this complexity on board.

The complex and varied, roles and purposes of a CCTV system: intelligence development, evidence gathering, incident management, order maintenance all need to be acknowledged. Situational crime reduction, via prevention or deterrence, is not the only outcome. Clarity about a variety of purposes is essential. As Gill et al., (2003) noted in their evaluation of CCTV project implementation: ‘When considering which type of crime prevention mechanism to use, it is important to be clear about the problems in the area and specific about the capabilities of a CCTV system to address them. If the two do not correspond, CCTV is not the right solution’ (2003: p.4).

Finally, CCTV systems have to be integrated with existing policing and crime management initiatives, this might mean that other policing processes might have to change and develop. It was quite unrealistic to imagine that CCTV systems could have a sustained impacts, on their own. In a similar fashion policing priorities had to be determined by reference to the problems requiring solution not driven by any a priori assumptions about the need for surveillance cameras. And, as Gill et al (2003) noted, by 1999 the Home Office guidance for CCTV development partnerships was insisting that any application for CCTV funding had to set out 'the criteria for identifying a relevant crime prevention mechanism,' which is to say that CCTV proposals had to be supported by evidence of 'theoretically sound crime reduction principles which suggest plausible causal mechanisms by which [the CCTV system] could work against the current crime or disorder problem in the current context (Home Office, 1999, section 4.3). Gill and Spriggs went on to note in their final report, however, that even where CCTV projects had discernible objectives which ‘had to be stated in tender documents’, these ‘often did not drive the scheme… and were rarely embedded in day-to-day practice’ (Gill and Spriggs, 2005: 116). So even when funding applications did contain evidence and problem analysis these were often overlooked as soon as the funding was achieved.

Crime reduction and community safety impacts

The Home Office National CCTV Strategy document when claiming that, ‘there is an ongoing debate over how effective CCTV is in reducing and preventing crime’ (2007, p.11) sought, perhaps understandably, to keep that very debate alive. In fact the accumulated evidence from research and evaluation, a combination of rather mixed, unimpressive and otherwise disappointing or unreliable results, provides the more compelling story.

Many local CCTV evaluations were carried out in the UK on the back of the various waves of CCTV installation although these were not always very methodologically rigorous and, as has been noted, they were often confined to impact assessments. Many were also rather too short term to provide any reliable evidence of sustained influence on crime trends and patterns. That said, a number of larger and/or comparative projects began to emerge later, as did a growing picture of evaluation experience. Welsh and Farrington (2002) undertook a meta-survey of 46 CCTV evaluation projects (worldwide) although only 22 satisfied the analysis criteria in that: CCTV was the main intervention studied, crime outcomes ‘before and after’ were measured and that there was a relevant ‘control area’ with which to compare the intervention area.

The results were rather mixed, half of the eligible studies ‘found a desirable effect on crime’ although five found an ‘undesireable’ impact, and five more found no significant impact. The
CCTV schemes in the UK generally showed a greater range of impacts than those in North America. Furthermore, CCTV ‘had no effect on violent crimes but … a significant desirable effect on vehicle crimes’ and on crimes in car parks. Finally ‘in the city centre and public housing setting, there was evidence that CCTV led to a negligible reduction in crime of about two per cent in experimental areas compared with control areas’ (Welsh and Farrington, 2002: p. vi). Noting that ‘surveillance studies’ was still a relatively new area the authors went on to suggest that there needed to be further research on both the optimal conditions for securing CCTV effectiveness and the mechanisms by which positive results are obtained. It seemed fairly clear that an appropriate package of interventions was necessary for the best results. Ultimately, they concluded, rather optimistically, that ‘CCTV reduces crime to a small degree’. Finally, they proposed that ‘future CCTV schemes should be carefully implemented in different settings and should employ high quality evaluation designs with long follow-up periods. In the end, an evidence-based approach to crime prevention which uses the highest level of science available offers the strongest formula for building a safer society’ (Welsh and Farrington, 2002: p. vii).

As we have already seen, such conclusions about CCTV surveillance impacts have been confirmed in many other similar studies especially the large national study by Gill and Spriggs (2005). These authors also concluded that CCTV appeared to have limited crime reduction effects in town centre and residential areas but appeared to work best in relatively contained and controlled access locations (hospitals, car parks, shopping malls). CCTV had poor results on impulsive (violence and alcohol-related) offending, but better results on more ‘premeditated’ crimes. As in other studies both ‘halo effects’ (crime reduction in adjacent areas) and crime displacement were noted (Gill and Spriggs, 2005: p.vii). The technical attributes of particular systems appeared to have either marginally positive or negative influences on the effectiveness of particular systems but these were of relatively little overall significance. Finally, surveys of members of the public in all the CCTV scheme areas found very little evidence of significant changes in either behaviour or levels of fear or concern about crime.

As the authors of this report concluded, ‘assessed on the evidence presented in this report, CCTV cannot be deemed a success. It has cost a lot of money and it has not produced the anticipated benefits’ (Gill and Spriggs, 2005: p.119). However, they continued by noting that lessons are being learned and the technology is improving rapidly with new ‘event-led’, proactive, ‘intelligent’ behaviour recognition and biometric systems presenting new safety management opportunities - whilst also bringing new threats and challenges. Above all, however, their ‘evidence based’ conclusion represents a warning against an all too tempting search for technical solutions. CCTV is but a tool, and where it was perceived to have failed this was often because the expectations placed upon it were too ambitious or because it was being used in unsuitable places for the inappropriate problems. Systems may have been poorly planned or badly implemented, or perhaps they were not effectively integrated into other community safety strategies and policing systems. As Haggarty has noted, perhaps one beguiling myth we need to question is the unproblematic assumption that there are ‘surveillance solutions’ for social problems (Haggarty, 2009: 162). What the Home Office referred to in 2007 as ‘the search … for the panacea of CCTV’ (HO/ACPO, 2007: 40) may be a futile one. Such ‘solutions’ will undoubtedly generate still further problems and dilemmas.

Issues here might include the question of who benefits most from the umbrella of protective surveillance: in the UK town centres, high value retail areas were the first major beneficiaries (as opposed to residential areas, children’s playgrounds or schools). These were not necessarily the most obvious community safety priorities or the most needy areas, but the nature of the funding arrangements in the early schemes meant that occupiers of these areas could most readily afford the matched funding investment costs. Another issue of inequality arises: at whom are the cameras mostly directed: who is most frequently under surveillance. As Shearing (2000) and Von Hirsch (2000) have, each in their own way, noted there are profound social and ethical questions associated with surveillance processes (Crawford, 1998: 98-101).
These ethical questions stretch backwards to the definition of the crime and security problems that we are seeking to solve and forwards into the design, monitoring and integration of the systems developed. Finally they involve the processes for oversight, monitoring and evaluation, accountability and redress that need to be part of effective community safety strategies. Without these issues being considered at every stage problems are likely, problems that will diminish the effectiveness of the system itself. However technically sophisticated a system is, it will only be as effective as those who operate it and it will only enhance community safety if it meets the needs and reassures the citizens it is intended to serve.

As Gill and Spriggs (2005) concluded:

Too much must not be expected of CCTV. It is more than just a technical solution; it requires human intervention to work to maximum efficiency and the problems it helps deal with are complex. [It can] help reduce crime and to boost the public’s feeling of safety; and it can generate other benefits. For these to be achieved though, there needs to be greater recognition that reducing and preventing crime is not easy and that ill-conceived solutions are unlikely to work no matter what the investment (2005: 120).
REFERENCES

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