EDITORS' INTRODUCTION: SEEING AND BEING SEEN TO PREVENT CRIME

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INTRODUCTION

Cohen and Felson (1979) argue that for a direct-contact predatory crime to be committed, one of the three essential conditions that must converge in space and time is "absence of capable guardians," or, more abstractly, "absence of capable guardianship." Surveillance (or the appearance of surveillance) is part of capable guardianship. Clarke (1995) presents 12 "techniques" of situational prevention, organised under three headings: increasing the effort, increasing the risks, and reducing the reward. Three of the four techniques included under "increasing the risks" refer to surveillance: formal surveillance, surveillance by employees, and natural surveillance. This collection, whose contributors are all British, discusses the efficacy, use and social context of varying forms of surveillance.

The weight of attention given to closed circuit television (CCTV; see chapters by Pease; Phillips; Norris and Armstrong; Gill and Turbin; Short and Ditton; and Beck and Willis) reflects the investment in this method of crime prevention in the U.K. over the past few years. There has been a truly dramatic expansion of CCTV in town centres over the past decade. It is estimated that there were two local authorities with CCTV schemes in 1987 (Bulos and Sarno, 1994), 79 town centre

schemes in 1994 (U.K. Home Office 1994), and at least 440 schemes specifically in town centres by 1998 (Goodwin et al., 1998).

It is not difficult to understand this growth in CCTV use in the U.K. As Phillips notes, central government through the Home Office made available £37 million between 1994 and 1997 to support over 550 schemes. The money was provided through CCTV Challenge, a competitive bidding process that required local matched funding. Central government contributions thus levered a further substantial funding, primarily from local authorities and the private sector. A further £170 million is being made available by the government in the U.K. over three years, beginning in 1999, for CCTV in town or city centres, car parks, residential areas, other crime hotspots, and to modernise existing systems. This will clearly further extend the reach of CCTV.

Home Office guidance, issued when CCTV Challenge was launched, began by saying,

> It is essential at the outset to assess the crime and other problems to be addressed and to examine a range of responses, which might include CCTV. Avoid falling into the trap of thinking you should use CCTV just because it is available and because neighbouring towns seem to be planning to do so. You need to think through the way in which CCTV will help address **your** problems in **your** circumstances. Remember no two towns are identical: there may be other solutions to particular local problems. Avoid unrealistic expectations. Don't assume that CCTV will *by itself* [emphasis in original] solve your problems. To be successful CCTV needs to be carefully planned, competently managed and generally introduced as part of a package of measures [U.K. Home Office 1994:9.)

In view of this official advice about the need for thought about the appropriateness of CCTV for local problems, consideration of alternative solutions, and the use of packages of measures rather than technological magic bullets, the decision to put so much of a crime prevention budget into this one particular device is surprising. The reasons may well have as much to do with the surface plausibility of the measure, the apparent public popularity of the measures, and the benefits that could be expected by being seen to be doing something visible in response to widespread concerns over crime, as with any serious explanation that CCTV alone would necessarily yield commensurate increases in community safety.

The alacrity with which local areas took up the CCTV Challenge also needs explaining. Cash-strapped local authorities, whose residents typically have crime at or close to the top of their concerns, are quick to take advantage of any funding opportunities offered by central government. As a rule they have been core players in preparing bids. One of the major, if unsurprising, lessons from the extensive installation of CCTV in Britain is the leverage that funding can have in shaping approaches to crime prevention.

Lighting as a crime prevention measure is addressed in two chapters (Pease; and Painter and Farrington), and this reflects the respective attention given to it and to CCTV in Britain in the past few years as a crime prevention measure. As Pease notes, there has been much more official skepticism about the potential of lighting to prevent crime than CCTV. It has certainly not received the same level of cash injection and leverage from central government as a crime prevention measure, though lighting has been upgraded for a range of other reasons: to prevent traffic accidents, to promote social interaction and commercial activity, and as a contribution to an aesthetically improved nighttime environment.

As a general review of street lighting, the chapter by Pease is refreshing in drawing attention to the political context of crime prevention policy. He discusses how the debate about the contribution of street lighting to crime reduction has been bedeviled by dogmatism, wooly thinking, and skepticism, despite generally positive findings from a number of small-scale projects and the "methodological sophistication" and "rigorous analysis" of the two most recent studies. As Pease wryly comments with regard to those accountable for exercising stewardship of public money, "One is tempted to ask where rigorous standards went into the headlong rush for CCTV deployment."

The volume begins with a chapter that is not quite so technique-specific. Hope discusses the context furnished for community property guardianship in suburbia, reminding us of the importance of community context for this.

Surveillance as Crime Prevention

No form of surveillance directly stops crimes from occurring. With improvements in lighting, as Pease notes, some crimes may even become easier to commit: for example, prospective thieves can see what there is to steal, what they are doing in overcoming physical security, and who is coming to stop them from committing their crime, and can more easily find their escape if they are disturbed. Neither CCTV

nor lighting constitute physical barriers. If CCTV and lighting do prevent crime it is through some mechanism they trigger, leading to fewer decisions to commit crimes than would otherwise be the case.

Where Clarke (1995) includes surveillance in general, and lighting and CCTV in particular, under "increasing risks" within situational crime prevention, he is indicating how each might have its crime-inhibitive effect. Several of the papers included here discuss in some detail the ways in which lighting and CCTV might lessen crime, and how they might also inadvertently increase it. Not all the mechanisms mentioned are directly risk-related, and even where risk is potentially raised it is not always through the introduction of lighting or CCTV *per se,* but rather through some other surveillance/risk-inducing behaviour triggered by them.

These papers avoid the trap of asking simple-minded and misleading questions about whether or not CCTV or lighting work unconditionally. Earlier research has, sometimes not very helpfully, framed questions about situational crime prevention measures in simple, "does it work?" terms, assuming that if in some case they are found not to have produced a reductive effect this in some sense counts against the measures. What several of these papers bring out is how lighting and CCTV *can* produce decreases in crime in conditions conducive to their efficacy. Pease has noted that in some cases packages of measures will be needed to ensure that conditions are created in which the causal efficacy of measures can be activated. In relation to the two specific measures examined in detail in this volume, lighting may be introduced to create conditions in which CCTV systems can be operated more effectively. At the same time, of course, lighting may have its own effects *sui generis.*

What Painter (1996) has said of lighting improvements in particular — that they might not always reduce crime — would go for almost any crime prevention measure. She says, "One is tempted to ask why anyone ever thought that they would achieve this" (p.333). No one should ever believe that any individual crime prevention measure (including CCTV) will always reduce crime. The potential effectiveness of measures depends on their suitability to the circumstances in which a given crime problem manifests itself.

Solution-led situational crime prevention, where particular situational measures are treated as potential cure-alls are, thus, doomed to disappoint. These measures also risk discrediting situational crime prevention by over-identifying it with the introduction of particular measures, such as bolts, bars and CCTV. A problem-oriented approach to situational crime prevention, in contrast, begins with the

presenting crime problem and then tries to figure out ways of triggering mechanisms for reducing opportunities for the offences. There are, of course, by now very many examples of achievements following from this (see Clarke, 1997).

Sadly, in the case of CCTV we see a good deal of funding-inspired, solution-led crime prevention. Equally sadly, in the case of lighting, some previous research seems to have assumed that if it was introduced it must have comprised a solution to a crime problem, or else it has no significance as a situational crime prevention measure. The review by Pease is useful in drawing a line under a sterile debate by concluding that the capacity of street lighting to reduce crime has now been satisfactorily settled. The question now is how policy should move forward to reflect this. Situational crime prevention, as we see it, is about working out how to trigger crime-inhibiting causal powers through the introduction of relevant measures. And what makes sense as a solution will depend on the specific circumstances.

Many of the contributions to this volume are concerned with spelling out how the measures introduced may trigger crime preventive mechanisms in the specific contexts in which they are introduced (Pease; Painter and Farrington; Phillips; Gill and Turbin; Ditton and Short; and Beck and Willis).

There is some evidence that though lighting, CCTV and provision of concierges might look like simple situational measures, because their surface plausibility is associated with the potential they evidently have for triggering direct risk-increasing crime prevention mechanisms, they may operate in more subtle ways. For example, just as Laycock (1997) found that property marking "worked" in small South Wales villages less by the direct consequences of the marking per se and more by the change in perceptions of general crime risks amongst the local offenders, so, too, can lighting have its effects less by the facilitated surveillance through improved illumination and more by the community changes effected by the environmental improvements (see Painter and Farrington).

The Social Significance of and Context for Crime Prevention Measures

There is more to crime prevention measures than their impact on crime rates. They may have other uses, consequences and meanings that are significant in shaping their social acceptability. There are, in this respect, significant differences between lighting and CCTV.

Public-space CCTV can comprise a tool for purposeful, targeted surveillance over what people are doing. It may thereby reduce pri-

vacy in public places, by providing the means for people to be watched and recorded as they go about their daily lives. Some feel uncomfortable at the thought that their private out-of-doors actions may be focused on by surveillance specialists, hidden in control rooms, and that their behaviour may in principle be broadcast, or used in evidence. It is not just criminal behaviour, of course, that might be captured, but kissing, scratching, nose-picking, dancing, tripping, colliding, bleeding, panicking, hugging, crying, vomiting, eating, smoking, spilling, quarrelling or dying. Many may feel uneasy about unseen professional watchers being able to look at and tape their private and personal behaviours, even in public places. Goffman (1971) has described the ways in which we preserve our dignity and self by controlling our public presentation in everyday life. CCTV jeopardises our scope for restricting access to public presentational slips.

CCTV can also capture not only what individuals do, but also whom they meet. For a host of innocent reasons, people may not welcome what they might see as intrusive surveillance of their relationships with others. Whether it be with potential business partners, lovers, political allies, or (non-criminal) friendship with offenders, being watched and recorded anonymously may be unwelcome. CCTV may, in addition, be deployed "against" certain persons or types of person who are deemed suspicious. It can thus be used as a means of oppressing those subject to public prejudice. It may even be deployed to exclude people whose face or appearance does not fit (Norris and Armstrong).

Lighting improvements facilitate natural surveillance; unlike CCTV, they are not a means for professional watching. Lighting can, thus, be seen to be less formal and more democratic. It is consonant with Jacobs's concerns about forging conditions for informal mutual control (1961), rather than the development of all-encompassing centrally staffed panopticon[1] of them and us.

There is currently no statutory regulation in Britain for the installation, operation and use of CCTV systems. Most, though, are covered by codes of practice, about whose development the Local Government Information Unit (LGIU) has prepared extensive guidance (LGIU, 1996). The Home Office CCTV Challenge competition called for the formation of codes of practice to effect local regulation of systems. The fact that codes of practice for CCTV are needed reflects the particular issues raised by CCTV as against lighting. In practice, however, policing codes of practice is very difficult.

A further consideration relating to the use of crime prevention measures is their relative cost-effectiveness. This has proved difficult, and relatively few studies have attempted systematically to measure paybacks for investments made. In this volume, pioneering efforts are made by Painter and Farrington in regard to improvements in street lighting, and by Beck and Willis in regard to CCTV in stores. Hope raises interesting questions about the conditions for natural surveillance in (changing) suburbia. He highlights the problems in achieving collective commitments where conditions favour "free-riding," and the consequent fragility of communal efforts. (For an explanation of free-riding, see note 14, page 44.)

The Future of Surveillance in Crime Prevention

Public support or acceptance for CCTV in public spaces in Britain appears to be high (Honess and Charman, 1992; Bennett and Gelsthorpe, 1996). Among a minority, however, there are important concerns about threats to civil liberties (Davies, 1998). Public support is not necessarily robust. While public concerns about crime appear to be enough to elicit acquiescence to the introduction of plausible measures to reduce risk, there has been rather little serious debate. Political parties and the mass media have raised few critical questions. Were the climate to change on the basis of perceived misuse and/or widespread perceptions of CCTV's ineffectiveness in many settings, support could presumably wither quite quickly. Ditton (1998) has entertainingly shown how patterns of answers to a question about support for CCTV can be influenced by the context set by preceding questions (95% versus 56% in favour) within a given research instrument. It is likely that the context set by the debate (or lack of it) outside the interview has a similar conditioning effect on what may be fragile and ephemeral opinions.

There is clearly no point in incurring the costs and other downsides of CCTV where there is no significant crime problem, or in contexts where its installation offers few prospects of triggering direct or indirect crime prevention mechanisms. Equally, opponents of CCTV as a crime prevention measure need to beware of claiming that it can never reduce crime. There is, by now, plenty of evidence that it can. Where there are significant crime problems in contexts where CCTV can plausibly play a part in prevention, presumably a balance has to be drawn between the protective benefits brought and the threats introduced by CCTV. Our hunch is that there will be circumstances where CCTV will be warranted on this basis, but this would probably justify rather fewer schemes than have now been installed in Britain.

Moreover, in these cases, enforceable codes of conduct or statutory regulation will be needed to minimise potential public disquiet and any unintended ill effects.

Technology and crime methods change. Ekblom (1997) has shown how the preventer and the offender are mutually adaptive and innovative. What works as a crime method today may not do so tomorrow as the preventer introduces new initiatives. What worked today as a prevention method may not work tomorrow, as offenders introduce their new initiatives. Both sides are able to take advantage of technological and social developments furnishing new resources and opportunities for crime and its prevention. CCTV and lighting both potentially fit into processes of innovation and adaptation, which can affect both the efficacy and the social significance of measures.

In the case of CCTV, the past decade has seen dramatic improvements in picture quality. From grainy black and white images where it would be quite difficult to recognise an individual, we now have systems where near-broadcast-quality images are relayed to the control room. Moreover, Norris et al. (1998) report the development of automated, "algorithmic" surveillance, using digitised cameras and microcomputers, through which images of scenes plausibly arousing suspicion can be recognised, triggering a response without the interposition of human beings with their perceptual frailties. There are developments towards systems that will hold and begin to match images of particular (known or wanted) individuals. Norris et al. even raise the spectre of a "near national database of all citizens" through which we can all be recognised as we walk the streets (p.268)! These developments will affect both the price and power of CCTV systems, altering at the same time their coverage, potential for detecting and disrupting crime in real time, and implications for civil liberties and possible discriminatory or exclusionary use.

In the case of lighting, developments are rather less dramatic, though the improvements in returns in lighting intensity from a given energy input have meant that the costs of lighting in terms of money and natural resources has dropped dramatically, making more realistic the scope for targeted improvements in lighting levels in the service of crime prevention.

Changes in technology, social arrangements and crime methods mean that fixed answers to effectiveness questions concerning individual surveillance methods cannot be expected. A research and practice agenda is needed to better understand how lighting, CCTV, concierges and residents, as well as combinations of them, can most effectively and economically contribute to public safety and security.

The papers collected here comprise an important start. They certainly show that CCTV, and lighting upgrades can reduce crime, and they begin to tease out some of the conditions needed for preventive effects to be achieved.

THE CONTRIBUTIONS

The opening chapter, by Hope, helps us distinguish between different forms of guardianship, the assumptions behind them, and the conditions needed for their operation. He distinguishes, in particular, the public good-oriented, inclusive, nondemarcatory, natural surveillance stressed by Jacobs (1961), which thrives on unboundaried social and functional heterogeneity, from the "club good"-related, exclusionary, demarcatory, facilitated and sometimes purposive surveillance stressed by Newman (1973), which thrives on boundaried, homogeneous communities of interest. Hope then looks at salient features of the particular physical and social context of the suburbs for the development, operation and maintenance of varying forms of private-property guardianship. He pays particular attention to the problems of free-riding.

The next two chapters examine lighting enhancement as a means of crime prevention. Pease reviews the literature to date and points to potential future uses of lighting to reduce crime. He highlights what is seen as a stale debate between those whose research purports to find that lighting improvements do and those whose research finds that they do not reduce crime. Pease concludes that lighting improvements can, and have, been found in almost all studies to reduce crime, but will not always or necessarily do so. A research agenda, aimed at finding how and in what circumstances changes in lighting levels can affect crime levels, is advocated and some possibilities suggested. Painter and Farrington report the findings of a case study of lighting upgrades in Stoke-on-Trent; the latest evaluation of a continuing programme of work that has been carried out in the United Kingdom over the past decade. Comparing experimental (lighting improved) and surrounding control areas (lighting levels unchanged), they find a significant decrease in crime in the relit area. There was no clear evidence of displacement, but rather diffusion of benefits to adjacent areas. The paper combines qualitative and quantitative data to explain the mechanisms of lighting as a crime prevention measure, and a cost-benefit analysis of reduction in crime is undertaken.

Six chapters focus on the installation of CCTV as a technique for crime prevention. Phillips provides a thorough review of the litera-

ture. She concentrates mainly on the effectiveness of CCTV in reducing crime, disorder and fear of crime, but also considers research findings concerning public attitudes towards the use of CCTV in public places and the civil liberties implications raised by its use. Phillips tries to make sense of mixed findings, concluding that CCTV can be effective in deterring property crimes but is less successful in dealing with personal crime, public order problems and fear of crime. Norris and Armstrong examine in detail how CCTV has actually been operated in practice in three sites. They show how operators are inevitably selective in their attention to and direction of cameras. Operators are shown to target surveillance disproportionately on men, the young and blacks, and to more frequently watch these groups for no apparent reason. Suspicions warranting surveillance are shown to be constructed on the basis of cues reflecting operator assumptions, values and stereotypes. Local policies also shape the use of CCTV, for example, to monitor particular crimes such as drug dealing and street robbery, or particular types of people, notably, black youths.

Gill and Turbin's chapter is primarily about methodology, using research on the effectiveness of CCTV in a retail environment as a case study for using "realistic evaluation." Realistic evaluation asks how interventions work to produce their effects according to contextual contingencies. Gill and Turbin highlight realistic evaluation's emphasis on developing and testing theories specifying context-mechanism-outcome configurations (CMOCs) to improve understanding of how measures have varying impacts according to the conditions in which they operate. They identify nine CCTV CMOC conjectures from their two-store study, and try to assemble data to test them. They conclude that whilst it is useful and relatively easy to devise CMOC conjectures, it is much harder to assemble data to test them in the context of research with time and resource limitations.

The chapters by Ditton and Short and by Armitage, Smyth and Pease comprise evaluations of the effectiveness of CCTV in town and city centres. Ditton and Short discuss evaluations they have conducted in two towns in Scotland: Airdrie and Glasgow. Interestingly, very different effects were found in each. In Airdrie, the evidence they adduce suggests that CCTV had been very successful in reducing recorded crime. Moreover, despite efforts to find displacement, they found none. In contrast, in Glasgow the evidence does not show the system to have had the same impact. Ditton and Short try to explain these differences in measured impact. They make a number of suggestions, in part having to do with measurement issues and in part with ways in which CCTV worked very differently in small town Air-

drie as opposed to major-city Glasgow. Armitage et al. present findings from their evaluation of the crime prevention effectiveness of the CCTV system installed in Burnley, in the northwest of England. They address the mechanisms through which CCTV may have its impact, and, like Ditton and Short, focus on changes in recorded crimes. Armitage et al. find a significant and sustained reduction in a variety of recorded crimes in the beats covered by the cameras. They find no evidence of displacement to adjoining areas, and some diffusion of benefits. The sustained impact suggests that the effect was not brought about by short-term publicity. They show decreases in some crimes that are not subject to CCTV surveillance, and propose mechanisms through which this may have happened: for example, through disrupting the general-offending behaviour of versatile criminals, releasing the police to attend more fully to crimes committed in private, and/or jogging the memory of potential victims who become aware of their vulnerability.

The final chapter, by Beck and Willis, examines the effects of CCTV as a primary crime prevention measure directed against staff and customer theft in the fashion-retailing sector. They report on a before-and-after study of 15 stores, comparing the impact of CCTV systems with varying levels of sophistication (high, medium, low) on levels of loss, measuring loss through a series of stock takes. The introduction of CCTV was associated with a significant short-term decrease in loss, though effectiveness had largely disappeared after six months. Beck and Willis conjecture that the diminishing impact follows from offenders becoming progressively inured to CCTV's deterrent potential. Beck and Willis also note that relatively easily collected measurements — loss of sales figures and numbers of units lost and their value — function as robust and "good enough" indicators of the likely impact of CCTV. They include useful discussion of and data on the payback from installing CCTV as a loss-reduction measure for stores.

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NOTES

1. Jeremy Bentham's 19th century design for a new model prison included a central observation tower from which guards could see all without being seen. He called this a panopticon. Inmates would not know when, or whether, they were being watched.