



## The age of surveillance

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CCTV has become a major tool for crime prevention in the UK but its widespread use has been resisted in many other countries.

This article highlights the advantages and disadvantages of CCTV for crime prevention and critically assesses whether the UK government has been wise to embrace it so fully.

Closed Circuit Television (CCTV) - where the picture is viewed or recorded, but not broadcast - initially developed as a means of security for banks. But now CCTV cameras are a common sight on public areas, such as town centres, car parks, shopping malls and housing estates. Over the last ten years the Home Office funding for Crime and Disorder Reduction Partnerships (CDRPs) to introduce CCTV as a crime prevention measure has increased significantly. According to Painter (2001), the Home Office made available ;208 million to fund CCTV between 1994 and 1998. Increased funding opportunities caused a dramatic growth in CCTV coverage in England and Wales from three town centre schemes with approximately 100 cameras in 1990 to hundreds of schemes with over 4 million cameras by the end of 2003. A recent article in The Independent newspaper has revealed that over 4,285,000 CCTV cameras, or 20% of all world CCTV cameras, are used in the UK. This reflects the belief in CCTV as a 'super measure' and a 'cure-all' that is based on largely simplistic assumptions about the effectiveness of CCTV in deterring and detecting crime, in helping to deploy police resources efficiently and in reassuring the public. However, there has been very little substantive 'quality' evidence to support these assumptions. The widespread use of CCTV cameras as the primary means of crime prevention has been resisted in many countries and opponents of CCTV surveillance all over the world are voicing numerous concerns regarding its effectiveness and its negative impact on privacy and civil liberties.

To answer the question as to whether the UK government was wise to embrace CCTV so fully, this article will discuss the main arguments of proponents and opponents of the widespread use of CCTV in crime prevention. The article will begin with a brief overview of the approach taken to evaluating the effectiveness of CCTV in crime prevention, followed by an explanation of the theory behind CCTV. Findings of recent studies into the effectiveness of CCTV will be used to highlight the advantages and disadvantages of CCTV for crime prevention and to draw the conclusion that CCTV is most successful at reducing crime when it is used not instead of, but alongside other crime reduction measures.

To answer the question in the title of the article, it is important to adopt the 'scientific realism' approach to evaluating the effectiveness of CCTV in crime prevention. This approach, as described by Pawson and Tilley (1994), focuses on the specific mechanisms through which

crime prevention measures impact on criminal behaviour, and the particular context in which they might be expected to work. ...Scientific realism [therefore] starts with a theory of what makes programmes work and a theory of the circumstances in which such ideas are likely to be efficacious. (Pawson and Tilley, 1994:292) This will start with the introduction of a suitable definition of crime prevention and a brief explanation of some other theories behind employing CCTV to reduce crime and disorder.

As an area of public policy and academic study, crime prevention is difficult to delineate and covers an enormous range of theories and practices (Department of Criminology, 2004: 1-6). Therefore, there is no universal definition generally accepted by academics and practitioners. However, theories of crime prevention offered by Lejins (1967), Brantingham and Faust (1976) and Clarke (1992) are the most suitable for the purpose of this essay, despite their limitations.

Whilst Lejins moved understanding of crime prevention from 'deterrence only' towards forms of pro-active prevention aimed at tackling criminogenic social conditions or physical opportunities, Brantingham and Faust used a public health analogy of primary, secondary and tertiary targets for intervention to prevent occurrences of crime and disorder. Primary prevention is focused on general populations and aims to preclude crime before it is actually occurs by manipulating the social and physical environment and the conditions that generate or preclude opportunities for crime to be committed. Secondary prevention concentrates on particular individuals or groups thought to be 'at risk' of offending or victimisation in specific neighbourhoods with the aim of diverting potential offenders and victims from crime through different social measures of intervention. Tertiary crime prevention is concerned with those individuals who have already committed offences or become victims (Department of Criminology, 2004: 1-8).

Ron Clarke has offered a theory of situational crime prevention as opportunity reducing measures that are directed at highly specific forms of crime, involve the management, design or manipulation of the immediate environment in as systematic and permanent way as possible and make crime more difficult and risky, or less rewarding and excusable as judged by a wide range of offenders (Department of Criminology, 2004: 1-11). Using CCTV cameras to tackle crime and disorder is an example of what Brantingham and Faust refer to as primary crime prevention, and what Clarke refers to as situational crime prevention, or 'attempts to prevent crime by changing the situation in which crime occurs' (Poyner, 1983:5).

In their routine activity theory, Cohen and Felson (1979) explain that for a crime to occur three elements must meet in time and space during the course of people carrying out their routine activities: a motivated offender, a suitable victim and the absence of a capable guardian. According to Tilley (1993), it is possible that the presence of CCTV cameras may deter crime and disorder by impinging on any one or more of these elements. For example, the presence of cameras may remove the motivated offender by increasing the perceived risk. The cameras also introduce the presence of a capable guardian, because they may allow the police and /or other security agencies to respond more quickly to an offence and to identify and detect the offender. It is also possible, that CCTV cameras may remove suitable victims by making potential victims more security conscious and, therefore, less vulnerable to crime. However, lack of empirical evidence means that it is impossible to say which of these three

elements is affected by the presence of CCTV cameras within an area.

A rational choice theory of Clarke and Cornish (1985) provides a complementary theoretical approach to the use of CCTV by focusing on both the offender and the immediate situational context of crime. Clarke and Cornish suggest that offenders are involved with decision making and choices and these choices present a measure of rationality. Installing CCTV cameras within the area increases the opportunities for surveillance and, as a result, increases the risk associated with offending. This may de-motivate some offenders.

The above theories have identified the main mechanisms under which CCTV aims to reduce crime and the generally perceived advantages of CCTV. These include: deterrence (the potential offender becomes aware of the presence of CCTV and chooses either not to offend or to offend elsewhere, because of the risk of detection and prosecution); efficient deployment (CCTV cameras allow those monitoring the scene to determine whether police assistance is required, and this ensures that police resources are called upon only when necessary); self discipline (by potential victims – they are reminded of the ‘risk’ of crime and, therefore, altering their behaviour accordingly; by potential offenders – through the fear of surveillance, whether real or imagined); presence of capable guardian (surveillance and police response if required); and detection (CCTV cameras capture images of offences taking place, which could be used as evidence to inform investigations) (Armitage, 2002:2). Those (largely simplistic) assumptions led to the belief in CCTV as a ‘cure-all’, a ‘super measure’ in crime prevention. They were also used as the main arguments by proponents of CCTV in discussions during the CCTV for Public Safety and Community Policing Summit, which took place in Washington, DC in 1999.

Opponents of CCTV pointed to three main areas of their concerns. Firstly, they argued that the development of CCTV in public areas, linked to computer databases of people's pictures and identity, presents a serious breach of civil liberties. They fear the possibility that one would not be able to meet anonymously in a public place or drive and walk anonymously around a city. Demonstrations or assemblies in public places could be affected, as the state would be able to collate lists of those leading them, taking part, or even just talking with protesters in the street. Critics see, as the most disturbing, that the latest technologies of face recognition, which use high-definition CCTV images, allow the determination of a person's identity without the need to stop and ask them in the street, or even alert them that their identity is being checked and logged. Secondly, opponents of CCTV point out that CCTV can be grossly abused by recording intimate and private conduct, in marking the innocent for tracking solely on the basis of characteristics such as race, gender, sexual orientation or political beliefs. The recent growth of CCTV in housing areas also raises serious issues about the extent to which CCTV is being used as a social control measure rather than simply a deterrent to crime. And thirdly, critics argue that recent studies into the effectiveness of CCTV suggest that it is not always as successful in reducing crimes as it claimed to be.

Although many evaluations of CCTV have taken place over the last ten years, according to Armitage (2002) very few have been methodologically valid for a variety of reasons. The Home Office, in conjunction with Department for Transport, Local Government and the Regions (DTLR), have jointly funded the first in depth national evaluation of CCTV. The research is being undertaken independently by the Scarman Centre (now Department of

Criminology) of Leicester University. It is evaluating 17 CCTV Initiative schemes over three years; one year prior to CCTV's instalment and two years afterwards. This research is due to be completed in November 2004. Findings of other recent studies will be used to discuss the advantages and disadvantages of CCTV for crime prevention.

Several studies give some insight into the effects of CCTV on property crime. Findings of an evaluation of CCTV within three town centres (Newcastle, King's Lynn and Birmingham), undertaken by Brown (1995) revealed that, overall, property crime has been reduced in those areas covered by cameras. However, in one of the three study areas, thefts from vehicles and criminal damage increased. A decrease in burglaries of shops offences coincided with the introduction of other significant measures such as traffic calming and pedestrianisation, making it very difficult to separate the impact of CCTV on crime rates. Tilley (1993) found that overall car crime had reduced in car parks in which CCTV had been installed, when compared either to a period before the installation or to control areas without CCTV. The effects of CCTV appeared to be more positive for theft of, as opposed to theft from, vehicles.

However, directly opposite results were discovered by Poyner (1992) in his research into situational crime prevention in two parking facilities in Clarke. Chatterton and Frenz (1994) found that CCTV works effectively in reducing burglary within sheltered housing schemes.

The findings of the above and many other studies suggested that CCTV is most effective in reducing property crime. This supports the 'rational choice theory' which suggests that offenders choose not to commit the offence in CCTV monitored areas because it is too risky. However, findings of the research on the effect of CCTV schemes on crimes against the person show that in alcohol-related offences such as public order, the rationality is often lost under the influence of alcohol, and the deterrent or 'risk' effect of CCTV does not work very well.

Brown (1995) found that in the large metropolitan districts, the cameras seem to have had considerably less impact on overall levels of public order and assault offences. However, in a smaller market town such as King's Lynn there is an evidence to suggest that CCTV have reduced assaults in those streets covered by cameras, but the numbers of incidents are small and this reduction occurred after the cameras had been operational for some months. Webb and Laycock (1992) have identified that using CCTV as a part of a general security package reduced robberies within small London Underground Stations. However, as Skinns (1998) has pointed out, the introduction of CCTV had no effect on the personal crime offences such as assault.

According to Brown, the strength of CCTV systems 'might lie less in preventing these offences (which it is argued will occur regardless) than with co-ordinating a quick effective response and gathering evidence should it be required. A quick response may mean that officers are able to defuse a situation before it becomes serious, or at least reduce the harm done to one of the participants. Providing evidence can direct investigations, saving officers both time and money' (Brown, 1995:26). A significant number of people arrested as a direct result of the schemes admitted guilt after being shown video footage, therefore avoiding the considerable cost associated with contested trials. Brown also pointed out that cameras were effectively used as a tool to 'patrol' the town centre areas and to discover incidents when they

occur. CCTV cameras proved to be very helpful in determining whether an incident required a police response and what this response should be. Cameras can, in some instances, liberate resources by cutting down considerably on the number of false alarms that police patrols are required to attend. In this way, CCTV helps manage police resources more effectively. According to Honess and Charman (1992), it has also increases the public's feeling of safety when using the town centre at night.

Evidence discovered by Brown (1995) and some other researchers suggests that the presence of CCTV cameras within the study areas can cause displacement of crime and diffusion of benefits. Brown suggested that the likelihood of crimes being displaced by the cameras depends on the nature of the offence, the type of the area the cameras are located in and the extent of camera coverage within this area. Personal crimes are the most difficult to be controlled by the cameras, and, therefore, the most likely to be displaced. Property crime is easier to control using cameras and, because of its nature, is less likely to be displaced within town centres. Furthermore, where the extent of camera coverage within a town centre is high, there may be some diffusion of benefits to areas that immediately surround the town centre.

While providing the evidences in support of CCTV, mentioned above and some other studies have identified several disadvantages of CCTV. A great number of natural obstacles such as street furniture and trees present a difficult environment for effective CCTV surveillance and mean that there are a number of locations that crime can be displaced to; and as crime is displaced over time from one area to another, it may change in its nature (Brown, 1995:46). As Honess and Charman (1992) have identified, the public perceive CCTV to be potentially effective in some places, particularly small, unprotected places such as subways. However, it was felt to be less effective in, for example, street locations, unless there was a complex network of cameras covering side roads/alleyways, where sexual assaults and mugging were more likely to take place. If town centre areas have many side streets and other premises such as car parks, it will require many cameras and several operators to make such a system effective. This has obvious resource implications.

CCTV can provide valuable information for police and courts. However, images can be of poor quality and may not be a reliable means of verifying identity. As is common with many crime prevention efforts, the effectiveness of packages that include CCTV may wear off over time. In order to sustain an effect, the cameras must play a part in the apprehension of offenders, and other conditions must be altered to improve the potential of CCTV to have this effect. Camera success can then be publicised, reinforcing the message for offenders that there is an increased risk of being caught. (Brown, 1995:.65)

Honess and Charman (1992) found that the vast majority of people support the use of CCTV to control crime in public areas. However, one third of people were concerned about 'being watched' and the possible expansion of state or police control. The concerns are less about the cameras per se, and are more about the impartiality and accountability of the people and organisations using these systems, and how they are using the information they are getting. The presence of so many cameras does represent a significant increase in the degree of surveillance in people's lives. Any abuse, or perceived abuse of CCTV, may affect public support for these schemes. To avoid misuse and maintain public acceptance of CCTV, it is

important to maintain a balance of individual rights with public interests by ensuring strict compliance with data protection and privacy legislation. CCTV operators should be very selective with regards of what and whom they observe. Norris and Armstrong (1999) pointed out, that some population sub-groups, such as male teenagers, particularly from ethnic minorities, may be most targeted, with crimes committed by other sub-groups left unchecked.

However, according to Parliamentary Office of Science and Technology (2002), precise number of CCTV systems in the UK is unknown, and many, particularly private schemes, may be unaware of the Data Protection Act and other legislation. Also, there are no national standards for training operators in either the use of CCTV, or data protection issues.

As follows from the evidences discussed in this article, CCTV has received major government funding, but the conditions under which it is effective are still poorly understood. According to Armitage (2002), more than three-quarters of the Home Office crime reduction budget was allocated for the implementation of CCTV schemes over the period 1996 to 1998. Since the growth of CCTV as the primary means of crime prevention, more traditional, community based measures have been discarded. However, numerous studies into the effectiveness of CCTV proved that it is not a panacea. As Brown (1995) pointed out, cameras are at their most effective in dealing with crime when they are part of a package of measures, when for example, they are integrated into a command and control strategy and are used to discover incidents and co-ordinate an appropriate response.

*'No one should ever believe that any individual crime prevention measure will always reduce crime. The potential effectiveness of measures depends on their suitability to the circumstances in which 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.'* (Painter and Tilley, 1999:4)

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