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Abstract

This article presents a longitudinal review of CCTV policy in the UK. In particular, it reconsiders the diffusion of CCTV cameras and systems in public places in relation to the current commitment to the development of ‘evidence based’ public policy and services. In the case of CCTV this evidence is usually assumed to be reductions in crime and the fear of crime as measured by crime statistics. However, for CCTV the evidence base can be disputed with systems not having the impact on crime that many take for granted. This raises important questions about the rationale for, and evidence base behind, CCTV policy and practice. These concerns are examined in this article through the exploration of a series of ‘myths’, or misconceptions about CCTV. The critical issue is that if CCTV does not work then how can we explain its widespread introduction and ongoing use? Here the article posits that a ‘policy perspective’ approach to understanding the CCTV revolution is illuminating as it highlights the complex intertwined interactions between government, policy-makers, the media and other stakeholders, and that CCTV does not necessarily have to ‘work’ if it meets other purposes. The article also presents evidence that CCTV policy is being reviewed, not just in relation to its established evidence base, but also in relation to the emergence of concerns raised about the cost of running systems.

1. Introduction

CCTV (Closed Circuit Television) cameras and systems are today firmly entrenched in modern society, not just in terms of their widespread presence in public places, but also as a key part of community safety, policing and national security public policy. However, despite the undeniable ‘surveillance revolution’ there are a number of intriguing issues embedded in the development of public policy surrounding these systems and which raise interesting questions about the rational logic of their ongoing provision and their purported benefit to society. Of particular interest here is the development, since 1997 under New Labour, of ‘evidence-based’ public policy and services, and which suggests that decisions about the allocation of scarce resources is determined by the existence of performance related measures and statistics, or ‘evidence’. In the case of CCTV this evidence is usually assumed to be reductions in crime and the ‘fear of crime’, as captured and measured by crime statistics. But even here the evidence is not ‘clear cut’, and doubts are frequently raised about the ability of these systems to have the impact on crime that many take for granted. If CCTV cannot be justified in terms of its impact on crime then we have to ask important questions about the reasons for its introduction and ongoing provision.

This article attempts to address such concerns by revisiting the rationale behind the policy and provision of CCTV surveillance cameras, and by reconsidering the evidence base and the logic behind the cameras. In doing so, it suggests that the focus on crime statistics is in many ways a ‘red herring’ that does not fully explain the impetus behind the revolution or the true beneficiaries of CCTV. Concern about the evidence base is currently high on the public policy agenda due primarily to the ageing nature of current CCTV stock - many systems are now over ten years old - and the costs associated with their

maintenance, upgrading and/or replacement. Consequently, the costs associated with the upkeep of these systems is leading many public agencies to reassess their provision and also the costs and benefits of their systems – especially when they are delivered by multiple agencies in ‘partnership’ type arrangements and when the CCTV footage is used for multiple purposes, for example, as evidence in criminal prosecutions. So, for public policy-makers and service providers it is evident that the reassessment of the evidence base is as much about a redistribution of the costs of delivering CCTV as about its effectiveness. This in turn raises further questions about the evidence base on which CCTV policy and practice is founded.

The remainder of the article is set out as follows. The next section, section 2, outlines some of the main features of the CCTV revolution in the UK. This is followed by two sections which explicitly take a ‘policy’ approach to comprehending this revolution. Section 3 provides an overview of the emergence of a distinct CCTV policy in the UK and stresses linkages with changes in the diffusion of CCTV systems. Section 4 provides an exploration of ‘evidence-based policy’, one of the core planks supporting public policy development in the UK since 1997. Following this, section 5 goes on to critically examine the evidence-base surrounding CCTV through the exploration of a number of CCTV myths. These myths call into question the evidence based supporting CCTV provision in the UK and raise significant questions about the rationality of modern public policy processes. Section 6 reconsiders the use and usefulness of the CCTV evidence-base in the UK, and section 7 offers some concluding comments.

The article is based on the author’s longstanding research interest in the policy processes surrounding the provision of CCTV in the UK (see for example, Webster 2004b) and much of the analysis presented in this paper derives from ongoing policy and document collection and review. The empirical evidence which informs the commentary presented in the latter part of the paper is from a series of interviews with CCTV policy-makers and service providers in public agencies in Scotland, conducted in the autumn of 2007. In total 12 semi-structured interviews were conducted with policy-makers, politicians, practitioners (e.g. CCTV Managers) and other interested parties (including police representatives) associated with CCTV provision in three local authority areas. Additionally, two interviews were conducted with actors involved with ‘national’ CCTV policy. All interviews explored the development of CCTV policy and systems in public places and the key issues surrounding current CCTV provision in the UK.

2. The CCTV phenomenon

The widespread introduction and diffusion of CCTV cameras and systems in public places across the UK has not gone unnoticed (see for example, the special issue on ‘The politics of CCTV in Europe and beyond’ of *Surveillance & Society*¹ published in 2004). Since the early 1990’s there has been a proliferation of these systems, especially in town and city centres (see for example: Fyfe and Bannister 1996; Graham *et al* 1996; Gill 2003; Norris and Armstrong 1999; Webster 1996), but also in residential and public service settings (Webster 1996; 2004a). Typically they have been introduced to assist in ‘the fight against crime’, mainly to deter and detect crime, disorder and antisocial behaviour, but also to help reduce the ‘fear of crime’. To this end these systems have proven to be very popular and have received widespread support from politicians, policy-makers and citizens. As a result of their popularity and perceived effectiveness they have been further supported by political rhetoric and financial assistance from central government, particularly the Home Office. The extent of this proliferation has led some commentators and academics to argue that the UK is now the most surveyed country in the world (Norris and Armstrong 1999) with an estimated five million cameras in existence in 2004 (Norris 2004). Although the precise number of cameras can be debated the existence of the CCTV ‘revolution’ cannot. Consequently, CCTV and the surveillance practices and relationships embedded in the technology are a key feature of modern society. Today, CCTV can be considered ubiquitous, a normal part of everyday

¹ <http://www.surveillance-and-society.org/cctv.htm>

life, with citizens willingly acquiescing as surveillance subjects, and perfectly happy to forgo some personal privacy in return for greater levels of personal safety and security.

One interesting feature of the CCTV revolution is the way in which CCTV systems have diffused unabated despite important concerns about their impact on individuals and society. Issues that have arisen around the operation of CCTV include; the effect on individuals privacy and civil liberties, citizens 'rights' to anonymity and freedom of movement, citizen-state relations arising from changes in relations between the surveyor and the surveyed, changes in behaviour arising from intense levels of visual monitoring, and the efficacy of new and untried technological systems. In sum, these concerns raise important questions about the rationale of widespread CCTV provision in society and the extent of rationality in the public policy-making process (Webster 1996). Nevertheless the unequivocal support for CCTV, evidenced by the results of public satisfaction surveys (see for example: Brown 1995; Honess and Charman 1992; Ditton 1998) and the overwhelming belief in the capabilities of the technology have remained intact and have overridden any such concerns about the use of such sophisticated technologies.

There are a number of different ways of conceptualising the CCTV revolution. Arguably the simplest is to see it as a technological revolution, where technical advances in information and communications technologies have enabled a configuration of camera, information and communications technologies into a useful surveillance tool. Such an approach would emphasise the technical specification and capabilities of systems and the actual number of systems in use. Linked to this approach would be a criminological perspective which would see CCTV as a crime prevention tool and a central plank of criminal justice and policing. This approach stresses the effectiveness of CCTV in reducing and deterring crime and disorder, for making citizens feel safer, and for ensuring safety and security. Sociological understandings of CCTV focus on aspects of control and power, and highlight changes in the nature of society and human behaviour arising from new surveillance based relationships, and the social construction of technologies. These three approaches, the technical, the criminological, and the sociological, dominate our thinking about CCTV. Yet there are plenty of other less prominent, but equally as significant, perspectives which offer important insights into the CCTV revolution. For example, lawyers focus on the evolution of legal constructs like privacy and data protection and their relevance to new technological domains, and political scientists on the political setting of the revolution and government activity. Whilst all these perspectives are valid they do not necessarily offer a comprehensive explanation for the CCTV revolution or the ongoing support for CCTV technologies. An alternative approach is to take a *policy* perspective, this is illuminating as it highlights the complex intertwined interactions between government, policy-makers, the media, service providers and users, and technological and policy developments. Such an approach stresses the power relations and social interactions between different actors and institutions in the governance and public policy process and points to CCTV as an important social and policy construct and not just a technological artefact. Elsewhere I have described the deployment of CCTV policy and practice as a 'techno-policy diffusion process', whereby the diffusion of the technological systems and policy have fused and evolved together (Webster 2004b). This is especially pertinent for a new technology like CCTV as initially very little is known about its impacts or the consequences of its use. Consequently, policy development and implementation evolve around a belief in what the technologies 'will' achieve. In a similar vein, this article takes a policy perspective by reassessing the CCTV phenomena in terms of the evolution of both CCTV policy and CCTV diffusion. This is primarily achieved by setting out the emergence and development of CCTV policy and reconsidering CCTV in light of 'evidenced-based' approaches to policy-making and service delivery that have dominated the public policy sphere since the mid 1990's.

3. The emergence of CCTV as a discrete policy area

Policy can take a number of forms and does not necessarily depend on the existence of a formal policy document. Policy can take the form of a concerted direction of actions, the coordinated deployment of resources, or simply a statement of intended action (Ham and Hill 1993; Hogwood and Gunn 1984). In the case of CCTV it is clear that central Government funding programmes established in the mid-1990's

and through which vast sums of money were invested in CCTV schemes, coupled with the publication of guidance documents and political rhetoric in favour of CCTV, heralded the arrival of CCTV as a clear UK policy initiative. The emergence of this discreet policy area dominated the crime prevention policy environment to such an extent in the late 1990's that some commentators argued that CCTV was not part of a broader crime prevention policy, it was 'the' policy (Groombridge 2008). The growth of this policy area culminated recently in the publication of a 'National CCTV Strategy' in 2007 (Gerrard *et al* 2007). Initially the emphasis of the policy was on crime prevention and detection, reducing citizens perceived fear of crime, protecting commercial interests, and allaying civil liberties concerns - here the mantra was 'if you've got nothing to hide then you've got nothing to fear' (Home Office 1994). Overtime, there has been a policy 'shift', so that CCTV policy was also about reducing antisocial and undesirable behaviour, this has encouraged the provision of CCTV beyond town and city centres and into residential and other public places. More recently, the policy has shifted again, and especially since 9/11 and 7/7, so that the emphasis is now also on national security and deterring terrorism. Allied to these policy developments have been a series of technical changes which have altered the capabilities of CCTV systems. In particular, advances in computerisation have enabled number plate, movement and facial recognition systems to be used alongside human operatives, and advances in communications have led to the integration and networking of previously disparate systems. Recognising this policy shift is important as it demonstrates how a technology introduced for one purpose can actually shift and be used for another. This shift is often referred to as 'policy creep' and by surveillance theorists as 'surveillance creep' (Lyon 1994). In the case of CCTV the net result is greater levels and intensities of surveillance as different surveillance purposes and activities have accumulated around technological systems. Cynics might argue that it was always the intention of the state to have an integrated nationwide network of surveillance cameras (for monitoring individuals and society), but that this would have initially been very unpopular, so the solution has been to carefully manage the policy process in a way that ensured the diffusion of CCTV, whilst at the same time maintaining public support.

Developments in CCTV policy can be mapped alongside developments in CCTV provision to show a co-evolution whereby the policy and the technology has evolved over time in tandem. This shows that the two – policy and diffusion – are closely intertwined processes. In many ways this is not surprising, as it would be hard to imagine the diffusion of such a powerful surveillance technology without some form of national policy. Table 1 (overleaf) sets out the three main CCTV policy eras: starting with policy 'innovation and experimentation', followed by policy 'acceptance and expansion' and culminating in the era of policy 'retrenchment'. The table shows that in each era the policy environment changed, with a shift in policy focus and a shift in the emphasis of diffusion.

In the earliest era, which I've labelled the era of policy 'innovation and experimentation', and up until the mid 1990's, the CCTV policy environment can be characterised by a desire by central Government to establish CCTV as a viable policy option for crime prevention, and for the formation of a policy environment and society malleable to the provision of public surveillance. This era witnessed the earliest small scale systems, operated by police forces or local authorities in town centres and car parks, and typically funded through discreet funding streams like City Challenge or Safer Cities Initiative.

In this era the CCTV policy was in a formative stage and it wasn't necessarily clear that the technology would be effective or whether public support would be forthcoming. So, the emphasis was on testing potential systems, spreading the message about their benefits, and asserting the message that CCTV was an effective tool in the 'fight against crime'. Policy-makers in this era were experimenting, trialling a new policy initiative based wholly on the perceived benefits of the new technology.

The subsequent era, from the mid 1990's to the mid 2000's, saw a proliferation of CCTV systems diffuse into a wide range of public places and public service settings. By this time, the dominant perception of CCTV was that it worked, this was reinforced at every opportunity allowing the policy focus to extend from crime prevention to include the deterrence of antisocial and undesirable behaviour. This era can be characterised by central Government funding and guidance and local service provision and operation.

Government funding took the form of the ‘CCTV Challenge Competition’ between 1994 and 1999, and under which £38.5 million was made available to some 585 schemes nationwide. Between 1999 and 2003 further investment occurred through the Home Office funded Crime Reduction Programme and the ‘CCTV Initiative’. Here a total of £170 million was made available to 680 CCTV schemes installed in town centres, residential areas and other public spaces (see Webster 2004a, for a summary of the Home Office funding programmes). In addition to these dedicated funding streams there have been a number of Home Office supported crime prevention programmes which have provided resources for CCTV, they include the Safer Communities Initiative, the Building Safer Communities Fund and the Safer Stronger Communities Fund, as well as other resources made available through the Department for Communities and Local Governance under arrangements for neighbourhood renewal and similar schemes. Beyond central Government many local authorities, police forces, community safety (and crime and disorder) partnerships and a range of other public service providers, have invested in CCTV systems. As a result of this approach most CCTV is now owned, monitored and managed by local authorities, often in partnership with police forces and other key public agencies. Also, as a result of this approach CCTV provision differs significantly as a multitude of technically different and independent, or ‘closed’ systems were installed. In this era, CCTV became a local policy initiative and influential policy networks emerged around the technology as the policy area expanded and achieved national recognition.

Policy Era	Policy Features	CCTV Diffusion
Innovation and Experimentation Early to mid 1990’s	Central government drive to establish policy Recognition of potential policy initiative Pilot systems to test feasibility Evaluation of performance and technical assessment Secure public approval and allay civil liberties concerns Secure political and media support Focus on crime prevention No legislation or formal controls	Initial CCTV systems Located in town and city centres and car parks
Acceptance and Expansion Mid 1990’s to early 2000’s	Extensive local service delivery Policy unquestioned and use of cameras accepted Home Office funding and guidance Extensive pro CCTV discourse Formation of partnerships between police and local authorities Focus extends to antisocial and undesirable behaviour (community safety) Voluntary codes of conduct Non-specific legislation applies Emergence of policy networks around CCTV	Widespread diffusion Variety of public places Variety of technical specifications
Retrenchment Mid 2000’s onwards	Central government drive to standardise policy and practice Desire to centralise disparate systems and practices Concerns about financial cost of running systems Extensive partnership working Focus shifts to national security and terrorism Pro CCTV discourse reinforced Reassessment of technical capabilities	Continued uptake and sophistication Computerisation of systems Integration and expansion of systems Further innovations

Table 1: Three CCTV Policy Eras

In the most recent era, from the mid 2000's onwards, which I've called the era of 'retrenchment', CCTV policy and practice has become established and concerns start to emerge about the running and maintenance costs associated with CCTV. Local authorities carry much of the financial burden of operating and maintaining systems and by this point many were coming to the end of their useful lifespan and were (are) in need of replacement. Also, in this era there is a policy shift whereby the focus of CCTV provision is adjusted to address concerns with national security and terrorism. So, not only is CCTV supposed to meet crime prevention and community safety objectives, but also policy objectives associated with the prevention of terrorism, intelligence gathering and national security. This has led to a desire by central government for CCTV policy and practice to be standardised, so that systems can be integrated and controlled centrally, and so that intelligence collected via CCTV monitoring can reliably be used as evidence in a court of law. In autumn 2007 the Home Office published the 'National CCTV Strategy' (Gerrard *et al* 2007). This strategy sets out the role of CCTV in crime prevention, criminal justice and for the prevention of terrorism. It stresses the role played by CCTV in serious crime and terrorist incidents and suggests a more coordinated standardised approach to CCTV would make it 'more' effective. The main thrust of the strategy is to consolidate the technical aspects of systems, to standardise procedures and technologies, and to create coordination. The publication of this strategy is a reflection of the piecemeal provision of CCTV across the UK and a desire by central government to use the technology for new anti-terrorism purposes. This has led to a reassessment of the technical capabilities of systems and also the introduction of new innovative computerised surveillance practices, such as facial and number plate recognition systems.

Breaking down CCTV provision into these three policy eras is illuminating as it highlights the significance of the evolving policy environment for the ongoing provision of CCTV. It demonstrates that the impetus for CCTV emanated from central government, but that its provision could not be achieved without local service delivery, and that recent efforts to standardise and centralise technological provision are also to meet central Government objectives. In this respect, it is evident that the CCTV policy arena has been dominated by central Government. Interestingly, throughout these three eras CCTV has remained high on the policy agenda. This may be because the shifts in policy and use, especially the new focus on national security and terrorism, has been an important political issue, it may be because CCTV is simply a high profile technology and policy, or alternatively it may be because the continuing presence of the technology and its use requires constant moral justification. Regardless of which explanation(s) is(are) most valid it is unusual for a single policy to retain such a high profile over such a lengthy period of time. Traditional approaches to the study of policy suggest policy-making is a cyclical process, where policy's 'come and go', and that they are contentious and high profile for relatively short periods of time as they are eventually replaced on the policy agenda by other not necessarily related issues and policies. Down's 'Issue Attention Cycle' (1972) and Kingdon's 'Policy Streams' (1984) are good examples of this line of argument.

4. Evidence-Based Policy and Services

A key feature of policy-making and service provision in the period in which CCTV has diffused is that it should be based on, and informed by, robust evidence. Interest in evidence-based policy as a distinct public policy-making process has gathered pace since the election of New Labour in 1997 and is explicitly part of the 1999 White Paper 'Modernising Government' (Cabinet Office 1999). Modernising Government states, Government; "must produce policies that really deal with problems, that are forward-looking and shaped by evidence rather than a response to short-term pressures; that tackle causes not symptoms". In short, Modernising Government signalled New Labour's intention to ensure that Government policy was based on sound and comprehensive understandings of the evidence available at any given time, and to develop a strategy to maintain, and update as necessary, the evidence base for future strategy, policy and service delivery. This approach has today filtered down to all levels of government and all service areas (Davies *et al* 2000) and is recognised as a direct response to the need to improve the quality of decision-making and to ensure that future decisions are not driven by short term

political pressures. The underlying essence and perceived benefit of evidence-based policy-making is better policy and consequently better and more effective public services.

There are a number of different approaches to evidence-based policy-making, but typically it is understood to be an approach to policy development and implementation which utilises rigorous analytical techniques to develop and maintain a robust evidence base from which to develop policy options (and consequently policy implementation) (see Davies *et al* 2000 for a detailed exploration of Evidence-based approaches in a range of different policy settings). There is nothing new in the idea that policy and practice should be informed by evidence and there is a general assumption that the public policy process should always be 'rational'. However, in the evidence-based policy approach the question is whether the evidence itself and the processes through which the evidence is translated into public services are sufficiently robust and valid, and consequently useful, when making decisions about the deployment of resources (Clarence 2002). Policy orientated evidence is usually considered to have three elements; hard data, analytical reasoning, and stakeholder opinion (Nutley *et al* 2007). The advantage of this tripartite approach is that if there is any weakness in the hard data, then policy-makers can fall back on the analysis that underpins the data. If there is any weakness in the analysis, then the policy-makers can go back to the stakeholder base in order to understand different interpretations of the data/analysis. The Cabinet Office's 'Better Policy-Making' report (Bullock *et al* 2001) identified an evidence-based approach to policy as one which; reviews existing research, commissions new research, consults experts (or consultants), and considers a wide range of properly costed and appraised options.

Under the evidence-based approach to policy-making and service development the Government has adopted a pragmatic non-ideological stance claiming, 'what matters is what works'. This has resulted in the adoption of policies, like the Private Finance Initiative, that would have previously been ideologically unacceptable to a 'left-leaning' Government. The resulting evidence also represents a new source of information and a direct alternative to information emanating from civil servants and professional bodies. One outcome of this approach is a proliferation of performance measures, *ex post* evaluations of public policy and services, and action based experiments to test or pilot new initiatives. In particular, these practices have become prevalent to evaluating the efficacy of new technologies, where little prior evidence exists, and where there is a need to create a knowledge base from which policy can be assessed.

Critics argue that the term 'evidence-based' is slightly misleading as the subtle and pervasive influence of politics on the policy process might suggest terms like 'evidence influenced' or 'evidence aware' are more appropriate (Nutley *et al* 2007). Clarence (2002) goes so far as to argue that it is a 'folly' to assume that evidence can provide objective answers to inherently political policy issues and that it is too simplistic to assume that policy-making can be a more rational decision-making process if it is influenced primarily by the weight of evidence. Rather, politics and policy reflects the art of 'muddling through' (Lindblom 1959), and often it is politics and not evidence which is the driving force for policy development (Davies 2004). Furthermore, there are disputes about what actually constitutes evidence or whether certain pieces of evidence are more important than others. Some authors go so far as to argue that it is inappropriate to assume that evidence is value free as it actually embodies the values of vested interests in the policy-making process and society more generally. Following this argument evidence then can never be objective as all knowledge is relative and developed in social contexts (Pawson 2006).

Nutley *et al* (2007) argue that there are four requirements for improving evidence use in government and public service provision:

1. Agreement as to what counts as evidence and in what circumstances;
2. The strategic creation of evidence in priority areas and the systematic accumulation of evidence in the form of robust bodies of knowledge;
3. Effective dissemination of evidence to where it is most needed; and,
4. Initiatives to ensure the integration of evidence into policy and to encourage the utilisation of evidence in practice.

The evidenced-based approach to policy-making would suggest that the proliferation of CCTV is supported by a solid evidence, or knowledge, base which demonstrably shows performance improvements resulting from the adoption of the technology. In the case of CCTV this approach suggests that within the CCTV policy environment there is general agreement about the validity of evidence supporting CCTV, that the evidence has diffused widely, and is used appropriately to support ongoing service evaluation and provision. Central to the evidence base are performance measures, like crime statistics, public perception surveys and cost-benefit analysis, all of which are used to support provision. It is not unreasonable to assume that the successful widespread diffusion of CCTV implies and demonstrates the reliability and validity of this evidence base, as in the modern era of ultra-rational, non-political, and non-ideological policy and services, this can be the only possible explanation for the dramatic emergence of such a new high profile policy. However, a careful re-examination of this evidence brings the nature of evidence-based policy-making into sharp focus. This is achieved in the next section of this article by exploring five facets of CCTV policy, which I have called five CCTV 'myths'. These myths call into question the evidence base supporting CCTV provision in the UK and raise significant questions about the rationality of the contemporary public policy-making process.

5. Five CCTV myths

Myth 1: CCTV works

The first myth is that CCTV cameras work in delivering their main policy objective - reduced crime and disorder. The evidence here is inconclusive and disputed. Initial anecdotal evidence and provider analysis of crime statistics in the era of innovation and experimentation suggested that CCTV was going to be a very effective tool. However, even in the early stages of CCTV diffusion analysts were raising questions about the assumed link between CCTV use and crime reduction (Ditton *et al* 1999; Short and Ditton 1995, 1996). More recent and comprehensive reviews of CCTV have continued to doubt the efficacy of CCTV. Systematic reviews of CCTV evaluations suggest that CCTV 'works' in certain circumstances and that the effectiveness of the cameras has consistently been overplayed (Armitage 2002; Welsh and Farrington, 2003). Gill *et al* (2005) conducted fourteen detailed case studies of a variety of CCTV systems and locations. Of the fourteen schemes examined only one showed a decrease in crime that was statistically significant and which might plausibly be related to CCTV. Gill and Spriggs (2005) consolidate this research into an overall assessment of CCTV. They argue; "It would be easy to conclude...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" (Gill and Spriggs 2005: 36). Groombridge (2008) goes so far as to argue that there is no rigorously consistent evidence to suggest CCTV cameras work and consequently they do not offer value-for-money. He says that if we are to judge CCTV on its impact on crime then, "the Home Office, and therefore the Treasury, has wasted enormous sums of tax payer's money on the deployment of CCTV" (Groombridge 2008: 74). In terms of crime prevention there is an assumption that CCTV works, it may make a useful contribution to crime control in certain circumstances, but in general it is myth to assume CCTV reduces crime.

Myth 2: CCTV is everywhere

The second established myth is that CCTV surveillance cameras are everywhere and that we are constantly under the visual gaze of CCTV. At the outset of this article I argued that the proliferation of CCTV cameras in public places across the UK is generally recognised and accepted. However, although the Government, local authorities and police forces have invested heavily in CCTV schemes, the vast majority are privately owned and operated by the commercial sector, and covers areas such as, retail establishments, shopping centres and other privately owned facilities. Publicly owned and operated systems are far fewer in number. The first 'national survey' of existing and planned local authority CCTV systems, conducted in 1999, showed that 86% of local authorities had installed a CCTV system, and that in total there were approximately 1,300 systems incorporating some 21,000 cameras (Webster 1999, 2004b). These numbers are a far cry from the five million cameras estimated by Norris (2004), and today, in Scotland, there is still one local authority that does not operate any public space CCTV

systems at all. So, although there has been a proliferation of CCTV cameras it is actually a myth to assume that there are large numbers of public space, publicly owned and operated systems.

Myth 3: Citizens want CCTV

The third myth is that citizens want CCTV surveillance systems. This myth is more tricky to establish, as there is clearly widespread support for CCTV, and it is based on the assumption that myth 1 is valid. Public perception surveys show unequivocal support for CCTV (Brown 1995; Honess and Charman 1992; Ditton 1998) and there is lots of anecdotal and research evidence to show citizens putting pressure on their elected representative to install systems (Webster 2004b). Equally, there is also emerging evidence of resistance to CCTV and the emergent surveillance society (see for example the forthcoming 'Surveillance and Resistance' special issue of the journal *Surveillance & Society*). However, public support for CCTV is based on myth 1, the belief that the cameras work in reducing crime. Norris and Armstrong observe, "there is a common assumption: (that) CCTV actually produces the effects claimed for it...an unquestioning belief in the power of the technology" (1999: 9). The view that crime reduction follows CCTV provision has been successfully disseminated across society and has filtered down into the general consciousness of the population. Here, the myth is that citizens want CCTV, but that they assume it is a technology that delivers certain outcomes. Presumably, as time passes and greater awareness of the limitations and implications of CCTV use becomes common knowledge public support will diminish.

Myth 4: Citizens understand the technological capabilities of CCTV

Linked to myth 3 is the fourth myth about our perceptions and awareness of the technological capabilities of CCTV systems. This is clearly also closely related to general belief that the cameras 'work' (myth 1). So, although there is widespread public support for CCTV, awareness that cameras exist, and knowledge about what they are there to achieve, there is very little awareness about the extent to which systems differ in terms of their the technical capabilities and operation (Webster 2004b). Amongst the general public - the surveyed - there is a general impression that CCTV systems are constantly manned and that following an incident an appropriate response would be forthcoming. However, in many cases this is unlikely to happen as the majority of CCTV surveillance systems do not have this responsive capability. In this respect, the surveillance expectations of the surveyed are not being met. Elsewhere I have argued, that although the CCTV systems have the generic titles of 'CCTV' or 'video surveillance camera' systems, they can broadly be categorised into three types of system, those that are proactive, those that are reactive, and those that are non-active (Webster 2004a), and that the type of system and its technological capabilities determine the levels of monitoring and the intensity of surveillance. The key differences between each of these types are provided in Table 2 (overleaf).

This typology is a hierarchy of sophistication. The least sophisticated 'systems' are non-active systems that act as a visual deterrent through the physical presence of passive cameras. They are non-active because there is no monitoring or recording capability. Instead they create the illusion of surveillance because citizens feel like they are being watched when actually they are not. The reactive type links cameras to recording, storage and playback facilities allowing access to footage after an event or incident has occurred. With this type there is no live surveillance but they are seen as particularly for identifying the perpetrators of criminal acts and in providing evidence for prosecutions.

Type	Features
Proactive	Live surveillance from a dedicated control room with recording, storage and playback facilities. Allows for an immediate response to incidents as they occur.
Reactive	Recording, storage and playback facilities. Provides access to footage of incidents after the event has occurred.
Non-active	No monitoring, storage or playback facilities. Acts as a visual deterrent by using fake 'cameras' to create the illusion of surveillance.

Table 2: A Typology of CCTV Systems

The most sophisticated type of CCTV system is that which includes an integrated dedicated surveillance and communications control centre. These centres are typically staffed by dedicated local authority or police operatives, have direct communications links with the local police force, and allow for real-time continuous surveillance. They are pro-active in that they allow an immediate response to events as they occur. Central to this myth is the assumption that the surveyed have a good understanding of the surveillance process, when actually a multitude of different surveillance practices are in existence.

Myth 5: CCTV is there to protect us and to reduce crime

Myth 5 questions the purpose and objectives of CCTV. CCTV is typically perceived to be a crime prevention and detection tool, for example, Tony McNulty, Minister of State for Security, recently stated “I see CCTV as an important tool in the Government’s crime-fighting strategy” (Gerrard 2007: 4). However, the impact of CCTV is equally felt on antisocial and undesirable behaviour, essentially lower level non-criminal activities, and evidence suggests that CCTV is actually more effective in deterring this undesirable behaviour than reducing crime and disorder (Gill and Spriggs 2005). This line of argument suggests that CCTV is not just focussed on crime but is more generally about helping provide community safety, a better living environment, and consequently has multiple purposes and objectives. In section 3 I argued that the policy focus of CCTV has shifted as the technology has diffused, from crime prevention, to community safety and now also to national security. CCTV also fulfils a number of other purposes. It is a useful tool for directing and controlling police resources, it is also a useful tool for gathering intelligence and monitoring suspect individuals, it plays an important role in making people ‘feel’ safer, and it has also proved to be very useful in generating reliable evidence for use in prosecutions. This range of activities clearly shows that the provision of CCTV systems is multi-purpose and intended to meet multiple policy purposes and objectives. In this respect, one of the key policy issues surrounding CCTV is that it is actually a multi-purpose policy, but the performance indicators used to make judgements about performance, primarily crime statistics, do not reflect this. Groombridge (2008) reinforces this argument by claiming that the objectives of CCTV systems are often not clear and are reliant on unreliable crime statistics. At the heart of this myth is the assumption that the primary purpose of CCTV is to protect us and reduce crime, when actually this is only one of a range of policy objectives.

5. Reconsidering the CCTV evidence-base

The five CCTV myths set out above raise significant questions for the evidence-base on which CCTV policy and practice is based - yet CCTV remains an important and popular policy. Questions about the purpose of CCTV, whether the systems work, and the extent to which the general public comprehend and are aware of surveillance capabilities and practices, suggest that the evidence-base is unreliable and ill-informed. If this is the case, then not only is the evidence-base problematic, but it becomes increasingly difficult to explain CCTV as a rational logic policy. Furthermore, these myths may suggest that the evidence-base has been misunderstood, misused or even ignored by policy-makers in the policy process. Reassessing the evidence base in this way also raises questions about why policy-makers, service providers, citizens and the media are not more questioning about the rationale behind CCTV provision.

Currently, across the UK a number of local authorities and other CCTV service providers are reviewing and reassessing their provision of CCTV. Significantly this is not driven by concerns with the evidence-base, but by financial concerns emanating from the costs associated with running and maintaining systems. In a recent research interview a senior local government policy-maker responsible for CCTV provision in his authority stated, “it is amazing to think that despite all the civil liberties concerns about the use of CCTV it is actually just the cost of running systems that is calling their use into question”. Local authorities are finding it increasingly difficult to carry the financial burden of service delivery and are starting to question the use of these systems by other agencies and for non-local authority purposes. Generally speaking, most local authority (and partnership) schemes have been installed to improve the quality of life of local citizens and to regenerate and reinvigorate local areas, and there is usually a focus

on community safety as opposed to crime prevention. The use of CCTV for policing (Goold 2003), for national security and to provide images for investigations and prosecutions, provide additional alternative benefits to other public agencies who do not necessarily contribute financially to the upkeep of systems. This issue is further exasperated by operational agreements which allow police forces and other security services to assume operational control of local schemes. These financial considerations are also encouraging CCTV service providers to consider new and innovative ways of raising finance. For example, the use of CCTV to detect car parking and road tax infringements and to issue fines is a further example of surveillance creep. From 31 March 2008 local authorities in England can use CCTV to issue postal fines for car parking offences in surveyed areas. Additionally, schemes with large centralised control rooms are starting to charge individual services and agencies for the monitoring carried out. Also, the reassessment of provision around cost is leading to the integration of systems, to reduce manpower costs, and the introduction of second generation computerised surveillance systems where the actual monitoring is not done by a human operative, but by a automated digital process (Surette 2005), again leading to a reduction in the manpower costs associated with operating systems.

Significantly, these developments are in line with the Home Office's desire to develop local CCTV systems into a national surveillance infrastructure for national security. The National CCTV Strategy (Gerrard *et al* 2007) argues that CCTV is currently delivered in a piecemeal fashion, and that there is a need for integrated CCTV infrastructure and a convergence of systems. It calls for a concerted effort to reappraise the provision of CCTV and for the digitisation of CCTV and standardisation of technology so that integration and convergence is possible:

“the introduction of digital CCTV systems could provide opportunities for real benefits if the technology is harnessed correctly...improving the quality of CCTV images will support the development of current, complimentary technologies such as Automatic Number Plate Recognition (ANPR) and future technologies such as facial recognition.”

(Gerrard *et al* 2007: 8)

The reassessment of provision around cost is therefore likely to lead to the further digitisation and integration of systems, making them more like security surveillance systems than council community safety systems.

The drive to harmonisation is also fuelled by police 'frustration' with the workability and effectiveness of existing systems. The Association of Chief Police Officers (ACPO) has therefore called for more CCTV training and improved use of CCTV systems so that there is a seamless interface between CCTV operators and police officers (ACPO 2008). Here the view is that CCTV would be more effective with better managerial and technological integration with existing police systems, and that through better training CCTV operators would have a better idea of what to survey and when. Such a standpoint is interesting, not just because it fuels the argument for convergence but also because it is an explicit police recognition that CCTV is not working (Bowcott 2008).

Beyond CCTV fresh questions are emerging about whether the Government's enthusiasm for evidence-based policy is now beginning to fade as the results of several high profile programmes are published (Nutley *et al* 2007). For example, the review of the implementation of the Crime Reduction Programme in England and Wales, which was once described as “the biggest single investment in an evidence-based approach to crime reduction which has ever taken place in any country” (Home Office 1999: 3), and which included the provision of CCTV via the 'CCTV Initiative', has documented many problems (Homel *et al* 2004) and a number of commentators have noted overall failure of the programme (Hope 2004; Maguire 2004; Tilley 2004). In the case of CCTV, the implementation of schemes seems to be at complete odds with the evidence base which in turn makes it difficult to provide a logical rational reason for installing CCTV surveillance systems so quickly and in so many public places.

6. Concluding comments

In this article I have used a 'policy' based approach to review the ongoing provision of CCTV in public places across the UK. The focus on policy is useful because it alerts us to changes in the purposes and practices of CCTV surveillance and because it allows us to ask important questions about the rationale for continuing provision. Interestingly, initial concerns about CCTV provision, raised in the mid 1990's (Webster 1996), remain unaddressed, and CCTV deployment is being extended despite a growing evidence-base which suggests that the cameras are not as effective as initially assumed. Ironically it is not effectiveness or civil liberties issues that have reignited a policy debate about CCTV, but the costs associated with running systems and its potential usefulness for national security and anti-terrorism purposes. What this shows, is that over time sophisticated surveillance technologies, in the form of CCTV systems, have become embedded in society, and that systems originally installed for one purpose, have evolved, with surveillance being normalised and accepted, to take on additional surveillance functions and activities. This surveillance creep has however not been accompanied by public debate and low levels of awareness about the realities of technologically enhanced surveillance remain. To date, only fairly abstract civil liberties arguments have been raised against CCTV, but if the general public were made more aware of the full costs of systems, and their overall lack of effectiveness, then opinions may change and the policy may lose credibility, support and momentum.

If the impetus for the ongoing provision of CCTV cannot fully be explained by the evidence-base then how do we account for a policy process that appears to be less than rational? It is also pertinent to ask additional questions about how the evidence-base has been utilised by policy-makers, and about the way in which policy initiatives are evaluated and assessed. The latter point is especially intriguing where independent agencies like the Audit Commission and Audit Scotland are responsible for assessing the quality and value-for-money of services delivered. These questions are likely to become more significant as awareness about the limitations of CCTV become more widely known, and if there is a backlash and resistance to a centrally controlled national infrastructure of CCTV surveillance systems.

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