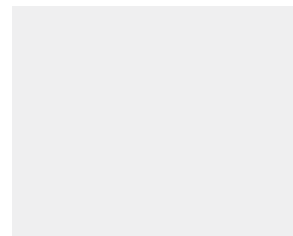
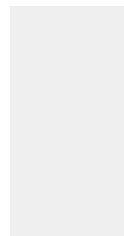
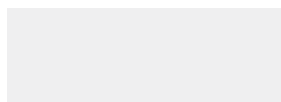
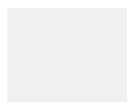
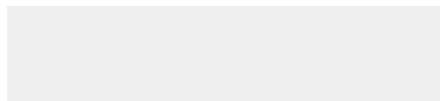
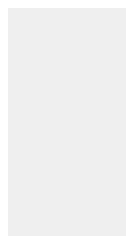
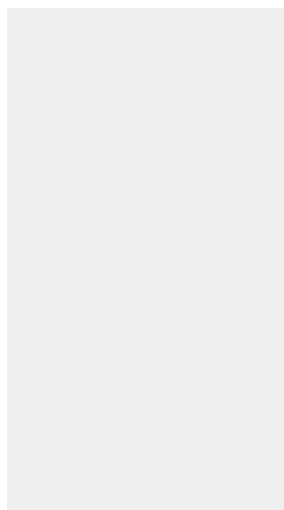
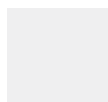
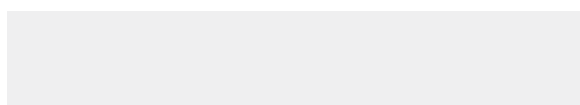


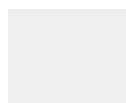
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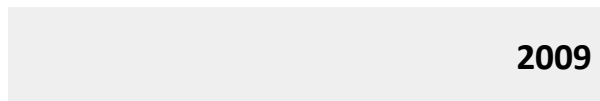
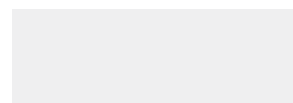
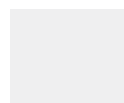
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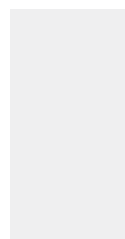
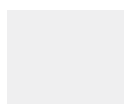
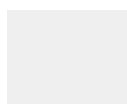
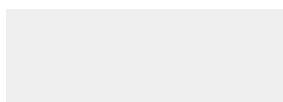
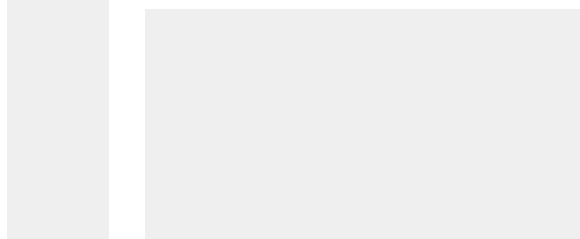
CCTV as a Crime Prevention Strategy: A Review of the Literature



Dorothy Appelbe



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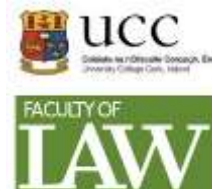
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1. *Subsidiary Protection: Case Law Project*, Siobhán Mullally, Liam Thornton *et al*, 2007
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6. *Beyond McMahon – the Future of Asylum Reception in Ireland*, Conference Summary, Nasc & CCJHR, June 2018



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Executive Summary

Aims.

CCTV is undoubtedly one of the most renowned weapons in the fight against crime. Funded by Allianz Ireland, Cork Chamber of Commerce and the Faculty of Law, University College, Cork, this research sought to examine the emergence of CCTV as a crime prevention strategy and the effectiveness it displays in this role. To do this, a literature review was undertaken to uncover the theoretical rationale underpinning the use of CCTV and explore the rise of surveillance as mechanism of social control. Numerous evaluations and studies, particularly from Britain, but also Ireland, were reviewed to investigate the impact of CCTV on crime, to assess the nature and value of those evaluations and consequently, to formulate a number of recommendations. It is hoped that this work will prove useful to those contemplating the future deployment of CCTV as a crime prevention strategy.

Theoretical Underpinnings: Rational Choice Theory & Routine Activity Theory:

Before engaging in an analysis of the rise of CCTV and its impact on crime, it is first necessary to examine the rationale behind the use of CCTV as a crime prevention strategy. Rational Choice and Routine Activity Theories provide the theoretical basis for CCTV.

Originally, the offender was seen as an aberration and crime was a plague, which needed to be eliminated from society. Early strains of criminology worked from this premise and sought to come to terms with what triggered criminality in the hopes of addressing the causes of crime and banishing it. Classicism, Neo-classicism and Positivism focussed on the offender, but all failed to provide a realistic solution to the crime problem. By the 1970s, widespread disillusionment with established theories primed the stage for Environmental Criminology, which drew the focus away from the offender and concentrated on the locus of the offence. This was a significant step, which paved the way for the emergence of Rational Choice and Routine Activity Theories. These more recent theories take in broader view of crime and are centred on the rational decision-making process of the would-be offender in the spatio-temporal context of the offence.

Routine Activity Theory asserts that crime occurs when three elements converge in time and space. Those elements are a likely offender, a suitable target and the absence of a capable guardian. Rational Choice Theory assumes offenders are rational beings, who engage in a cost/benefit analysis in a given situation to assess whether there is an opportunity to offend to their advantage. In essence, these theories focus on the situations and routines of everyday life and of potential victims, which are liable to foster criminal opportunities, and contend that by identifying and modifying these, it is possible to reduce the opportunity to offend.

Crime Prevention Strategies designed to combat Rational Choice Offenders.

Centuries of armchair theorising about how to eliminate crime had failed to produce any practical solution and the realisation dawned that crime is nothing but an inevitable fact of life. A more pragmatic approach took hold and that was to control and manage the problem of crime so as to limit its impact on society. Responsibility for this approach percolated down from the State to its citizenry.

Situational Crime Prevention is one of the main categories of crime prevention and is the practical sibling of Routine Activity and Rational Choice Theories. It operates by manipulating the criminogenic

environment to avoid the spatio-temporal convergence of the willing offender, the likely target and the absence of a capable guardian, thereby defusing the opportunity to offend. From the potential offender's point of view, Situational Crime Prevention measures increase the effort required to successfully perpetrate the offence (target-hardening, i.e. steering column locks), increase the risk of being detected and/or apprehended (CCTV, burglar alarms) and reduce the rewards entailed (immobilisers), thereby titling the scales in the rational decision-making process against offending.

Situational Crime Prevention encapsulates a vast array of measures to minimise the opportunity for offending and this approach fits comfortably with the dispersal of responsibility for crime control. Such preventative measures vary from the use of plastic drink containers instead of glass, the removal of coin-fed metres, the fitting of steering column locks, improved street-lighting and the installation of CCTV.

One of the main criticisms of Situational Crime Prevention is that it is limited in its application. It does not impact upon domestic or white collar crimes, but nor does it claim to. Situational Crime Prevention does not purport to be a panacea or silver bullet for all crime. Rather, it advocates deploying preventative measures specifically targeted to specific crimes.

Another criticism of Situational Crime Prevention is that its measures merely displace or move crime around as opposed to actually preventing or minimising it. To a large extent, whether an offender desists altogether or just moves on to a more amenable criminal opportunity, depends on whether he is simply opportunistic or in fact determined to commit the offence. Displacement is not inevitable and in fact, when it does occur, it is not always a negative side-effect of Situational Crime Prevention. An offender may be displaced to commit a lesser offence or may be displaced to an area more capable of coping with the crime.

A further and quite strong criticism of Situational Crime Prevention measures is that they encourage a 'fortress mentality' and a mistrust of others, particularly strangers. The decentralisation of responsibility for crime control has seen individuals batten down the hatches to shield themselves from the threats posed by potential wrong-doers. In this way, Situational Crime Prevention can be seen as fuelling what has become known as the 'Stranger' Society and CCTV has been identified as a particular culprit in this.

CCTV: Its Use – Success or Failure from a Comparative Perspective.

With the realisation that crime could never be eliminated, the agenda shifted to containing and controlling the problem of crime. Risk assessment and management became the order of the day, giving rise to the emergence of the 'Risk' Society. Mass surveillance became a particularly useful tool in this Risk Society. It facilitated the assessment of risk through the accumulation of information on potential malefactors. Similarly, it contributed strongly to the management of risks in that interventions could be launched to intercept and apprehend those posing a risk or even the threat of such a mobilisation of authority could be enough to discourage the risk.

Similarly, when crime control became a shared task between the State and its citizens, individuals became increasingly sensitive to perceived threats posed to their security and safety by 'others'. Difference, once celebrated, became a cause for concern and even fear. This saw the emergence of what is known as the Stranger Society. This atmosphere involved individuals closing ranks to exclude those who did not conform – others, strangers. Gated residential communities, private security firms and CCTV are typical symptoms of such a 'Stranger' Society. CCTV, in particular, allows for the identification and subsequent exclusion of non-conformists. As well as exiling non-conformity, CCTV encapsulated the essence of Bentham's Panopticon. This never-realised architectural structure was conceived to exploit the potential of surveillance as a social control mechanism. The rationale underlying it was that constant

observation reinforced by the threat of an authoritative force would secure conformity by way of coercion, encouragement or conditioning. CCTV is thought to be the modern physical embodiment of this architectural vision.

Arguably, CCTV has perpetuated its own necessity. It can be said to underline the preoccupation with risk and encourage the heightening of suspicion and distrust of others by accentuating the visibility of non-conformity, thereby feeding into and off the Risk/Stranger Society. Consequently, what has occurred is the mass proliferation of CCTV.

The emergence of the Risk/Stranger Society coincided and arguably caused urban decline. Out-of-town malls became increasingly commonplace and to emulate the perceived security of such facilities, urban renewal groups sought to bring one of their signature features – CCTV – to city and town centres in the hopes of encouraging business back into decimated urban centres. Consecutive increases in crime rates and watershed events such as the killing of Jamie Bulger increased public receptiveness to the use of CCTV in public areas. What followed was mass investment by the British central government and interested parties alike, which culminated in Britain becoming the most surveilled society by far.

Initial evaluations of CCTV schemes yielded mixed results regarding their effectiveness as a crime prevention strategy. Many such studies were based upon the overly simplistic and uninformative evaluation question – ‘does CCTV work?’ With time, a much more enlightening evaluation was posed – ‘how/why does CCTV work, when it does work?’ This method of evaluation is known as the Tilley/realistic evaluation model and involves the identification of the contexts and mechanisms in which CCTV factors into the thought-process of the potential offender, causing them to desist and realising the crime control capabilities of surveillance. Evaluations premised on this approach possess a much greater potential to inform the subsequent deployment of situational crime prevention strategies such as CCTV so as to achieve their optimal efficiency and effectiveness.

CCTV in Ireland – The Story so Far.

Since its arrival in the 1990s, the level of public area CCTV has been increasing particularly more recently. Tralee, Dublin and Cork are home to the most established and extensive systems. February, 2007 saw an announcement of the extension of Garda CCTV systems, bringing the total to 26. Garda CCTV systems, as well as being deployed for crime prevention purpose, have proven exceedingly useful in the efficient allocation of limited Garda resources, investigation of incidents and complaints and also traffic management.

While An Garda Síochána had been the driving force behind the roll-out of CCTV in Ireland, the institution of the Community-Based CCTV Scheme in June, 2005 has injected increased fervour into the expansion of CCTV surveillance in Ireland. This scheme sees local communities financially supported in the installation of CCTV systems. As a result, communities in the likes of Blackpool in Cork, Clonmel and Tallaght have received various levels of funding to assist in the installation of CCTV.

As well as providing support and structure for local communities, this scheme together with the Garda Síochána Act 2005 provides a certain level of formal regulation, which is to a large extent absent in Britain. The provision of funding is dependent on a successful application under the scheme, which necessitates compliance with various terms of the Garda Síochána Act 2005, including the observance of technical specifications and code of practice as set out in the Act.

Other forms of regulation herding the use of CCTV include the right to privacy as recognised by the Constitution and the European Convention on Human Rights. While the Irish courts have not had many

occasions to deal with the impact of CCTV on the right to privacy, there have been quite a few European cases, which have seen an expansive view of privacy even in public spaces. Data protection legislation also provides another avenue of protection to privacy rights and CCTV systems must adhere to data protection principles, such as secure storage or and limited access to recordings, fair obtaining requirements and proper signage.

The rules of evidence govern how footage is to be stored, handled and used as evidence according to the principles of fair procedure. However, as with data protection, the rules of evidence offer no guidance on how surveillance is to be executed. The main form of such guidance would be codes of practice. This is arguable the most common form of 'regulation', though informal in Britain. Often codes of practice are inconsistent and fail to deal with important issues such as 'suspicious behaviour' and subject-targeting. There have been improvements in this regard in Britain. In Ireland, An Garda Síochána operates in accordance with *The Declaration of Professional Values and Ethical Standards*, while community based schemes will have to abide by the code of practice contained in the 2005 legislation.

As regards the impact of CCTV in Ireland, a significant number of evaluations have been undertaken by or in association with An Garda Síochána. Similar to Britain, Ireland's accessible evaluations to date have displayed mixed results and have experience some difficulties in obtaining sufficient data of an appropriate nature. The arrival of the community-based CCTV scheme poses a golden opportunity to allocate proper resources and engage in appropriate data collection so as to accurately assess the impact of CCTV on crime in Ireland and thereby ensure efficient and effective future deployment.

Summary of Recommendations:

1. CCTV is not a panacea for the predicament of crime control and should not be treated as such. However, it seems to be most effective on vehicle-related offences in enclosed areas such as car parks.
2. Serious consideration should be given when selecting the areas to which CCTV is deployed to ensure it is the most appropriate form of crime prevention measure for the area.
3. The impact of existing CCTV systems should be assessed and reviewed in such a manner as to inform on best practice for the future deployment of CCTV. This would involve assessing why and how CCTV effects its impact on crime.
4. In undertaking evaluations of CCTV systems, it should be determined what exactly constitutes success. As well as affecting crime rates, CCTV may be used for investigation purposes, to ensure the efficient deployment of resources, to increase economic activity in an area and so on.
5. Appropriate data should be collected to investigate whether CCTV succeeds in achieving the identified objectives. The method of evaluation and data collected should be tailored to assess whether the objectives of CCTV installation have been met.
6. Data should be assembled in a timely fashion in such a way as to shed light on the way in which CCTV operates. Data should be collected in advance of the installation of CCTV to give an impression of the situation prior to CCTV deployment and the collection of data should be of a sufficient timespan to give a more accurate indication of the impact of CCTV.
7. The type of data assembled should be of a nature appropriate to ascertain the tangible and less tangible effects of CCTV. Interviews and surveys would cast a sharper light on the incidence of displacement and diffusion of benefits, as well as fear of crime and privacy concerns.
8. With the introduction of the Community-Based CCTV Scheme, the opportunity should be taken to audit the impact of CCTV in accordance with the methodology lessons learned in previous evaluations. Ideally, following a sufficient number of localised studies, a meta-analysis would be

undertaken on a national level to instruct on the best practice of CCTV deployment. This should employ the realistic evaluation model to determine how CCTV works, when it does work.

9. Any codes of practice used should be of a uniform standard and should be reviewed periodically to ensure they remain relevant. Ideally, observance of codes of practice should be monitored. As well as the technical and operational specifications, codes of practice should direct also how subjects are to be selected for surveillance.
10. Training and guidelines should be issued to those operating CCTV systems. To avoid discriminatory targeting, what constitutes 'suspicious behaviour' should be explored and should not be left to the absolute discretion of the monitor.

Chapter 1:

Introduction.

For almost a decade now, reality television has dominated our screens. Our fascination with the likes of *Big Brother* and *Celebrity Love Island* is indicative of our obsession with voyeurism. CCTV is the ultimate reality TV. While CCTV footage is broadcast as entertainment on *Tarrant on CCTV* and *America's Dumbest Criminals*, for example, this was not its intended purpose. Far from it – in fact, CCTV's most notable role is the prevention of crime and it may arguably be regarded as the most prominent weapon in the crime prevention artillery.

CCTV has become a fact of modern life and with the rapid development of more far-reaching technology, it does not seem that this will change. If anything it will become more intense. In October 2006, Michael McDowell, then Minister for Justice, Equality and Law Reform, announced an increase of the number of CCTV cameras on Limerick streets and estates to 70 and the further investment of €200,000 to increase the 35 camera coverage in Moyross. The Moyross system is now to be monitored from the control room in Henry Street Garda Station in Limerick as well as in the local community centre to enable swift a Garda response to street crime in the area.¹ In a similar vein, less than four weeks later Bus Éireann announced it would be fitting all its city fleets with on-board CCTV to curb the recent upsurge in vandalism and anti-social behaviour.² These are but two of the more recent examples of the spread of CCTV. There have been and no doubt will be many more. The question is why has CCTV captured the imagination of those involved in crime prevention?

Events such as 9/11, the London Bombings and the Dublin Riots received international media coverage and cast a spot light on the use of CCTV as a tool in the war against crime and the war against terrorism. Images of Mohammed Atta, one of the 9/11 hijackers, as he caught his connecting flight from Portland, Maine to Boston on the morning of the attacks were published on countless newspapers and shown on news broadcasts.³ Following the London Bombings on 7th July, 2005 and the failed attempted attack two weeks later, a massive police and security forces effort began in an attempt to capture terrorist fugitives before they could strike again. A significant part of this campaign was the examination of over 15,000 hours of CCTV footage in order to trace the movements and ascertain the associates of the suspects.⁴ Closer to home, footage from over 300 CCTV cameras were called upon by An Garda Síochána to identify those involved in the riots that laid siege to Dublin in February 2006.⁵ With the role of CCTV in the aftermath of these events receiving significant media coverage, it is not difficult to see why CCTV has taken hold as one of the more favoured crime control tools.

It does not take an act of terrorism or a massive input of funding for CCTV to grasp the headlines. Virtually every day in one newspaper or another, we are told of how CCTV is being used by the police to investigate crime. Images from surveillance cameras have been called upon in the investigation of

¹ Woulfe. *McDowell promises Crime Czar for Limerick Housing Estate*. Irish Examiner. 20th October 2006. Also, Duggan. *Gardaí set to get Mobile Stations for Trouble Spots*. Irish Independent. 20th October 2006.

² Bracken. *Buses to get CCTV in Bid to Tackle Vandalism*. Irish Examiner. 8th November 2006.

³ Whittington. *Storm Rising*. Irish Independent Weekend. 3rd September 2005.

⁴ McCann. *Terrorism 2005: Fortress Britain*. Irish Independent Review. 30th July 2005. Also, Fenton & Steele. *Caught on Camera: Faces of the Four Suspected Bombers*. Irish Independent. 23rd July 2005. Macintyre. *Police use Technology & Science to close in on Culprits*. Irish Independent. 23rd July 2005.

⁵ McEnroe. *Gardaí & Businesses examine CCTV Images*. Irish Examiner. 28th February 2006.

offences ranging from sexual assaults⁶ to false imprisonment⁷ and criminal damage.⁸ Probably more notable is the role CCTV has played in the investigation of homicides. Countless newspaper articles refer to CCTV footage being trawled through to ascertain how these devastating events unfolded. One such example would be the investigation into the murder of Margaret 'Meg' Walsh in Waterford in October 2006, in which CCTV footage was examined to assist in piecing together her final moments and to trace the weapon used.⁹ Yet another instance of CCTV coming to the aid of the police can be seen in coverage regarding the investigation into the tragic deaths of five women in Ipswich. To trace the final movements of the victims, police undertook house-to-house inquiries, appealed to the public and scoured CCTV footage in the hopes of revealing valuable information on what happened to the five women. Police even released the last known sighting of Anneli Alderton, one of the victims, on board the Harwich-Colchester train a week before her body was discovered in woods just outside Ipswich. It was hoped that the release of such footage would lead to a breakthrough in the case.¹⁰ Shortly after this, two arrests were made and one of those arrested was released, the other Steve Wright stood trial.¹¹ In the course of the trial, the jury viewed the CCTV footage of Anneli Alderton on the Harwich-Colchester train and also footage of Tania Nicol, another victim, getting into a car, described by a vehicle identification specialist, as being 'highly likely' to be that of Steve Wright. After a six-week trial, on 21st February 2008, Steve Wright was convicted of the five murders.

With CCTV almost permanently occupying inches in the columns of newspapers, it is not difficult to fathom why CCTV has been perceived as somewhat of a 'silver bullet' in the war against crime. The media's portrayal of the value of CCTV in particular accounts for the vast majority of public support for the measure. The question, which must be asked is, 'how did CCTV begin this road to fame and recognition?' And equally importantly, 'why?'

CCTV is arguably the form of crime prevention that most prominently springs to mind. The following chapters trace the journey of CCTV to its current reign. By beginning with the theoretical underpinnings of crime prevention strategies and proceeding through to the theory of surveillance as a mechanism of control, the aim is to uncover exactly why and how CCTV has come to be such a prominent feature in our everyday lives and now that it is, just how effective is it in its role as a crime prevention strategy.

⁶ O'Doherty. *Bus Sex Attack on Student caught on CCTV*. Irish Examiner. 10th November 2005.

⁷ Managh. *Judge asked to throw out Convictions and Fines against Arcade Owner's Sons*. Irish Examiner. 10th December 2005.

⁸ O'Doherty. *Men fire Shots through Children's Window*. Irish Examiner. 20th November 2006.

⁹ O'Connor. *Gardaí widening their Search for Missing Mum who told Friends she lived in Fear for her Safety*. Irish Independent. 10th October 2006. Roche & Parsons. *Breakthrough in Hunt for Killer of Waterford Woman*. Irish Times. 19th October 2006. Riegel. *Weapon Search: Divers sift through Silt at Bottom of River in Effort to find the blunt Instrument used to kill Mother of One*. Irish Independent. 21st October 2006. McSweeney. *No CCTV Cameras at Quay where Meg's Body was dumped*. Irish Examiner. 26th October 2006.

¹⁰ Ungood-Thomas & Swinford. *CCTV Images of Victim's last Hours*. The Sunday Times. 17th December 2006. Lusher & Quinn. *CCTV Footage of Vice Girl released in Murder Hunt*. The Sunday Times. 17th December 2006. Millar. *Waiting for an End to the Nightmare*. The Sunday Times. 17th December 2006. Greenwood. *Pathologist has five Chances to catch Serial Killer*. Irish Examiner. 15th December 2006.

¹¹ Coverage of the trial and in particular the use of CCTV footage can be viewed at http://news.bbc.co.uk/2/hi/uk_news/england/suffolk/7190318.stm.

Chapter 2:

New Criminologies of the Self: Rational Choice Theory & Routine Activity Theory: A New Focus on Offenders as Rational Choice Actors.

Introduction.

*"Crime, like death and taxes, is one of the few certainties of human life."*¹²

Originally, crime was seen as an aberration and the offender as anomalous to the rest of society. In more recent years, however, this perception has changed and crime is now seen as a normal social occurrence. The total abolition of offending is no longer the reigning aspiration of those concerned with maintaining the social order. The control and reduction of crime are its replacement and with this, the use of situational crime prevention measures, such as closed circuit television (CCTV), has become commonplace, in a practical attempt to curb today's high rates of property and violent crime, which as Garland notes, are *"historically unprecedented."*¹³

Before examining the impact of CCTV as a crime prevention strategy, it is first necessary to investigate the theoretical basis underlying it. Routine Activity Theory and Rational Choice Theory are the two predominant strains of criminological thought behind situational crime prevention, which focuses on the convergence in time and space of a willing offender, a suitable target and the absence of a capable guardian, rather than just the offender or the locus of the crime. Routine Activity and Rational Choice theories are recent developments of the 70s and 80s and to appreciate the significance of these lines of criminological theory, it is necessary to take a very brief and simplistic glimpse back through their ancestry.

Classicism.

Up until the mid to late eighteenth century, it was thought that public spectacles of extreme punishment would deter the masses from engaging in criminal activity. The Black Acts of the 1720s, for example, introduced in excess of two hundred capital offences onto the English statute books.¹⁴ However, because the enforcement of such drastic sanctions was rarely automatic and certain, the deterrent element of this harsh punishment regime was severely undermined. The failure of this rather extreme approach paved the way for classical criminology to suggest a more effective and efficient theory of punishment and crime prevention.

Classicism looked on crime as nothing more than a rational and self-interested pursuit of personal advantage by the offender. Consequently, the figurehead of classicism was the rational man, who would assess the risks of pain through apprehension and punishment against the likely awards of the offending. If the threat of pain were to slightly outweigh the possible gains, the potential offender would be

¹² Kilcommins, O'Donnell, O'Sullivan. & Vaughan. Crime, Punishment & the Search for Order in Ireland. Institute of Public Administration. Dublin. 2004. Page 1. See also Garland. *The Limits of the Sovereign State*. (1996) 36(4) British Journal of Criminology 445. Pages 446-448.

¹³ Garland (1996), page 446.

¹⁴ Gilling. Crime Prevention: Theory, Policy & Politics. UCL Press. London. 1997. Page 26.

deterred. For this threat to be effective, the punishment for crimes would have to be certain, immediate and limited to what is necessary to deter and it would be tailored to fit the offence rather than the offender.¹⁵ In order for the punishment to be certain and easily calculable to the rational, potential offender, it would have to apply equally to all individuals, without exception.

This school of criminological thought assumed all individuals shared a universal rationality, devoid of any wider social, personal or environmental background. Such an excessively sterile approach to crime could not be sustained and was later watered-down in the nineteenth century with the recognition that not everyone shared the same level of rationality.

Neo-Classicism.

Classicism sought to provide a system of punishment and crime prevention by looking at the offender as one, who freely made a rational and calculated decision to engage in criminal behaviour.¹⁶ However, during the nineteenth century, classical criminology gave way to neo-classicism, which retained free will and '*calculative rationality*', but paid heed to the fact that some wills were not as free as others. It was realised that a uniform standard of rationality was little more than a fanciful ideal and accordingly the assignment of punishment could no longer be so rigid a measurement.¹⁷

Though neoclassicism was a more practical and realistic application of classical ideals, it similarly did not succeed in achieving the traditional classicist ambition of crime prevention. Continually rising crime rates lead to the cultivation of dissatisfaction with classicism and neo-classicism during the late nineteenth century, leaving the way open for the fostering of a new wave of criminological thought – Positivism.

Positivism.

When neo-classicism failed to alleviate the problem of crime, attention shifted to new avenues of criminological thinking. This subsequent criminology took on board the tendency of neo-classicism to acknowledge individual circumstances, when assessing the proportionality of punishment. The development of new social sciences, concerned with the motivations of behaviour, ushered in a novel way of viewing criminal behaviour. Studies of crime and their statistics and the experiences of criminal justice institutions, such as prisons, altered the perception of criminal behaviour.¹⁸ Human conduct was no longer seen as driven by a prior rational cost/benefit analysis. It was, more often than not, irrational, uncalculated and paid no heed to the consequences the law had in store for it. The Holy Grail of positivism was the cause of crime and the quest began with the individual offender.

Positivism subscribed to the premise that human behaviour is determined to forces, internal or external to the individual, over which the individual has no control. Therefore, it was thought that by way of the scientific observation of and experimentation on human behaviour, it would be possible to ascertain what these dictates of behaviour were, be they psychological, biological, social and so on. The rationale was that the discovery and study of these predispositions towards criminal activity would facilitate the treatment and rehabilitation of such individuals, thereby eliminating recidivism. Where the individual

¹⁵ Hughes. *Understanding Crime Prevention: Social Control, Risk & Late Modernity*. Open University Press. Maidenhead. 1998. Page 29.

¹⁶ Beirne, *Inventing Criminology: The "Science of Man" in Cesare Beccaria's Dei Delitti E Delle Pene (1764)*. In Henry & Einstadter. (Eds.) *The Criminology Theory Reader*. New York University Press. New York. 1998. Page 20.

¹⁷ Hughes, page 31.

¹⁸ Brantingham & Jeffery. *Afterword: Crime, Space, and Criminological Theory*. In Brantingham & Brantingham. (Eds.) *Environmental Criminology*. Waveland Press. Illinois. 1991. Page 233.

was impervious to rehabilitation and the prevention of reoffending was not viable, that individual would be contained for the good of society. Positivists saw the prevention of crime as attainable through the curing of this societal disease and by the quarantining of those immune to treatment. Treatment replaced punishment and the emphasis shifted from the criminal act to the criminal actor.

However, the 1970s rise in crime highlighted the practical shortcomings of established criminological approaches to crime prevention and saw increased scientific and political dissatisfaction with the positivist preoccupation with identifying and eliminating the cause of crime. *'Nothing works'* became the slogan of the day.¹⁹ While criminologists, of whatever denomination, remained obsessed with theorising, others from disciplines outside the field of criminology and criminal justice sought to tackle the problem of crime on a more pragmatic level. The likes of Jane Jacobs, with her idea that architecture and city planning could both positively and negatively contribute to crime prevention, and Oscar Newman with his concept of *'defensible space'* introduced new ways of thinking about crime, which lead to the discipline of criminology reorienting its approach towards a more holistic evaluation of crime and criminality.²⁰

Environmental Criminology.

Jane Jacobs contended that the distribution of activities throughout urban centres could influence the occurrence of criminal activity. She condemned modern city planning for its *'artificial compartmentalisation of activities'* through its failure to recognise cities as *'organic, living things, constituting a myriad of everyday social and economic interactions'*, which rendered city districts *'custom made for crime'*.²¹ Diversity in zoning and appropriate building design could minimise opportunities to offend by promoting the community's own surveillance potential without fostering a *'socially divisive fortress mentality'*.²² Though her recommendations were seen as overly simplistic, they did provide an impetus to reassess the approach of criminology to crime prevention.

Newman followed up on Jacobs' propositions and formulated a theory of *'defensible space'*, which set out that with proper urban planning and design, society could benefit from *'a most effective model of crime prevention, utilising mechanical means of target hardening, and corrective means of mobilising natural social processes of territoriality and surveillance.'*²³ His contention was that the design of the residential environment could inhibit crime by reflecting a defensive attitude, which sent the message that this area is not conducive to offending nor would such be tolerated. The rationale was that by increasing the opportunities for natural surveillance and fostering a sense of community among inhabitants, residents could be encouraged to play a very effective part in preventing crime in their neighbourhood.

Both of these contributions worked from the premise that the environment and geographical locus of the event could exercise an influence over the criminal actor. This new perspective lead to the identification of place as one of the essential components of crime. Classicism had focussed on the offence, while positivism concentrated on the offender. Environmental criminology then shifted the focus to the location of the crime. The idea that individuals respond to environmental stimuli triggered a hope of crime prevention through manipulation of the environment to discourage criminal behaviour. The most recent developments in criminology in the form of the *'new criminologies of everyday life'*²⁴

¹⁹ Gilling, page 43.

²⁰ Ibid, pages 45-55.

²¹ Ibid, page 47.

²² Ibid.

²³ Ibid, page 50.

²⁴ Garland (1996), page 450.

then entered to provide a strong theoretical framework to support the pragmatic possibilities of environmental manipulation in the campaign of crime control. These 'new criminologies' explain how the environment or situation factors into the individual's decision to offend or not.

New Criminologies of Everyday Life.

Garland identifies the new predicament facing contemporary governments caused by *'the normality of high crime rates and the limitations of criminal justice agencies.'*²⁵ In response to this predicament, criminology has produced the 'new criminologies of everyday life', comprising of the theories of routine activity, rational choice, situational crime prevention and crime as opportunity. Conventional criminologies had categorised criminality as a departure from normality and civility. However these new criminologies recognise crime as a standard fact of modern society, rather than a deviant anomaly.²⁶ Garland defines crime in this context as *'an event – or rather a mass of events – which requires no special motivation or disposition, no pathology or abnormality, and which is written into the routines of contemporary social and economic life.'*²⁷ He goes on to highlight that the significance of these new theories lies in their practical acknowledgement of 'the limits of the sovereign state' by their passing of the crime control baton to non-state agencies and individuals. With these new protagonists, the practical applications of these new criminologies focus not on the offender, but on the situations and routines of potential victims and everyday life, which are liable to foster criminal opportunism. By identifying and modifying these vulnerabilities, it is hoped a reduction in opportunities to offend will be achieved.²⁸ Rather than dissuading offending merely by means of deterrent punishment and threats of apprehension by criminal justice agencies, new criminologies advocate individuals making it more difficult for the individual to behave criminally.²⁹

These new criminologies are classified by Garland as *'criminologies of the self.'* They depict the offending individual as a *'rational opportunist, little different from his or her victim.'* Criminologies of the self are *'invoked to routinize crime, to allay disproportionate fears and to promote preventative action.'*³⁰ On the other side of this classification lie *'the criminologies of the other'*, which *'... demonize the criminal, ... excite popular fears and hostilities, and ... promote support for state punishment.'*³¹ Practical embodiments of these criminologies are evident in the policies of mass incarceration, extensions of mandatory life sentences and capital punishment by political regimes, particularly in the US and UK.³² This classification illustrates the two-pronged approach of *'official criminology'*, which is equivocal and often contradictory. The dyad of contemporary criminology operates to bestow upon society at large the responsibility for preventing its own victimisation, while endowing society's political and legal agents with a more heavily punitive agenda.

Having briefly outlined the complexities of contemporary criminology and its varied and often contradictory practical manifestations, it is time to look more closely at the aspect of this criminology –

²⁵ Ibid, page 445.

²⁶ Cohen & Felson suggest that instead of assuming crime is *'simply an indicator of social breakdown, one might take it as a by-product of freedom and prosperity as they manifest themselves in the routine activities of everyday life.'* Cohen & Felson. *Social Change & Crime Rate Trends: A Routine Activity Approach.* (1979) 44 American Sociological Review 588 at page 605.

²⁷ Garland (1996), page 450.

²⁸ Ibid, page 451.

²⁹ Garland (1996) gives practical examples of this in the form of steering column locks, the use of CCTV in city centres and Neighbourhood Watch schemes. Page 451.

³⁰ Ibid, pages 461-462.

³¹ Ibid, page 461.

³² Garland (1996) gives the punitive policies of the Major and Clinton administrations as examples. Page 462

‘the criminologies of the self’ – which espouses the use of situational crime prevention measures such as CCTV.

Routine Activity Theory.

One of the primary branches of ‘the criminologies of the self’ is routine activity theory. This was advanced as a response to the seemingly paradoxical post-war development that saw the decrease of criminogenic factors coincide with an increase in crime rates.³³

In 1979, Lawrence Cohen and Marcus Felson presented a cohesive routine activity analysis of trends in post-war crime rates.³⁴ They took their prompt from the sociological paradox put forward in the 1969 report of the National Commission on the Causes and Prevention of Violence. The report drew attention to the incongruous fact that rates of urban violence had been increasing, while the typical criminogenic factors behind this violence had remained static.³⁵ Cohen and Felson employed a theory that the routine activities exercised in the area and their structure influence the occurrence of criminal opportunities, to provide a logical explanation for such a paradox.

Their approach does not hold the characteristics of the offender as the primary focal point, but rather the circumstances of the criminal event. The relevant circumstances involve the convergence in time and space of a likely offender, a suitable target and the absence of a capable guardian, which allows *‘illegal activities to feed upon the legal activities of everyday life.’*³⁶ It was their contention that structural alterations in patterns of routine activities could affect this convergence to the extent of influencing rates of offending in that area. In other words, if the proportions of likely offenders and suitable targets in an area were to remain the same, changes in that area’s routine activities could increase the likelihood of their spatial and temporal convergence, thereby increasing criminal opportunities.³⁷ The absence of at least one of the three elements – the motivated offender, a suitable target and the absence of a capable guardian – would suffice to scupper the spatio-temporal convergence necessary for crime.

Cohen and Felson took the inclination to offend as a given and went on to examine how *‘the spatio-temporal organization of social activities helps people to translate their criminal inclinations into action.’*³⁸ They considered crime as a normal activity, which shared many characteristics with, and was interdependent on, other non-criminal routine activities. The theory works from the premise that regular, non-offending human activity may facilitate the spatial and temporal merging of an offender willing and able to act, a suitable target and the absence of a guardian capable of impeding the offence. Cohen and Felson acknowledge that though guardianship may often be marked by the absence of offending, it is commonly overlooked, particularly guardianship by ordinary citizens as they pursue their routine activities.³⁹ They proceed to submit that given the parasitic dependence of criminal activities upon other activities, *‘the spatial and temporal structure of routine legal activities should play an important role in determining the location, type and quantity of illegal acts occurring in a given community or society.’*⁴⁰

³³ Gilling, page 57.

³⁴ Cohen & Felson. *Social Change & Crime Rate Trends: A Routine Activity Approach*. (1979) 44 American Sociological Review 588.

³⁵ Ibid, page 588.

³⁶ Ibid.

³⁷ Ibid, page 589.

³⁸ Ibid.

³⁹ Ibid, page 590. This type of guardianship is commonly referred to as ‘natural surveillance.’

⁴⁰ Ibid, page 590.

Cohen and Felson explain that since World War Two, American society has experienced dramatic changes, which have had knock-on effects on the structure and type of the routine activities undertaken. For example, advances in technology not only facilitate the pursuit of lawful activities, but also that of criminal activities. Consumer goods, particularly electronics, are more conducive to easy transportation nowadays than ever before. This aids both legitimate and illegitimate movement thereof. Similarly, the increase in female involvement in the labour force since the war and the proliferation of single member households means domiciles are often left unattended for long periods during the working and school week. Societal affluence also encourages the pursuit of leisure activities, which again results in increased targets, be they vacant homes or added luxuries. These combine to result in a majority of routine activities taking place away from the household, leading to a suitable target and the absence of a capable guardian for the motivated offender.⁴¹

For Cohen and Felson, the beauty of routine activity theory is that it explains the divergence between the trends in the presumed causal variables of crime and actual crime rates. It also sets out how the structure of the primary, legitimate routine activities in a community can be used to influence the likelihood of the pursuit of criminal inclinations and control them. Moreover, this theory clarifies that substantial increases in opportunities to offend have undermined the grasp wielded by the criminal justice system and society at large on social control.⁴²

According to Cohen and Felson, the opportunity structure for legitimate activity and that for illegitimate activity are two sides to the one coin, making it extremely difficult if not impossible to '*root out substantial amounts of crime without modifying much of our way of life.*'⁴³ However, the explanation of the occurrence and rates of crime provided by their theory of routine activities empowers society to invoke strategies to reduce the suitability of targets and maximise the presences of capable guardians, thereby reducing the opportunities of any motivated individuals to offend.

Rational Choice Theory.

This is somewhat of a sister theory to routine activity theory. It harks back to the classical days of rational calculations of the costs and benefits of offending, however this contemporary theory has evolved to look at the situations and circumstances in which potential offenders engage in such rational calculations.⁴⁴ As with classicism and routine activity theory, rational choice theory does not concern itself with the criminal inclinations and motivations, it takes them for granted. Vold *et al* explain that rational choice theory builds upon classicism's core principle of rational choice, and like routine activity theory, it considers how a motivated offender might undertake a cost/benefit analysis in a given situation to assess whether there is an opportunity to offend.

According to Vold *et al*, the cardinal assumption of rational choice theory is that '*all crime is purposeful, committed with the intention to benefit the offender*' and the aim is to ascertain the purpose or rationale behind the offence.⁴⁵ The ambition of rational choice theory has been to provide an explanation encompassing the event (the crime) and the involvement of the offender (the criminality). Gilling sets out that '*in rational choice theory the intention has always been to build a bridge between situation (crime) and disposition (criminality),*'⁴⁶

⁴¹ Ibid, pages 593-602.

⁴² Ibid, page 604-605.

⁴³ Ibid, page 605.

⁴⁴ Vold, Bernard & Snipes. *Theoretical Criminology*. (5th Ed.) Oxford University Press. Oxford. 2002. Page 203.

⁴⁵ Ibid, page 204.

⁴⁶ Gilling, page 60.

Efforts to interpret the criminal event have come in terms of opportunities, which may be defined as '*occasions whose objective conditions appear conducive to crime*' and which are subjectively perceived by the potential offender as tempting.⁴⁷ An explanation of the event cannot be forthcoming without an assessment of the role of the offender. While an open window may objectively seem an obvious criminal opportunity, the involvement of a willing and motivated offender is required to turn this opportunity into a criminal event.

While opportunity may be the essence of the event/crime definition, choice is the pivot in terms of involvement/criminality. While rational choice resonates, to an extent, with classicist theory, it is not merely a repetition of old teachings. Unlike classicism, which accepts the idea of free will at face value, rational choice recognises that choices are not always simple and are rarely objectively rational. Subjective preferences and motivations complicate matters of 'rational' calculation and choice. Clarke and Felson's make the assumption '*that crime is purposive behaviour designed to meet the offender's commonplace needs for such things as money, status, sex and excitement, and that meeting those needs involves the making of (sometimes quite rudimentary) decisions and choices, constrained as these are by limits of time and ability and the availability of relevant information.*'⁴⁸ This indicates that rational choice theory does not employ an ultimate standard of rationality and free will in the way that classicism did, when it comes to assessing the involvement/criminality element.

Cornish and Clarke reiterate that rational choice is concerned with '*a limited rather than normative rationality.*'⁴⁹ This more flexible notion of rationality, which takes account of constraints of time, intelligence and cognitive ability and available information, allows rational choice and situational approaches scope to address the issue of crime displacement, which has been seen by many, especially those with positivist affiliations, as the Achilles' heel of this recent criminological perspective. Positivists would be of the opinion that, because the offender suffers from a predisposition towards criminality, the situational crime prevention measures invoked, following a rational choice analysis of the opportunity for offending, would do nothing more than shift the criminal activity to another time, place or target or alter the type of crime.⁵⁰ Cornish and Clarke concede that displacement may occur, but insist that displacement is contingent upon a commonality of what they term '*choice-structuring properties*'.⁵¹ Rational choice and situational theories adopt a crime-specific approach, instead of assuming that potential offenders suffer from general criminal tendencies. A potential offender makes a decision to commit a specific crime for specific reasons. This decision is influenced by characteristics of both the offender (including abilities, motives and experience) and the offence (perceived risks involved, skills required and amount of reward and so on). Choice-structuring properties are the factors taken into account by the offender, when making his (subjectively) rational cost/benefit calculation. The properties of the offence structure the offender's choice in line with his own characteristics. According to Cornish and Clarke, a comprehensive understanding of the phenomenon of displacement requires a crime-specific approach to criminal decision-making, which appreciates the importance of 'choice-structuring properties' in the process of the offender's rational calculation. Such an approach would allow policy makers to accurately assess the displacing impact of situational crime prevention measures advocated by rational choice and routine activity theories and to take steps to curb displacement or filter it towards non-criminal alternatives.⁵²

⁴⁷ Ibid, page 61.

⁴⁸ Clarke & Felson. *Introduction*. In Clarke & Felson. (Eds.) *Routine Activity & Rational Choice*. Transaction. New Brunswick. 1993. Page 6.

⁴⁹ Cornish & Clarke. *Understanding Crime Displacement: An Application of Rational Choice Theory*. In Henry. & Einstadter. (Eds.) *The Criminology Theory Reader*. New York University Press. New York. 1998. Page 45.

⁵⁰ Ibid, page 46.

⁵¹ Ibid, pages 47-49.

⁵² Ibid, page 53.

The rational choice and situational approach towards the problem of crime control was largely based on research by Ronald Clarke, in particular, in the 1970s under the auspices of the British Home Office Research and Planning Unit and it was anticipated that this novel strain of criminology would provide precise framework from which to derive accurately targeted and realistic crime control policies. Together with routine activity theory, it re-establishes the classical notion of the offender as a rational choice actor and informs contemporary strategies of situational crime prevention.

Conclusion.

At first glance, it seems as though criminology has come full circle and returned to its (arguable) classical roots, with the offender once again viewed as a rational actor. This is not altogether an accurate assessment. Rather the contemporary position appears to somewhat of a merger of the previous strains of criminological thought. The 'new criminologies of the self' take account of their classicist genes with the resurgence of rational choice as a determinant of criminality. However, their acknowledgment of the fallacy of a universal standard of rationality is nothing less than a concession to positivism. These criminologies also pay homage to their environmental ancestry by situating the subjectively rational choice actor within the spatio-temporal boundaries of the criminal event in an attempt to formulate a comprehensive and cohesive platform from which to propagate effective and efficient means of crime control.

This evolution of criminological theory brings us to the issue of Situational Crime Prevention – the umbrella prevention policy, which houses the use of target-hardening and surveillance strategies such as CCTV, advocated by routine activity and rational choice theories. These new criminologies dictate that effective situational crime prevention policy requires a crime-specific alteration of situations *'to increase the perceived effort to commit a crime, to increase the perceived risks, and to reduce the perceived benefits.'*⁵³

Rational choice theory and routine activity theory combine to offer those concerned with criminal justice and social control a more realistic and potentially effective artillery with which to manage the problem of crime.

*"Seeking to control crime is not the same as seeking to eliminate it, and this is therefore a criminology for the real world, and one that understandably finds favour therein."*⁵⁴

Just how it finds such favour will be explored in the next chapter, which looks at the emergence of Situational Crime Prevention as an approach to undermining offending and effectively curbing crime. Rational choice theory and routine activity theory undoubtedly set the seed from which this method of crime control has spawned.

⁵³ Vold *et al*, page 205.

⁵⁴ Gilling, page 65.

Chapter 3:

Crime Prevention Strategies designed to combat Rational Choice Offenders.

The Development of the Preventative Paradigm.

Up until the latter part of the twentieth century, the State and more specifically, the criminal justice system had enjoyed sovereign control over all things related to crime and criminal justice. The fall from grace, however, of positivism, rehabilitation and social reform ushered in the demise of this State domination. The criminal justice system was stretched beyond capacity and was still failing to make any significant inroads into the spiralling crisis. Social control seemed to drift out of the reach of the Sovereign, with the resulting void being filled by a new pessimism, aptly summed up by Martinson's catch phrase of '*Nothing works*'.⁵⁵ This marked a shift away from the utopian objective of identifying and eradicating the causes of crime to a more realistic and attainable goal of managing the 'inevitable' crime problem.

Consequently, prevention and security developed as a third sector in the field of crime control alongside policing and penalty.⁵⁶ According to Garland, this new sector occupies the overlap between the territory of the State and that of its citizens, with responsibility for crime control percolating through the State/citizen barrier. Garland attests that preventative ripples can be felt throughout the other two crime control sectors of policing and penalty. Prevention has been credited as becoming '*a major organising principle of almost all western criminal justice systems*' or at the very least '*a general government-led movement for the development of an organised set of activities under the general heading of crime prevention*'.⁵⁷ The reduction of crime is no longer to be seen as a mere corollary of the punishment of offenders, but as a deserving objective in its own right and one in which each citizen has a role to play.

Typologies of Crime Prevention.

Crime prevention may be the new and favoured weapon in the artillery against social disorder; however, there is no definitive consensus on what crime prevention actually is. Hughes explains that there are '*competing models and typologies, often of a limited theoretical nature, and seemingly driven by rather narrow technical concerns about the measurement and evaluation of 'success' or 'failure'*'.⁵⁸ He goes on to cite the recommendation of Ken Pease, a leading expert in the evaluation of preventative strategies, that we hesitate in searching for a universal definition of crime prevention and commonality among preventative measures since what we are actually looking at is '*a set of events*', whose common ground rests solely in their '*proscription by statute*'.⁵⁹ Put simply, if different crimes share little, then measures to prevent them are likely to follow suit.

⁵⁵ Hughes. *Crime Prevention, Community Safety, and Crime & Disorder Reduction*. In Muncie & Wilson. *Student Handbook of Criminal Justice & Criminology*. Cavendish Publishing. London. 2004. Page 172.

⁵⁶ Garland. *The Culture of Control: Crime & Social Order in Contemporary Society*. Oxford University Press. Oxford. 2001. Page 170.

⁵⁷ Hughes. *Understanding Crime Prevention: Social Control, Risk & Late Modernity*. Open University Press. Maidenhead. 1998. Page 12.

⁵⁸ Ibid, page 18.

⁵⁹ Hughes (1998), page 19.

In the absence of a clear consensus on what crime prevention should constitute, the next best thing is to look at the various strategies, which have been deemed to be different strains of crime prevention. Brantingham and Faust advocate the popular public health model of disease prevention analogy, under which distinctions may be most clearly drawn between different preventative measures and activities according to the varying stages along the development of criminal behaviour at which they are implemented.⁶⁰ The public health analogy consists of three levels:

- (a) *Primary prevention* addresses the potentially criminogenic conditions of the physical and social environment and seeks to impede the precipitation of crime by altering those conditions. Brantingham and Faust label this the ideal level of prevention, whereby the opportunity for criminal behaviour to materialise is removed.
- (b) *Secondary prevention* measures are aimed at discerning groups and individuals at particular risk of criminal involvement and intervening in their lives to prevent the realisation of that risk. Nipping more serious anti-social behaviour in the bud is the objective of secondary prevention following the identification of potential offenders. Here prevention reaches beyond criminal justice agencies and incorporates the involvement of wider educational, private and general social service agencies. Secondary prevention is closely associated with the causal approach to crime prevention and since the causes of crime may not be remediable, the scope for this level of prevention is limited.
- (c) *Tertiary prevention* involves intervention in the lives of actual, rather than potential, offenders in order to prevent their recidivism. Measures under this level of prevention are carried out by agencies within the criminal justice system, namely by prisons and probation services. The ideal is to reform the individual offender in such a way that he conforms to a socially acceptable standard of behaviour. However, where this is not possible, incapacitation of the offender is warranted to protect society. Tertiary prevention is even more restricted as regards the bigger crime prevention picture in that it operates more as damage control or containment rather than significant prevention.

Hughes presents another typology of crime prevention formulated by Tonry and Farrington.⁶¹ This classification distinguishes among four types of prevention: law enforcement, developmental, communal and situational prevention. Despite the acknowledgement of *law enforcement* as a preventative strategy, it is largely denied a comprehensive consideration as such. *Developmental prevention* seeks to excise the potential for criminality in individuals by focussing on risk factors and inhibitors identified through the study of human development. *Communal prevention* targets offending in residential communities by altering social facilitators of crime in those communities. *Situational prevention* looks to thwart the incidence of crime by altering the physical environment to reduce the opportunity for crime to occur while also increasing of the risks of detection and apprehension. It is this strain of crime prevention that is of interest here.

⁶⁰ Brantingham & Faust (1976), page 287-296. Brantingham & Faust accept that others have made various adjustments and added to this more basic version of the tripartite model.

⁶¹ Hughes (1998), pages 21-22 Though in theory, there may be various distinct classifications of preventative measures, in practice the divisions are quite fluid, especially in light of the fact many strategies may be socio-situational hybrids. For example, the distinction between situational and social prevention has become less defined in recent years with the merger of the purely situational approach with the social agenda to form a more general 'community safety' perspective. This has occurred more by default than intention through the recruitment of very diverse agencies in the implementation of the situational approach. A discussion of this variant of crime prevention is beyond the scope of the present work. See further Gilling *Crime Prevention: Theory, Policy & Politics*. UCL Press. London. 1997. Chapters 4 & 8. See also Crawford. *Crime Prevention & Community Safety: Politics, Policies & Practices*. Longman. London. 1998. Chapter 1.

The Emergence of Situational Crime Prevention:

The *new criminologies of everyday life*⁶² took the stage from the waning dispositional theories of positivism and the focus moved from treatment and rehabilitation to prevention, risk management and harm reduction. However laudable, positivism's search for the ultimate causes of criminality was realised to be nothing more than a fool's errand. Identifying what instigated criminal behaviour is one thing, but actually removing those triggers is quite another. The total alleviation of the many socio-economic and psychological precipitants of crime, even if they could be agreed upon, is an unrealistic and futile goal, as attempts during much of the twentieth century had shown. Growing frustration and disillusionment with established approaches to deal with crime as a mere symptom of society's vast ills instigated a change of tack in addressing the crime problem. As Crawford attests '*... the 'nothing works' pessimism has precipitated a criminological shift away from the offender as the object of knowledge towards the offence – its situational and spatial characteristics – as well as the place and role of the victim ...*'⁶³

Rational choice and routine activity theories filled the theoretical gap left by the emaciated dispositional approach. These perspectives work from the premise that crime is an everyday occurrence and offenders are nothing more than reasoned actors, who may suffer under particular pressures and are exposed to situational inducements and opportunities.⁶⁴ According to rational choice theory, the decision to offend is arrived at through a rational calculation of the perceived risks and effort involved set against the potential rewards of the criminal behaviour. Effective prevention under this theory would necessitate increasing the perceived risks and effort required and decreasing any potential rewards in order to alter this rational decision-making process.⁶⁵ Proponents of rational choice have distilled Classicism's initial abstract and simple human decision-making model to take account of the fact that rationality is far from a universal standard, but is limited by time, the potential offender's intelligence, cognitive ability and available information and criminal decision-making is a dynamic process involving a series of decisions rather than a once-off decision to offend.⁶⁶

Crawford asserts that the likes of Clarke and Felson have lent weight to the trend of addressing the situational and spatial features of crime by drawing associations with routine activity and rational choice theories.⁶⁷ Routine activity theory explains, quite competently, that variations in crime rates correspond with changes in the routine activities in that particular area. Consequently, by altering the routine activities in an area and, more specifically, by discouraging the spatio-temporal convergence of a motivated offender, a likely target and the absence of a capable guardian, the opportunity to offend will have been thwarted.

⁶² Garland. *The Limits of the Sovereign State: Strategies of Crime Control in Contemporary Society*. (1996) 36(4) British Journal of Criminology 445 at page 450.

⁶³ Crawford (1998), page 35.

⁶⁴ Muncie. *Contemporary Criminology, Crime & Strategies of Crime Control*. In Muncie & Wilson (Eds). *Student Handbook of Criminal Justice & Criminology*. Cavendish Publishing. London. 2004. Page 11.

⁶⁵ Potential victims may also be considered as rational choice actors, who are free to choose to implement measures to maximise their own security and safety. With choice comes responsibility. Situational crime prevention apportions responsibility to potential victims for their vulnerability to crime. Responsibility carries with it the potential for blame on failure. This is indicative of the overall decentralisation of the crime control mandate from the State to the individual. See further Crawford (1998), page 72 and Garland (1996).

⁶⁶ Cornish & Clarke. *Understanding Crime Displacement: An Application of Rational Choice Theory*. In Henry & Einstadter (Eds.) *The Criminology Theory Reader*. New York University Press. New York. 1998. Page 54.

⁶⁷ Crawford (1998), page 79.

Together with situational crime prevention, rational choice theory and routine activity theory form the three prongs of what Garland has christened *the criminologies of everyday life*,⁶⁸ 'for which crime is seen as a risk to be calculated and hence avoided or managed, rather than a moral abnormality in need of explanation.'⁶⁹ Crawford classes situational crime prevention as the practical element of these related criminologies and suggests that routine activity and rational choice theories may have developed subsequent to the practical approach to give it a theoretical basis and conceptually bolster its pragmatic propositions.⁷⁰ He identifies a number of hypotheses upon which situational crime prevention rests:

- (a) Crime is largely opportunistic in nature.
- (b) Individuals are rational choice actors.
- (c) Situational features have a greater potential for change than individuals.
- (d) Deterrence operates most effectively through the certainty of detection, rather than the severity of punishment.

Rather than establishing bare theoretical suppositions like their predecessors, the new *criminologies of everyday life* incorporate a strong empirical basis upon which to build their preventative proposals. Much of the groundwork for these recent perspectives was laid by the British Home Office Research and Planning Unit during the late 1970s and early 1980s. Previous dispositional theories advocated addressing the causes of crime and individual tendencies towards criminality. The social reforming and rehabilitative strategies deduced from these propositions had proven ill-equipped to tackle the existing crime problem and, even more dishearteningly, were utterly impotent in the face of spiralling crime rates in the era of post-war affluence. Home Office researchers took heart in the ideas of 'defensible space' and the spatio-temporal analysis of crime incidence and opted to explore the potential for reducing the opportunities for crime by manipulating its setting rather than attempting to eliminate its causes.⁷¹ The propagation of this new attitude towards crime prevention was greatly facilitated by patronage of the Home Office and its well-funded and prestigious army of researchers and its resultant subsumption into government policy.⁷²

An Explanation of Situational Crime Prevention:

As a consequence of the emergence of this situational perspective, the new crime control agenda focussed on practical and targeted measures to alter the physical environment and promote processes of informal social control. At the heart of this new agenda was the relationship between the offence and its situation, rather than between the offender and their environment. In other words, the situational approach advocated a crime-specific strategy.

In short, it is the policy of situational crime prevention to alter the situational features of a criminal opportunity in order to minimise it and increase the prospect of detection. This is achieved by manipulating the principle elements in the potential offender's 'rational' cost-benefit assessment of the opportunity, namely the effort required, the risks involved and the possible rewards entailed. Situational measures tend to take the form of (a) effort increase, (b) risk increase or (c) reward reduction. Often, such preventative techniques are combinations of these forms.⁷³

⁶⁸ Garland (1996), page 450.

⁶⁹ Crawford (1998), page 80.

⁷⁰ Ibid page 69.

⁷¹ Hughes (1998), page 60.

⁷² Ibid, page 61.

⁷³ Crawford (1998), pages 66-68.

Increasing the effort involved in committing a crime primarily involves 'target hardening', in other words providing additional physical security to the target of the offence, be it property or a person. Security locks and steering column locks are examples of measures undertaken to reinforce protection against an offender gaining access to a property or making off with a vehicle. While such initiatives may not completely foil criminal endeavours, they may combine with other risk-increasing or reward-reducing measures to tilt the rational cost-benefit calculation against targeting that property.⁷⁴ Quite often the success of such target-hardening measures is dependent on the diligence of property owners and residents and this diligence is similarly commensurate with the risk under which the target suffers.⁷⁵

Increasing the risks involved in offending entails utilising methods to accentuate the chance of detection. Technology, in the form of CCTV and burglar alarm systems, is often employed under this category of situational prevention. Street lighting and environmental design contribute to the effectiveness of 'natural' surveillance, by which the observing potential of civilians is invoked. Involving the local community in preventative measures is indicative of the promotion of informal social control and the divesting of the State's core responsibility for control. Screening entry and exit points and the tagging of merchandise are other examples of risk-increasing measures.

The prospect of being seen in the course of offending is possibly the most menacing threat taken into account by the potential offender. The deterrent power of surveillance rests less in the actual risk of being observed and more in the perceived risk.⁷⁶ Mayhew acknowledges that the effectiveness of surveillance is contingent upon the class of witness. He discusses the impact of observation by those with a law enforcement mandate, such as security personnel and the police, residents and those employed in public places, such as bus conductors and receptionists. Even though they may be specifically employed and trained to observe and thwart offending, Mayhew concedes that the weak deterrent element of policing is illustrated by the fact that offenders are seldom apprehended in the course of offending.⁷⁷ In regard to surveillance by residents, while they may have a vested interest in paying heed to suspicious presences and activity in their locality, the fact that residential crime occupies such a small proportion of the overall crime risk means that surveillance by residents, be it formal (through technology) or natural, does not feature high on the agenda in relation to expenditure and effort.⁷⁸ Surveillance by employees in a more unofficial capacity has been undervalued, according to Mayhew, given the frequency of crime in such public places as underground stations, shops and parks. Mayhew contends that the susceptibility of these places to a higher risk of offending warrants greater research into and financing of surveillance aids and training to optimise the capacity for employee surveillance.

Reducing rewards often means devaluing the targeted property for the offender. Property marking not only increases the detection risk, but also undermines market price of the stolen item. The true owner of the property is more easily traced, making it less attractive for black market dealing. Similarly, car

⁷⁴ Templeman & Doherty. *Criminology*. Old Bailey Press. London. 1997, page 128. Templeman & Doherty cite the 1984 survey of burglars by Bennett & Wright, which revealed that of the respondents only 10% would definitely be put off from burgling a house with security locks, while 20% said they might be so deterred.

⁷⁵ Ibid, page 129. In two English studies during the 1980s, one of which was undertaken by the Home Office (1986), 20% of burglarised properties were entered via unlocked doors or windows. See also note 24 below and the accompanying text.

⁷⁶ Mayhew. *Crime in Public View: Surveillance & Crime Prevention*. In Brantingham & Brantingham (Eds). *Environmental Criminology*. Waveland Press. Illinois. 1991. While the potency of surveillance may be in the threat it is perceived to pose rather its capacity to be a real menace, it is difficult to gauge how much weight a potential offender will attribute to a particular 'perceived' risk at any given time during the dynamic process of criminal decision-making. Mayhew accepts that his explanation of the value of surveillance in crime prevention may be based more on speculation regarding offender perceptions rather than on a firm knowledge thereof. Page 120-122.

⁷⁷ Mayhew (1991), page 122. This is largely the extent to which Mayhew addresses the role of professional surveillance.

⁷⁸ Ibid, pages 123-128.

stereos and vehicles themselves have inbuilt immobilisers to prevent or at least hamper unauthorised use. Target removal is a more extreme version of this form of situational prevention. This involves removing targets from environments accessible to potential offenders. Templeman and Doherty illustrate a variation of target removal suggested by Hough *et al*, which amounts to the immediate repair of damage so as not to inspire further attacks.⁷⁹

Felson recognises another element in situational prevention, which he attributes to Clarke's deduction of the types of situational prevention initiatives from a potential offender's decision-making process. *Increasing guilt* may steer individuals less resolved in their potential criminality away from offending by way of controlling disinhibitors such as alcohol, removing excuses often used to offset guilt and facilitating compliance with rules. He explains that the inducement to offend will be vitiated, where the sum of the guilt, the effort and the risks involved outweigh the potential reward attached to the target.⁸⁰

Having looked at the various objectives behind the many situational crime prevention measures invoked to combat the potential criminality of the rational choice actor, it now seems apt to address a number of individual initiatives to elucidate how such situational strategies have materialised.

Examples of Situational Crime Prevention Strategies.

What follows is a brief collection of examples of diverse situational measures utilised to target different types of crime to varying degrees of success.⁸¹

British gas suicide⁸² – During the 1960s and 1970s, carbon monoxide was removed from domestic gas supplies in Britain. Clarke and Mayhew looked back at the impact of this development on suicide levels and the possible implications for criminology. Suicide rates throughout Europe had risen significantly between 1963 and 1975. This was with the exception of England and Wales, whose annual suicide rate declined from almost 6,000 to almost 4,000. Prior to this, 40% of all suicides were attributable to gas intoxication. Following the removal of the more toxic element, suicide by gas was virtually eliminated. This development was not accompanied by an increase in the number of suicides by other means, suggesting that there was no significant displacement. This supports Clarke and Mayhew's contention that displacement is not inevitable, but rather contingent upon a commonality of choice-structuring properties between the different offences.⁸³ Suicide by gas intoxication was painless, clean and easily accessible. These features may have prompted those, who opted for that method of suicide to so decide and the absence of these choice-structuring properties in other suicide methods meant they did not choose to commit suicide by another means. Though this was not an overt crime prevention strategy, its consequences lend weight to the theory that by altering the opportunity-structure around certain

⁷⁹ Templeman & Doherty (1997), page 129. See also Wilson & Kelling. *Broken Windows*. (1982) The Atlantic Monthly. 29. Studies have shown that vandalism left unaddressed fosters further attacks, as it suggests that 'no one cares'. On the other hand, where vandalism is quickly addressed and remedied, a message is sent out decreeing that such behaviour is not tolerated. See also note 48 below and the accompanying text.

⁸⁰ Felson. *Crime & Everyday Life*. (2nd Ed.) Pine Forge Press. London. 1998.

⁸¹ Crawford cautions that it is often the case that the findings of the research into these initiatives are '*the product of the methodology that gives rise to them.*' In other words, the approach of the research can influence the findings. The time span of the study, the type of data collected, its source and so on can have significant repercussions on the findings. Crawford (1998), page 84.

⁸² Ibid, page 85.

⁸³ For a more extensive discussion of 'choice-structuring properties' and their implication for displacement see also Cornish & Clarke. *Understanding Crime Displacement: An Application of Rational Choice Theory*. In Henry & Einstadter (Eds.) *The Criminology Theory Reader*. New York University Press. New York. 1998.

behaviour, that behaviour can be controlled or even avoided without major displacement implications. This seemed all the more potent given that suicide is often seen as '*deeply motivated*'⁸⁴ behaviour.

Crawford cites similar studies of gas detoxification and suicide rates in the Netherlands. His findings were not consistent with those of Clarke and Mayhew. He goes on to refer to subsequent studies on British areas, whose suicide rates reflected this decline, even though their gas supplies were not detoxified until much later. The suggestion being that the drop in suicides was not entirely attributable to the removal of carbon monoxide from domestic gas supplies.⁸⁵

Motorcycle theft & helmet legislation⁸⁶ – Concerns over the safety of motorcycle users led to the introduction of legislation compelling the wearing of protective helmets in West Germany. Mayhew credits this legislation with the reduction in motorcycle thefts by 60% during the period from 1980 to 1986. It was thought that the requirement of wearing a helmet would deter the opportunistic motorcycle thief in that his risk of being detected for the theft increase by the clearly observable fact of his not wearing a helmet. Similar research on the impact of comparable legislation in the Netherlands and England in the 1970s yielded consistent conclusions. Despite claims by Mayhew that no significant displacement occurred, Gabor argues that there were noticeable increases in car and bicycle thefts probably due to displacement during the initial period of the helmet legislation.⁸⁷

Car theft & steering column locks.⁸⁸ – In West Germany in 1963, legislation was passed making it mandatory for all cars, new and old, to be fitted with steering column locks. A 60% reduction in car theft was subsequently recorded. Similar legislation was introduced in Britain in 1971 requiring all new cars to incorporate steering column locks. While new cars were hardened as targets, older cars became more vulnerable to the theft. Crawford terms this '*regressive displacement*', whereby the cost of offending is transferred to those already less capable of carrying it.⁸⁹ He also draws attention to the fact that steering locks did not fare so well in reducing car thefts in the United States, possibly because they were not of the same standard. Felson lists a number of other situational features to combat vehicle theft. These include reinforced window glass, audible reminders to remove keys, central locking and immobilisers.⁹⁰

CCTV⁹¹ – Home Office funded research was undertaken by Poyner in the early 1990s on the effect CCTV had on theft from and theft of vehicles in the car parks of the University of Surrey. The former type of theft had been more prevalent and appeared to be more adversely affected than the theft of cars. The incidence of theft from vehicles dropped from 92 the year prior to CCTV installation to 31 the year of the installation. Crawford concurs with Poyner's explanation that the presence of a manned security post monitoring campus entry and exits restricted unauthorised access to vehicles and contributed to a lower rate of vehicle theft.

Crawford notes Tilley's caution regarding CCTV. Quantifying the effectiveness of CCTV in preventing crime is a very difficult task, particularly where it coincides with other preventative measures. However, it appears that CCTV has a synergistic preventative quality when partnered with other such initiatives. The assessment of the displacement consequences of CCTV is similarly problematic. Tilley also warns

⁸⁴ Crawford (1998), page 85.

⁸⁵ Ibid, page 86.

⁸⁶ Ibid.

⁸⁷ Crawford (1998), page 87.

⁸⁸ Clarke. 'Situational' Crime Prevention: Theory & Practice. In Muncie, J (Ed.). Student Handbook of Criminal Justice & Criminology. Cavendish Publishing. London. 2004. Page 141.

⁸⁹ Crawford (1998), page 87-88.

⁹⁰ Felson (1998), page 168.

⁹¹ Crawford (1998), pages 88-89. This particular situational measure will be dealt with much more extensively in subsequent chapters.

that the longevity of CCTV's preventative potency is dependant not only on the presence of security personnel in front of the screens, but also on its successful utilisation in the apprehension of offenders.

Crawford also notes studies undertaken on CCTV usage in the London underground.⁹² He mentions Burrows' conclusions that the implementation of CCTV surveillance in four underground stations resulted in the spatial displacement of thefts and robberies to the other fifteen stations in the area, with the seven more proximate stations faring worst. He also alludes to Brown's 1995 appraisal of three town-centre CCTV systems. Brown deduced that CCTV's deterrent element is short-lived and it in fact had little effect on the incidence of crimes against the person, apart from facilitating a more rapid response and reducing the seriousness.

Vold *et al* postulate that the success of deterrence rests in increasing the certainty of detection, apprehension, conviction and ultimately punishment.⁹³ The capable guardian that is the properly maintained and manned CCTV system is a foremost tool in the proliferation of certainty of detection.

Improved street lighting⁹⁴ – Crawford uses Painter's two London street lighting projects to illustrate how fear of crime and perceptions of intimidating behaviour can be alleviated. People felt more at ease on the streets, which consequently became more frequented. Painter resolved that good street lighting could revitalise public areas, foster natural surveillance and aid the identification of assailants. Crawford, however, questions Painter's empirical basis for such conclusions based on the methodology employed in the studies. He criticised the short time span during which the studies were undertaken and suggests that perhaps the improved perceptions of residents and pedestrians of crime in the area are just that – perceptions, rather than accurate assessments of the actual effect the improved lighting had on crime. Crawford contemplates that while studies have implied that street lighting may have an insignificant, if any, effect on crime, it does seem to impact upon the public's fear of crime and arguably, the fear of crime is as destructive as crime itself. Gilling asserts that *'fear of crime is now considered to be an important rationale for preventative intervention in its own right'*⁹⁵, as it *'extends beyond the bounds of actual criminal victimisation to include also potential victims, so that overall it reaches the status of a quite general social problem.'*⁹⁶

Kirkholt Burglary Project.⁹⁷ – During the mid-1980s, the Home Office financed a project to combat burglaries in the Kirkholt housing estate. In 1985, 25% of houses on the estate were targeted. The research showed that the chance of falling victim to subsequent burglaries was quadruple the likelihood of suffering the initial burglary. Based on this information, victimised residences became the focal point of preventative measures in the vicinity. Physical security was upgraded. Coin-fed utility metres were removed and neighbourhood watch programmes huddled around the targeted residence. Revictimisation of these properties fell by 80% following the initial application of the programme of target hardening, target removal and improved surveillance. Displacement did not appear to be an issue and in fact the benefits of this situational package seem to have diffused beyond the focal residence. Crawford highlights a difficulty in this comprehensive preventative project. The combination of a number of measures makes ascertaining the relative effectiveness of each measure and whether their overall impact was synergistic or cumulative exceptionally difficult.

⁹² Ibid, page 89.

⁹³ Vold, Bernard & Snipes. *Theoretical Criminology*. (5th Ed.) Oxford University Press. Oxford. 2002. On the other hand, they assert that *'further increases in the severity of punishments probably will have no impact on crime reduction and, for various reasons, may actually increase crime.'* Page 208.

⁹⁴ Crawford (1998), pages 91-92.

⁹⁵ Gilling (1997), page 186.

⁹⁶ Ibid, page 187.

⁹⁷ Crawford (1998), page 94-98.

Other situational measures:

- Phone entry systems operate to reinforce notions of ‘defensible space’ within residences. This may have the adverse impact of accentuating the fear of crime among residents by encouraging the perception that strangers are inevitable mal-intentioned.⁹⁸
- Road closures along routes frequented by prostitutes and their clientele have been used to discourage kerb-crawling. It is thought that this may have the added benefit of alleviating the problem of other crimes committed by or attracted by prostitution, such as car theft. It may also actually worsen the problem by facilitating prostitutes sitting on bollards and solicit drivers forced to slow down.⁹⁹
- The presence of a conductor on double-deck buses deters vandalism; however this may coincide with increased assaults on conductors.¹⁰⁰
- Electronic tagging, frequent stock inventories and even alternating the directions of hangers on racks can reduce retail theft.¹⁰¹
- As regards subway graffiti, a ‘broken windows’ policy is often followed, whereby the offending material is cleaned off immediately.¹⁰² The Stockholm Metro took a novel approach in reducing graffiti. Artworks were officially commissioned for the metro stations. This hindered effective graffiti, as did having highly polished and very rough surfaces.¹⁰³
- To combat violence at sports events and in bars, buses may be arranged to arrive shortly before the event commences, thereby avoiding the situation of multitudes of intoxicated supporters mulling around before kick-off. Also rather than using glass containers for drinks, plastic or more resilient containers are dispensed.
- Another form of alcohol-related behaviour, which has seen intervention by situational crime prevention measures, is bar-hopping.¹⁰⁴ The average weekend night saw more than six thousand people descend on Geelong, the second largest city in the Australian state of Victoria, to socialise and consume alcohol. The evening would normally begin with beer purchased from a liquor store and consumed in the car, before moving from bar to bar to avail of their specials. Females were given free drinks in the hopes of drawing more males. When the specials ran out, it was back to the car for more beer. Empty bottles became missiles to be hurled at people and property. Concerned that their specials were undermining their profits and that their staff were in danger, pub owners consulted with local police and the liquor board and formulated ‘The Accord’. This comprised of a number of policies to discourage pub-hopping, which included the cessation of specials and happy hours, the institution of cover charges after 11pm, the denial of free re-entry and the prohibition of open containers on the street. Having evaluated ‘The Accord’, Felson *et al* found it proved most effective in stopping almost all bar-hopping and significantly reducing violence.

The above list of situational measures is far from exhaustive, but provides an overall impression of the various initiatives employed to combat the rational choice offender and their general effectiveness.

⁹⁸ Crawford (1998), page 91.

⁹⁹ Ibid, page 92-94.

¹⁰⁰ Felson (1998), page 167-168.

¹⁰¹ Ibid, page 169-170.

¹⁰² See note 25 above.

¹⁰³ Felson (1998), page 170-171.

¹⁰⁴ Ibid, page 171-176. In relation to bar-hopping, see also Felson, Berends, Richardson & Veno. *Reducing Pub Hopping & Related Crime*. In Homel. (Ed.) Policing for Prevention: Reducing Crime, Public Intoxication & Injury. Crime Prevention Studies, Volume 7. Criminal Justice Press. New York. 1997.

A Critical Appraisal of the Situational Crime Prevention Measures.

One of the main criticisms of situational crime prevention is displacement. This provides the primary means of attack by advocates of dispositional theories of positivism. Such critics would maintain that situational measures merely deflect the focus of the criminally-predisposed offender to another target. Barr and Pease identify displacement as *'an albatross around the neck of purposive crime prevention'*.¹⁰⁵ Clarke explains that the chance of displacement occurring depends on the category of the offending.¹⁰⁶ He contends that in the case of opportunistic crimes, merely increasing the level of difficulty is enough to significantly reduce the likelihood of offending. With regard to professional criminals, he concedes that their attention will more than likely just be deflected by situational measures to another more accessible target. Crawford echoes this, when identifying the *'theoretical conundrum for situational approaches: those most likely to conform to a rational choice model of behaviour – the self-maximising professional criminals – are exactly the group of offenders most likely to be displaced'*.¹⁰⁷ Clarke also admits that most crimes do not fall into either the professional or the opportunistic category. They are perpetrated by those with a deliberate intention, who seek out a suitable opportunity in which to realise this intention. Clarke acknowledges that, along with professionally perpetrated crime, this category of offence is likely to be displaced.¹⁰⁸

On a more positive note, Cornish and Clarke are of the opinion that displacement is by no means an inevitable side-effect of situational crime prevention initiatives. They argue that, in actual fact, it is contingent upon the choice-structuring properties. In other words *'the readiness with which the offender will be prepared to substitute one offence for another will depend upon the extent to which alternative offences share characteristics which the offender considers salient to his or her goals and abilities'*.¹⁰⁹ Gilling even suggests that displacement is not necessarily a negative aspect of situational prevention.¹¹⁰ *'Malign'* displacement is displacement to a more serious crime or to an area already suffering heavily from offending or to an area less able to afford security measures. There is also, however, the possibility for *'benign'* displacement, which involves displacement to a less serious offence or to non-criminal activity (*desistance*), or to an area that can cope.¹¹¹ It also entails, as Gilling puts it, *'spreading the burden of victimisation'*.¹¹² According to him, *'displacement is not a sound basis on which to reject situational crime prevention'*.¹¹³

Another contention against the merits of situational prevention is that it only addresses certain types of offence, namely property crimes. Crawford explains that it is not equipped to deal with offences perpetrated behind closed doors¹¹⁴, while Hughes professes that the exclusion of corporate crimes and crimes by governments from its ambit *'is surely tied to the fact that its agenda has been largely set by the demands of its patron, either the state or private corporation'*.¹¹⁵ Situational prevention proponents adhere to the principle that effective crime prevention measures are crime-specific in focus. The approach does not claim to be a panacea to the entire crime problem.¹¹⁶ If it does manage to put a

¹⁰⁵ Gilling (1997), page 182.

¹⁰⁶ Clarke (2004), pages 140-141.

¹⁰⁷ Crawford (1998), page 83.

¹⁰⁸ Clarke (2004), page 140.

¹⁰⁹ Cornish & Clarke (1998), page 47.

¹¹⁰ Gilling (1997), page 184.

¹¹¹ Crawford (1998), page 83.

¹¹² Gilling (1997), page 184

¹¹³ Ibid, page 184.

¹¹⁴ Crawford (1998), page 98.

¹¹⁵ Hughes (1998). Page 68-69.

¹¹⁶ Gilling (1997), page 185.

significant dent into a certain proportion of the crime problem, then its failure to be all encompassing is hardly a reasonable criticism, especially since there has been no such magic formula thus far.

Many evaluations of the various situational initiatives have been limited in their time span, making it difficult ascertain the longevity of their impact. Crawford recognises that the nature of crime and criminals is dynamic requiring preventative measures to adjust. He accepts that the ever-improving technology employed to combat ever-evolving criminality may often be used as a double-edged sword against its primary objectives.¹¹⁷ This resonates with what Cohen and Felson said in regard to the symbiotic relationship between legitimate and illegitimate activities and behaviour.¹¹⁸

Situational crime prevention strategies have also been condemned for promoting an over-reliance on technology, which may cause us to let our guard down. But even if street lighting, for example, makes little actual preventative inroads in relation to the vast crime problem, what is the harm if our faith in it frees us from our own perceptions of intimidation. Crawford cautions that *'technology is more likely to have enduring effects if it is conceived of as an enhancement of human activity rather than as a substitute for it.'*¹¹⁹

Despite Clarke's claims that situational measures are largely unobtrusive, the fact remains that an *'enduring unease'* surrounds them.¹²⁰ Concerns over who monitors the monitors and possible misuse of collected information adds to the distrust of Big Brother in the CCTV viewing room. Gilling speaks of *'an almost pathological mistrust that we have of surveillance, which is enhanced when it is embodied in technology rather than embedded in social life, and especially when it is perceived as being conducted on behalf of the state.'*¹²¹ This together with the argument that many situational measures promote social exclusion and generate an *'anti-communitarian fortress mentality'*¹²² are common among critics of the approach. Arguably, an unreasonable fear of crime may be encouraged by the proliferation of surveillance and target-hardening. An over-reliance on and a normalisation of situational measures may lead to the destruction of, what Crawford terms, *the framework of culturally important interpersonal trust relations.*¹²³ This merits concern given that fear of crime seems to have become a significant social problem in its own right.¹²⁴

Conclusion.

All of this said, as Crawford asserts *'situational crime prevention clearly represents an example of what Garland (1994) refers to as the 'governmental' project within criminology, its gaze firmly focussed on the administrative task of crime control and management.'*¹²⁵

The preventative paradigm emerged in response to the failure of the State and its criminal justice agencies to reign in the crime problem through its established approaches. Rhetoric about how crime could be banished by addressing the causes of crime lost favour following decades of futility. Facing crime prevention as a worthy goal in itself rather than a coincidental extension of the traditional criminal

¹¹⁷ Crawford (1998), page 99. Technological advances may assist offenders as much as they inhibit them.

¹¹⁸ Cohen & Felson. *Social Change & Crime Rate Trends: A Routine Activity Approach.*

(1979) 44 American Sociological Review 588. Page 605.

¹¹⁹ Crawford (1998), page 100.

¹²⁰ Gilling (1997), page 186.

¹²¹ Ibid, page 189.

¹²² Ibid, page 186.

¹²³ Crawford (1998), page 101.

¹²⁴ Gilling (1997), page 186.

¹²⁵ Crawford (1998), page 99.

justice practices of law enforcement and punishment was the first step in re-infusing optimism in the crime predicament.

Situational crime prevention took centre stage under the '*notoriously woolly notion of crime prevention*'¹²⁶ with its evidence-based and pragmatic response. Its methods embody a common-sensical approach to the rational choice offender by manipulating the deciding factors in his rational calculation of a potential criminal opportunity. It abandons the traditional guise of theoretical pontificating in favour of a straightforward practical and realistic approach. While its initiatives may not be perfect, they do get results in many cases, even if it is to varying degrees. It may be little more than a matter of fine-tuning and combining them with each other and more social preventative measures¹²⁷ to tailor a holistic preventative package designed for the particular crime problem of a particular area. Even though situational crime prevention initiatives are shaped to target specific crimes, their potential for a 'diffusion of benefits' should not be overlooked.¹²⁸

Hughes sums it all up in saying '*situational crime prevention is arguably now the most powerful and hegemonic discourse of crime prevention in the late twentieth century.*'¹²⁹

The next chapters will focus on the emergence of CCTV as arguable the predominant situational crime prevention strategy and explore its performance in Britain and Ireland.

¹²⁶ Hughes (1998), page 24.

¹²⁷ For example, neighbourhood watch. See Gilling, chapter 8 and Crawford, chapter 1 in relation to the evolution of the 'community safety' method of crime prevention. This is, arguably, a hybrid of situational and social crime prevention.

¹²⁸ Crawford (1998), page 84. Crawford defines a diffusion of benefits as occurring where the '*effects of a situational measure may extend beyond the targeted offences or areas, thus heralding more general benefits of crime reduction*' and suggests it is '*tantamount to the inverse of displacement.*'

¹²⁹ Hughes (1998), page 63.

Chapter 4:

CCTV: Its Use – Success or Failure from a Comparative Perspective.

Introduction:

With the fall of the Utopian desire to rid society of crime through the identification and excision of criminal inclinations, a more realistic and pragmatic approach took hold. Risk management and the containment of society's inevitable ill of offending became the order of the day. This, together with the delegation of partial responsibility for crime control to the public itself, ushered in the diversion of attention from the offender to the situation of the offence. Situational crime prevention has therefore come into its own as the predominant means to tackle the rational choice actor and alter the routine activities of the spatio-temporal situation so as to limit and control crime. With little doubt, closed circuit television has become the favoured situational crime prevention strategy.

What is to follow is a brief glance at surveillance, in general, as a mechanism of social control and order and an exploration of the rise of closed circuit television, in particular, as the most prevalent form of surveillance in modern society. The sheer pervasiveness of CCTV schemes suggests it holds the throne of situational crime prevention. This reality begs the question of whether CCTV can competently wear that crown.

The Emergence of the Risk Society, Actuarial Justice and their Consequent Entourage.

Now that crime is viewed as an inevitable fact of life, risk management is the driving agenda in crime control and with that has emerged what is known as the 'Risk Society'. In this risk society, policing takes on a new forward-looking perspective, becoming '*increasingly proactive rather than reactive*'¹³⁰ with a view to risk assessment and management. But even where policing is reactive, it involves the collection of information with a view to future risk assessment. Surveillance feeds directly into this risk society by facilitating the accumulation of information with which to assess the level of risk posed. With the dawn of the digital age and the combination of digital databases with ever-advancing technology, such as automated surveillance, facial and vehicle recognition and 'intelligent scene monitoring' software, surveillance in the risk society has reached an entirely new stratosphere of capability.¹³¹ Together with the driving preoccupation with risk, virtually everyone falls within the realm of suspicion and virtually everyone may be treated accordingly.

*'What is important here is that the emphasis on risk makes everyone a legitimate target of surveillance: 'Everyone is assumed guilty until the risk profile assumes otherwise.'*¹³²

¹³⁰ Norris & Armstrong. *The Maximum Surveillance Society: The Rise of CCTV*. Berg. Oxford. 1999. Page 24.

¹³¹ For further discussion of the more recent technological advances see Norris. *From Personal to Digital: CCTV, the Panopticon and the Technological Mediation of Suspicion and Social Control*. In Lyon (Ed). *Surveillance as Social Sorting: Privacy, Risk & Digital Discrimination*. Routledge. London. 2003. Pages 268 – 278. Also for a discussion of the consequent development of the phenomenon of the 'digital persona' or the 'data subject', see McCahill & Norris *Literature Review* (Working Paper No. 2), 2002 in *Urbaneye – On the Threshold to Urban Panopticon? Analysing the Employment of CCTV in European Cities & Assessing its Social & Political Impacts*. RTD-Project (September 2001-February 2004), 5th Framework Programme of the European Commission. Available at <http://www.urbaneye.net>. Pages 5-6.

¹³² Norris & Armstrong (1999), page 24.

This risk society is accompanied in its emergence by a new, often ambivalent, style of crime control, fashioned by economic reasoning and drawing upon the *new criminologies of everyday life*.¹³³ Garland introduces a two pronged approach to the crime control predicament facing modern governments. The first branch of this approach involves the State attempting to reassert control with 'zero tolerance/tough on crime' type policies. The second branch is what Garland terms a '*responsibilization strategy*',¹³⁴ whereby responsibility for crime control is delegated to citizens. Surveillance and CCTV in particular, can be placed to fit comfortably within this new governmental style. On one side, we have the likes of open street CCTV complimented by an increasing number of databases operated by the police and on the other, we have private CCTV installations operated by civilian organisations and institutions to protect their own domain. Both privately and officiously administered surveillance enhances the capabilities of its operators to assess risk and categorise and manage its subjects accordingly. Feeley and Simon term this recent approach the 'New Penology', which focuses on '*techniques for identifying, classifying and managing groups assorted by levels of dangerousness*'.¹³⁵ According to them, this increasingly actuarial justice and its consequent interventions, such as preventative detention and offender profiling, are based on risk assessment with the hope of leading to containment of the risk posed and the effect of putting a control on the crime predicament. Mass surveillance is but another intervention, which feeds off and feeds into the Risk Society.

Surveillance as a Social Control Mechanism.

Mass surveillance and CCTV in particular cater for this actuarial justice approach to crime control. It is in fact an implement for what Garland terms '*supply side criminology*', which aims to temper the routine activities of everyday life '*by limiting the supply of opportunities, shifting risks, redistributing costs and creating disincentives*'.¹³⁶ But just how is it that surveillance operates as a social control mechanism?

Norris and Armstrong describe the power of vision and how it regulates and is regulated in the context of social interaction.¹³⁷ They tell how, in its simplest form, the 'gaze' operates within certain unwritten and fundamental rules of social interaction. The look regulates and is regulated by the tender balance of order and acceptable behaviour in social interaction. There is an equality between the parties that allows for and maintains this delicate balance. Each look invites a proportionate response. This equality is facilitated by the co-presence of the parties, which permits an insight into the motivations of the 'gazer' and the furnishing of a measured reply. The same reciprocal exchange does not occur between the watcher and the watched, when the conduit of the 'gaze' becomes the lens of a camera. The watcher is shielded from the questioning and challenging by the watched – watching becomes an act of unilateralism.

There is more, however, to the use of CCTV surveillance than merely the ability to observe, even on a grand scale. Embedded within the concept of mass surveillance is the idea that the 'surveiller' wields a significant degree of power and influence over the 'surveilee'. To capture the essence of the power-vision core of surveillance, one must look to Jeremy Bentham's 19th Century architectural design for a

¹³³ Garland. *The Limits of the Sovereign State: Strategies of Crime Control in Contemporary Society*. (1996) 36(4) British Journal of Criminology 445 at page 450.

¹³⁴ Garland (1996), page 452.

¹³⁵ Feeley & Simon. *Actuarial Justice, the Emerging New Criminal Law*. In Nelken (Ed). *The Futures of Criminology*. Sage Publications. London. 1994. Cited in Norris & Armstrong (1999), page 25 and McCahill & Norris (2002), page 8.

¹³⁶ Garland (1996), page 451.

¹³⁷ Norris & Armstrong. *Introduction: Power & Vision*. In Norris, Moran & Armstrong. *Surveillance, Closed Circuit Television & Social Control*. Ashgate. Aldershot. 1998. (Norris & Armstrong (1998)).

revolutionary new prison – the Panopticon¹³⁸, which is described in the words of Michel Foucault as consisting of:

‘at the periphery, an angular building; at the centre, a tower; this tower is pierced with wide windows that open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; they have two windows, one on the inside, corresponding to the windows of the tower; the other on the outside, allows the light to cross the cell from one end to the other, all that is needed, then, is to place a supervisor in a central tower and to shut up in each cell a madman, a patient, a condemned man or a schoolboy. By the effect of backlighting, one can observe from the tower, standing out precisely against the light the small captive shadows in the cells of the periphery. They are like so many cages, so many theatres, in which each actor is alone, perfectly individualised and constantly visible.’¹³⁹

At all times, the inmate is seen without ever seeing, creating a relationship of dominance and subordination at the outset. Simon contends that *‘this seeming combination of structurally imposed visibility (one is always seen) and the perceptual uncertainty (but one cannot see) has led many commentators to focus on the centrality of vision in the production of social control.’*¹⁴⁰ The true capacity of surveillance to control lies in its ability, or rather potential, to coerce. Norris and Armstrong reflect on Lukes’ three dimensions of power, when illustrating the three levels at which this panoptic power may be deployed. The first is the ability of the watcher to enforce conformity by launching a *‘direct and authoritative response to observable non-conformity.’*¹⁴¹ The second is the capacity to deter non-conformity through the fear of detection and the threat of mobilisation of that authoritative response. The third is the nurturing of conformity at a most basic level by the subconscious guiding of behaviour towards conformity, thereby excising the potential for deviance in the first instance. According to Foucault,¹⁴² the overall effect of the Panopticon should be that the ‘inmate’ is conditioned to conform through the perceived continuity of surveillance, even though the surveillance may not in fact be continuous.

Be it by way of enforced, persuaded or self-induced conformity, the Panopticon epitomised the power of surveillance to go beyond mere observation and to effect control. Though Bentham’s 1787 vision for *‘an architectural system of social discipline applicable to prisons, factories, workhouses and asylums’*¹⁴³ was never realised, Foucault accurately predicted the seeping of its panoptic principles into the wider world. His foresight has been realised with the dawn of the era of spatio-temporal transcending technology, such as CCTV, which seeks to effect the dispersal of discipline throughout society. Reeve remarks that the use of CCTV in urban centres is *‘clearly reminiscent of what Foucault has described as the disciplinary society, in his use of the metaphor of the Panopticon as a device of total surveillance in a rationally ordered society.’*¹⁴⁴

¹³⁸ According to Norris & Armstrong, Foucault views the Panopticon as representing *‘a crystallisation of the power of vision embodied in architectural form.’* Norris & Armstrong (1998), page 5.

¹³⁹ Foucault. *Discipline & Punishment: The Birth of the Prison*. Pantheon. New York. 1977, page 200.

¹⁴⁰ Simon. *The Return of Panopticism: Supervision, Subjection & the New Surveillance*. [2005] Volume 3(1) Surveillance & Society 1 at page 4. Available at [http://www.surveillance-and-society.org/articles3\(1\)/return.pdf](http://www.surveillance-and-society.org/articles3(1)/return.pdf).

¹⁴¹ Norris & Armstrong. (1998), page 6.

¹⁴² Foucault (1977), page 201.

¹⁴³ McCahill & Norris (2002), page 2.

¹⁴⁴ Reeve. *The Panopticism of Shopping: CCTV & Leisure Consumption*. In Norris, Moran & Armstrong (Eds) *Surveillance, Closed Circuit Television & Social Control*. Ashgate. Aldershot. 1998. Page 71.

The Stranger Society & the Urban Panopticon – CCTV & Social Control.

Rather than subscribing to the view that CCTV is today's 'silver bullet' of crime prevention, Bannister Fyfe and Kearns perceive it as a '*symbol of the current urban malaise*'.¹⁴⁵ They describe public spaces, particularly the streets as the '*life blood*'¹⁴⁶ of the city, whose strength lays in its ability to absorb and feed off difference and variety. They outline the benefits of exposure to difference.¹⁴⁷ Disparity demands from us a greater array of psychological, intellectual and emotional reactions than banality does. Consequently, the presence of difference stimulates development and promotes public sociability. Exposure to difference contains our fear of it. Without such exposure, we lose the ability to tolerate difference and react in a more exaggerated fashion when we do encounter it:

*'Crime should not be understood as the root of public disorder, but merely a facet of it. Public disorder arises, more generally, from an inability to cope or lack of desire to cope with 'difference.'*¹⁴⁸

To maintain civility and sociability, city streets need to be in constant use and to continue to applaud difference in interactions between strangers. This however is not the reality. Bannister *et al* address, what Christopherson termed, '*the fortification of the city*'.¹⁴⁹ This process is increasingly evident with the emergence of gated residential communities and the deployment of private security personnel and CCTV in prolific office complexes and shopping centres. The construction of zoned encampments for the various urban activities frustrates the possibility of encountering difference on a regular basis, thereby heightening the fear of it. Difference loses its appeal and garners yet more suspicion, while insecurity peaks. Unsurprisingly, this fuels the drive for the further buttressing and patrolling of partitions in urban centres so as to exclude difference.

The mushrooming of out-of-town retail and business parks in the last number of decades came at the expense of the city and town centre. Their existence away from the urban centre imbued them with connotations of security and safety. Private security personnel and CCTV reinforced this peace of mind. In order to quell their social and economic decline, urban centres, through the Town Centre Management movement, sought to replicate the feeling of security enjoyed in those out-of-town malls. The installation of town-centre CCTV was of vital importance in this endeavour. A prime example is the story of Glasgow.¹⁵⁰ During the 1980s, Glasgow experienced significant unemployment in the manufacturing industry and consequently it fell to city-centre retail and office employment to fill the void. Soon it came to light that criminal damage, theft and fear of crime dissuaded many from venturing into the city centre. To address this, the Glasgow Development Agency with the cooperation of the public and private sector launched *Citywatch*, a CCTV system to reinforce the sense of security in the city and thereby encourage economic growth. The slogan used to persuade private business interests to assume some of the installation and running costs was '*CCTV doesn't just make sense – it makes business sense!*'

Returning for a moment to Lukes' dimensions of power and the deployment of the panoptic power,¹⁵¹ the use of CCTV could be said to enable the economic revival and nurturing of the urban centre on all

¹⁴⁵ Bannister, Fyfe & Kearns. *Closed Circuit Television & the City*. In Norris, Moran & Armstrong. *Surveillance, Closed Circuit Television & Social Control*. Ashgate. Aldershot. 1998. Page 22.

¹⁴⁶ Bannister *et al* (1998), page 22.

¹⁴⁷ *Ibid*, pages 24-27.

¹⁴⁸ *Ibid*, page 22

¹⁴⁹ Christopherson. *The Fortress City: Privatized Spaces, Consumer Citizenship*. In Amin (Ed). *Post-Fordism: A Reader*. Blackwell. Oxford. 1994. Cited in Bannister *et al* (1998), pages 26-27.

¹⁵⁰ Bannister *et al* (1998), page 29-30.

¹⁵¹ See further note 12 above and the accompanying text.

three levels of power mobilisation. Those not conforming to the commercial image of the city could be observed, identified and excluded¹⁵², while the prospect of this would encourage others to conform and the remainder would be subliminally conditioned to conform under the influence of the panoptic gaze of the cameras.

The Panoptic Capacity of CCTV.

The rise of the '*society of strangers*'¹⁵³ has shifted the sands for regulation by surveillance. Face-to-face interaction – the traditional social regulator¹⁵⁴ – has somewhat relinquished its role as the social control protagonist. The increasing aversion to intermingling with 'strangers' and the symbiotic generation of the '*anti-communitarian fortress mentality*'¹⁵⁵ have meant a growing reliance on CCTV, a more omnipotent and omnipresent 'surveiller'. Norris sets out how the introduction of CCTV has altered the capabilities of discipline through surveillance. While acknowledging the widely held notion that this technology '*heralds a massive expansion of the disciplinary ... social control ... through the ever-present threat of authoritative intervention to any acts of deviancy [which] creates anticipatory conformity on a scale unthinkable on the basis of mere co-presence*',¹⁵⁶ he goes on to suggest that perhaps with this 'massive expansion', has come somewhat of a dilution of panoptic power. He addresses this suspicion under a number of general headings concerning how surveillance has evolved with the introduction of CCTV:

The removal of spatial constraints and the requirement of co-presence.¹⁵⁷

Norris suggests that the ability of CCTV to extricate the requirement of the surveiller's co-presence removes 'situated knowledge' and entices anonymity. The distance weakens the bond through which the ability to discipline is channelled. The small Scottish town of Airdrie became somewhat of a flagship for the CCTV campaign.¹⁵⁸ Here, there was a very high likelihood of personalised knowledge of the surveillance targets by the local police, resulting in a successful dispersal of panoptic discipline in this close-knit community. Conversely, in city centre systems, the large volume of people involved and the extensive areas covered, the chance of any localised knowledge significantly diminishes. This problem

¹⁵² Individuals falling into this category would include adolescents congregating in shopping centres, individuals consuming alcohol in public spaces and the homeless. In some cases, such individuals are asked to 'move along' – for example in McCahill's study of the use of CCTV in a private shopping centre, he came across a written instruction from the management, which read "*If you see any groups of youths hanging around, you can ask them to move along. If you have to tell them more than twice, could you please ask them to leave the centre?*" (From McCahill, '*The Surveillance Web: The Rise & Extent of Visual Surveillance in a Northern City*'. Unpublished PhD Thesis, University of Hull, 1999. Cited in Norris (2003), page 267.). [See generally, McCahill. *The Surveillance Web: The Rise of Visual Surveillance in an English City*. Willan Publishing. Devon. 2002] In others, there may be a local ordinance specifically designed to address their non-conformity. For example, in Glasgow in August 1996, a blanket ban on the consumption of alcohol in public places was introduced. See further McCahill & Norris (2002), pages 13-16.

¹⁵³ Norris & Armstrong. *CCTV & the Rise of Mass Surveillance Society*. In Carlen & Morgan. *Crime Unlimited? Questions for the 21st Century*. McMillan Press. London. 1999. Page 76. (Norris & Armstrong (1999b)).

¹⁵⁴ See note 8 above and the accompanying text.

¹⁵⁵ Gilling. *Crime Prevention: Theory, Policy & Politics*. UCL Press. London. 1997. Page 186. Be it a fear of strangers and difference or a fear of crime, the increasing reliance on and normalization of 'organised' surveillance (as opposed to 'natural' surveillance by way of unmediated social interaction) merely exacerbates this precipitant fear. It becomes a self-propagating cycle.

¹⁵⁶ Norris (2003), page 253.

¹⁵⁷ Ibid, pages 254-258.

¹⁵⁸ Ibid, page 257. An analysis of the performance of CCTV in Airdrie can be found in Ditton & Short. *Yes, It Works, No, It Doesn't: Comparing the Effects of Open CCTV in Two Adjacent Scottish Town Centres*. In Painter & Tilley (Eds.) *Surveillance of Public Space: CCTV, Street Lighting & Crime Prevention*. (Clarke (Ed) *Crime Prevention Studies*. Volume 10). Criminal Justice Press. New York. 1999. See further note 99 below and the accompanying text regarding the Airdrie evaluation. Similarly, it could be said that Cork is a relatively small and centralised city, meaning that An Garda Síochána would have substantial localised knowledge enabling the successful dispersal of panoptic power through CCTV.

of 'distanciation' exponentially increases with the emerging trend of centralising monitoring centres to alleviate pressure of the considerable running costs on local providers. While amalgamating monitoring centres reduces the financial burden of operating CCTV systems, it simultaneously undermines their panoptic power.

The removal of temporal constraints.¹⁵⁹

Modern technology has freed the act of surveillance from the shackles of time as well as space. Information gathered through CCTV surveillance can be stored in huge volumes for review at any point in the future. The scope of information, together with the fact that it can be more accurately accessed in retrospect without the same threat to its integrity carried in human memory recall, have underlined its value as an investigative police tool. While this may be the case in theory at least, Norris explains that in reality the sheer volume of recorded data to be waded through renders it '*an alternative, yet equally resource-intensive tool as other investigative strategies.*'¹⁶⁰ He illustrates his point with the case of the London nail bomber, David Copeland.¹⁶¹ Copeland's first attack was in Brixton on April 17th, 1999. He was arrested almost two weeks later, but only after two further bombings – his final attack, at the Admiral Duncan pub in central London, left three dead and seventy-six injured. Footage of the perpetrator from the first attack was captured, but it took approximately 4,000 man hours to wade through over a 1,000 videotapes with about 26,000 hours of recording before investigators had an image of sufficient quality to release to the media for identification. While CCTV surveillance does allow for the long-term storage of accurate information, it by no means guarantees the police a precise investigative shortcut.

The functional separation of monitoring and authoritative intervention.¹⁶²

While police officers on patrol act directly on their own suspicion, CCTV operators cannot. They must instigate an intervention by others. Police officers on patrol have the freedom to act unilaterally on their own initiative, while the CCTV operator must convey his suspicions to the patrol officer in order for action to be taken. Surely this fortifies the prerequisite of accountability for the launching of an authoritative intervention. This, in turn, may mean that deployment of intervention becomes less frequent, which was evident in the research of Norris and Armstrong in 1999¹⁶³, where it was shown that in over 600 hours of surveillance there were only 45 interventions instigated by CCTV operators. Another issue, which came to their attention, was that civilian operators were not necessarily aligned with police as regards the type of incident or conduct warranting police deployment.¹⁶⁴ CCTV installations do not lead to automatic interventions – rather they add a further stage – deployment – between surveillance and intervention. Thus as well as being increasingly spatially and temporally distanced, surveillance has similarly become functionally isolated, thereby losing an element of its panoptic influence.

The democratisation of the act of surveillance.¹⁶⁵

Marx sketched the view held by some that CCTV-mediated surveillance is democratised surveillance in that it is unbiased and without agenda.¹⁶⁶ This impression is bolstered by the submission by many CCTV advocates that rigorous codes of practice ensure that there is no deliberate monitoring of law-abiding citizens and that only 'suspicious' behaviour will be targeted. Norris aptly points out, however, that given the fact that many CCTV systems are submerged in considerable volumes of data, operators need to be

¹⁵⁹ Norris (2003), pages 258-260.

¹⁶⁰ Ibid, page 259.

¹⁶¹ Ibid, page 260.

¹⁶² Ibid, pages 260-263.

¹⁶³ Norris & Armstrong. (1999b). See chapters 8 and 9 in particular.

¹⁶⁴ Norris (2003), page 263.

¹⁶⁵ Norris (2003), pages 263-266.

¹⁶⁶ Marx. *The Engineering of Social Control: The Search for the Silver Bullet*. In Hagan & Peterson (Eds). *Crime & Inequality*. Stanford University Press. California. 1995. Page 238. Cited in Norris (2003), page 253.

selective in their focus. Who attracts their attention and what constitutes 'suspicious' behaviour is often left up to the discretion of the operator. While the camera may not distinguish between different social classes, its operator may well – while *'technology may be ... neutral, but the uses to which it is put are not.'*¹⁶⁷ Even though it is a practical necessity to engage in selection for targeted surveillance, Norris and Armstrong found that age, gender and race were the decisive criteria for selection. From their observations in three CCTV control rooms, they deduced that of those targeted for surveillance 93% were male, 39% were teenagers and 32% were black.¹⁶⁸ They also noted that in each case these incidences were approximately twice the percentage presence of each in the population, in other words men, teenagers and black people were twice as likely to be targeted as their presence in the population suggested. While Norris accepts that this may reflect the involvement of these individuals in suspicious behaviour, he is not entirely convinced – particularly in light of Norris and Armstrong's finding that 36% of those selected for prolonged surveillance were targeted 'for no obvious reason', 24% for involvement in 'suspicious behaviour' and 34% due to their affiliation to a particular social group.¹⁶⁹ Again, of those targeted for no particular reason, a significant proportion fell into the 'categories' of male, black or teenagers. Consequently Norris reasons that *'... rather than promoting a democratic gaze, the reliance on categorical suspicion intensifies the surveillance of those already marginalised and further increases their chance of official stigmatisation.'*¹⁷⁰

A perceived increase of inclusionary social control.¹⁷¹

In theory, the panopticon would be an inclusionary social control mechanism, which would dismantle deviance and foster conformity in the offender before returning him to the societal fold. Norris, however, asserts that *'exclusion is frequently at the heart of situational crime prevention strategies'*¹⁷² and, arguably, CCTV has lead the charge of this approach to crime control. He goes on to note that the Town Centre Management movement, which developed in response to the economic decline of city and town centres,¹⁷³ brought with it ordinances and prohibitions intended to eradicate certain behaviour, thus having the indirect effect of excluding certain classes of people, who failed to live up to the commercial and aesthetic image of the urban centre. Anti-Social Behaviour Orders under the English Crime & Disorder Act 1998 and local ordinances prohibiting the consumption of alcohol on the streets are exclusionary tactics. Their exclusionary capabilities are supported by CCTV surveillance targeting. In his study of the operation of CCTV in a northern city shopping centre, McCahill concluded that teenagers were the prime targets for both prolonged surveillance and subsequent exclusion.¹⁷⁴ While theoretically, the panopticon aims to facilitate inclusionary social control, Norris maintains that in reality CCTV *'significantly becomes a powerful tool in managing and enforcing exclusion.'*¹⁷⁵

With the introduction of CCTV, surveillance has taken on a new dimension. The electronic age has altered the nature of surveillance and brought the potential for social control to a whole new level, while perhaps losing some of their potency along the way. Norris does acknowledge that the digitalisation of CCTV surveillance will ease, among others, the burden of processing and retrieving stored data.¹⁷⁶ Digitalisation however, brings along its own complications – the more advanced the technology, the more advanced their problems. McCahill and Norris draw attention to the works of Bogard and Graham,

¹⁶⁷ Norris & Armstrong (1999b), pages 94 -95.

¹⁶⁸ Ibid, page 167.

¹⁶⁹ Norris (2003), pages 265-266.

¹⁷⁰ Ibid, page 266.

¹⁷¹ Ibid, pages 266-268.

¹⁷² Ibid, page 266.

¹⁷³ See further note 21 above and the accompanying text.

¹⁷⁴ See further Chapter 4 (*The Panopticon Mall*) in McCahill. *The Surveillance Web: The Rise of Visual Surveillance in an English City*. Willan Publishing. Devon. 2002. In *The Panopticon Mall*, McCahill tells of the exclusion of various classes of people *'who disrupted the commercial image'* of the shopping centre. Page 126.

¹⁷⁵ Norris (2003), page 267.

¹⁷⁶ Ibid, pages 268-278.

both of whom have explored the application of the most recent information technology and advanced software to the surveillance web and its social control mandate.¹⁷⁷ These writers explain how simulation software, surveillance technology and digital databases can be combined to '*attempt to identify deviance prior to the occurrence of the behaviour or the event in real time.*'¹⁷⁸ 'Intelligent scene monitoring', facial and vehicle recognition software permit CCTV-accumulated images to be automatically interpreted and significant threats of deviance to be anticipated and neutralised. Norris and Armstrong indicate that the marriage of digital databases, CCTV and automated identification software marks a shift from mass to maximum surveillance.¹⁷⁹ As well as tracking the movements of an individual, it is becoming increasingly possible to assess the individual's '*moral worthiness*' based on the dossier of information stored in the database. The known offender is no longer alone in surveillance-targeting – *everyone is a dossierled 'data subject' with a 'digital persona.'*¹⁸⁰ With time, these digital personae take on a life of their own. Norris and Armstrong offer a disturbing example.¹⁸¹ Two Welsh football fans were mistakenly entered into Britain's National Crime Intelligence Unit database of football hooligan suspects. On arrival in Belgium for a match, the brothers were identified by Belgian police, arrested and deported, all on foot of their digital, not actual, identities. Their movement within Europe was considerably restricted, even though they had done nothing to merit it. It took six years before their campaign to have the National Football Intelligence Unit database amended and their names removed from Belgian record succeeded. Because football hooligan databases are shared in Europe, it is unclear how many other databases contain these erroneous digital personae, in particular, or any others for that matter.

According to Norris and Armstrong, the union of the camera, the computer and the database is the harbinger of, what Poster coins, the '*superpanopticon.*'¹⁸² While harbouring their own difficulties, arguably, these most recent technological developments go a long way to addressing the deficiencies, as noted by Norris, of CCTV surveillance as the modern embodiment of Bentham's Panopticon¹⁸³ and fortify it as a social control device.

A Natural Progression to CCTV – The Chronology of the Camera & Social Control.

With each technological development, surveillance is being fine-tuned; however, camera-mediated social control was not initiated by the arrival of closed circuit television. The use of the camera to effect control is not a recent phenomenon; it is merely a contemporary slant on an age-old practice. Norris and Armstrong recount the enlightening history of the relationship between the photographic image and the control of crime.¹⁸⁴ They tell that within a decade of the realisation of the photography, it had applications for the administration of justice. By 1854, James Gardner, Governor of Bristol Gaol,

¹⁷⁷ McCahill & Norris (2002), pages 5-6. See further Bogard. *The Simulation of Surveillance. Hyper Control in Telematic Societies.* Cambridge University Press. Cambridge. 1996. Also, Graham. *Spaces of Surveillant Simulation. New Technologies, Digital representations, and Material Geographies.* (1998) Volume 6. Environment & Planning: Society & Space 483.

¹⁷⁸ McCahill & Norris (2002), page 5.

¹⁷⁹ See generally Norris & Armstrong (1999), Chapter 10: *Towards the Maximum Surveillance Society.*

¹⁸⁰ Norris & Armstrong (1999), page 221.

¹⁸¹ Ibid, pages 221-222.

¹⁸² Poster. *Database as Discourse; or, Electronic Interpellations.* In Lyon & Zureik. *Computers, Surveillance & Privacy.* University of Minnesota Press. Minneapolis. 1996. Page 184. Cited in Norris & Armstrong (1999), page 222

¹⁸³ Automation and the availability of comprehensive databases mean the absence of the personalized knowledge of co-presence and the potential for discriminatory targeting ceases to be a flaw in the armour of the urban panopticon. However, Norris & Armstrong's cautionary words should be reiterated – '*Technology may be ... neutral, but the uses to which it is put are not.*' (1999b), pages 94-95.

¹⁸⁴ Norris & Armstrong. (1999b), pages 77-81. For a more detailed account of the evolution of photographic surveillance, see Norris & Armstrong (1999), chapter 2 '*A History of Photographic Surveillance and the Rise of CCTV.*'

photographed prisoners in order to identify habitual offenders for closer supervision and recommended other institutions follow suit. Those individually classified as habitual offenders were removed from the community by transportation and imprisonment. The photographing of offenders proceeded to become a necessary step in the processing of inmates. For years, habitual offenders anonymously travelled from place to place, giving a different name each time they were apprehended and therefore cloaking their recidivism with a multitude of aliases. Criminal identity consequently rose in priority and photography provided the ideal tool to ascertain it.¹⁸⁵

As well as individual classification, statistical classification was also greatly advanced through the use of photographs. With the dawn of criminology and the Lombrosian project,¹⁸⁶ which attributed, at least in part, criminogenic tendencies to physical characteristics, photographs were used to categorise and document the 'criminal type.' For example, in 1883, over a decade of research culminated in the publication of Francis Galton's *Inquiries into Human Faculty*, which included composite portraits of various categories of individuals, including the diseased and the criminal. These composites were grounded in 'statistically based photographic syntheses.'¹⁸⁷ Galton, having pioneered the use of photography to identify the 'born' criminal, went on to establish the eugenics movement. In 1914, the British Eugenics Society declared their objective of preventing the procreation of future innate criminals by segregating those statistically classified as criminal, due to their physical characteristics identified through Galton's work, for the duration of their fertility.¹⁸⁸ Clearly, even from its infancy, photography was used to classify and manage risk – at the very least in theory if not in reality.

While the application of the disciplinary potential of surveillance in eighteenth and nineteenth century institutions required 'the direct, unmediated, human monitoring,'¹⁸⁹ photography was limited in its control potential by its once-off, snapshot nature, which was not compatible with the routine monitoring available in the institutional emulations of the Panopticon. However, with the dawn of the television era in the 1930s and later the video cassette recorder in the 1960s, the camera's surveillant potency was vastly increased – its 'true panoptic potential was realised.'¹⁹⁰

Norris and Armstrong's tale leads to an understanding that the most recent application of the camera to crime control is conceivably less a bolt from the blue and more a 'natural' step in the evolution of social classification and control. Arguably, it is the sheer proliferation of this new stage that captures attention.

The Proliferation of CCTV.

Bannister *et al* ascribe the pervasive rise of CCTV surveillance to the 'changing nature of contemporary urbanism'¹⁹¹ – the escalation of fear, the preoccupation with 'risk' and the resultant cultured instinct to exclude. Unsurprisingly, the phenomenon of out-of-town malls relished in the decline of the urban centre. The discomfort felt amid the miscellany of the city streets faded to a distant memory in the enclosed seclusion of these self-contained retail centres. CCTV was recruited as a primary tool in the

¹⁸⁵ See further Ireland. *The Felon & the Angel Copier: Criminal Identity & the Promise of Photography in Victorian England & Wales*. In Knafla. *Policing & the War in Europe*. Criminal Justice History. Volume 6. Greenwood Press. Connecticut. 2002.

¹⁸⁶ Refer back to Chapter 2 regarding positivism. Cesare Lombroso was arguably the most notable of the positivist school of criminology. See further Hughes. *Understanding Crime Prevention: Social Control, Risk & Late Modernity*. Open University Press. Maidenhead. 1998. Page 39.

¹⁸⁷ Norris & Armstrong (1999b), page 77.

¹⁸⁸ *Ibid*, page 78.

¹⁸⁹ *Ibid*, page 78.

¹⁹⁰ *Ibid*, page 79.

¹⁹¹ McCahill & Norris (2002), page 11.

maintenance of these biospheres of security and safety. As far back as 1967, the expansion of surveillant capacity posed by this new technology was recognised and almost immediately this potential was applied to crime control in the private retail sector.¹⁹²

McCahill and Norris point out that the emergence of out-of-town retail outlets was indicative of a manifest trend of city planning known as zoning.¹⁹³ Urban areas were defined by reference to their function. Residential, business and retail areas were zoned and their boundaries were reinforced.¹⁹⁴ Gated communities, CCTV and private policing were further symptoms of this 'fortress impulse.' The division into and fortification of the different zones complimented the shift toward the preventative paradigm of crime control. Those who are 'different' or 'strangers' pose the greatest threat and the optimal way of dealing with that risk is to exclude those, who present it. By homogenising urban space, it becomes easier to expel those who do not fit.

The vibrant business and retail zones tended to be located on the outskirts of the urban centres. Not only did this add to the social decline of town and city centres, but it also fuelled their economic decline.¹⁹⁵ To lure investment and breathe economic life back into urban centres, the town centre management movement sought to emulate the security of the out-of-town shopping mall. The promotion of a business-friendly image of the urban centre was best served through the extension of CCTV into public spaces. Norris and Armstrong illustrate this by reference to a promotional video for a CCTV system, which *'emphasised not the detection of crime but the role of CCTV was to play in revitalising the city centre's flagging fortunes by contributing to the 'feel good factor' and encouraging the shopper back to the centre.'*¹⁹⁶ The portrayal of the urban centre as a utopia of consumption demanded the exclusion of those incongruent with its commercial image.¹⁹⁷ CCTV facilitated this and was connotative of the security and safety offered in those out-of-town shopping malls.

One of the first ventures of CCTV into the public, or at least semi-public, arena occurred on the Northern line of the London Underground in 1975. Its introduction was an attempt to curb robbery and assaults on London Transport staff.¹⁹⁸ The initial system expanded into other branches of the underground over the next decade. The first instances of CCTV use in public space proper were largely to tackle traffic and protest-type public order incidents. Norris and Armstrong tell of the deployment of CCTV under the Central Integrated Traffic Control system to address congestion on London's major arterial roads. The Lynx system involved the installation of eight cameras focussing on the main rallying points for demonstrations in central London. Football stadia became another locus for surveillance. The targets of this public gaze were classified as 'marginal' – protestors and football hooligans.¹⁹⁹ It was not until the mid-1980s with the introduction of CCTV on the promenade in Bournemouth that the surveillance net was cast wider. There was no longer the same overt targeting through camera positioning as was the case with the initial public exploits of CCTV surveillance – everyone and anyone frequenting that area were potential surveillance subjects. They did not have to be demonstrators or football hooligans. By 1990, however, CCTV fever had not yet gripped Britain. By that time, there was still only a hand full of public space systems. Within a decade, this would all change.

¹⁹² Norris & Armstrong tell of Photoscan's introduction of CCTV in 1967 to deter and apprehend shoplifters. Norris & Armstrong (1999b), page 79.

¹⁹³ McCahill & Norris (2002), pages 11-12.

¹⁹⁴ Bannister *et al* (1998), pages 27-29.

¹⁹⁵ See note 21 above and the accompanying text on the use of CCTV in Glasgow.

¹⁹⁶ Norris & Armstrong. *Categories of Control. The Social Construction of Suspicion and Intervention in CCTV Systems.* (A draft manuscript of material being prepared for *Images of Control. CCTV and the Rise of the Surveillance Society*, to be published by Berg in 1999). 1998. Page 46. Cited in McCahill & Norris (2002), page 13.

¹⁹⁷ See further note 42 above and the accompanying text. See also Chapter 4 - *The Panopticon Mall* – in McCahill. *The Surveillance Web: The Rise of Visual Surveillance in an English City.* Willan Publishing. Devon. 2002.

¹⁹⁸ Norris & Armstrong (1999b), page 79.

¹⁹⁹ Norris & Armstrong (1999b), page 80.

CCTV had become a routine feature in the retail environment, but was a relatively sparse occurrence outside that context. It largely fell well below the public's radar. Nonetheless, this was all about to change. By 1994, there had been consecutive increases in recorded crime rates.²⁰⁰ This increased public receptiveness to a more general application of CCTV's panoptic capabilities. The real watershed event, however, was the tragic killing of Jamie Bulger. Arguably, that grainy, yet unforgettable, image of the two-year-old being led out of the Liverpool shopping centre marked the turning point at which the potential of CCTV gained widespread recognition. The public's familiarity with CCTV has been further cemented by its notable capturing of other momentous events – for example, Princess Diana and Dodi Al Fayed leaving the Ritz Hotel in Paris; Jill Dando out shopping or the brief glimpse of the hooded perpetrator of the Admiral Duncan pub nail-bombing near the scene in Soho.²⁰¹ More recently, CCTV has vividly documented the images of the London bombing suspects and many of the Dublin rioters. The cumulative effect of this archive of CCTV imagery has catapulted the potential of CCTV into the public consciousness. As a consequence, it is hardly surprising that financial support from British central government for widespread CCTV systems has not waned.

Far from it – in October 1994, on the heels of a Home Office published CCTV instruction manual offering advice to local agencies and interest groups, the British Conservative Government launched its *CCTV Challenge Competition*.²⁰² With its £2 million, this initiative would fund up to half the cost of installing the systems with the remainder coming from the competing co-operatives of local agencies and interests. Almost 500 bids were received and the fund was increased to £5 million. 106 were awarded and the huge demand meant three further competitions were launched by 1998. Between Home Office financing and local partnership efforts, £85 million was raised to establish 580 CCTV schemes in Britain. The change in government in 1997 with New Labour coming to power did not alter the attitude towards CCTV. In fact, 1999 saw the new administration pledge an impressive £153 million toward CCTV expansion over the following three years as a core element in its crime-reduction programme. By July 2001, 447 new schemes had been awarded grants totalling £128 million. Norris calculates that in the decade between 1992 and 2002, the British central government spent approximately a quarter of a billion pounds on CCTV expansion through the competitions and the general crime reduction programmes – and given that Home Office funding through the CCTV challenge competitions is to be matched by locally-raised financing, this sum merely reflects a fraction of the amount expended on CCTV.²⁰³

The CCTV Challenge Competition is but one example of the dispersal of responsibility for crime control outward from central government. Another is the more overarching *Safer Cities* programme, which itself served the CCTV project. These epitomise the adaptive strategy of responsibilisation described by Garland, whereby central government provides 'help for self-help' to 'activated' communities and multi-agency partnerships in order to relieve the crime control burden, which once rested squarely and solely on the shoulders of the sovereign State.²⁰⁴ The eagerness of the recipients of this delegated responsibility is evident in the popularity of the CCTV competitions and Safer Cities programmes. The

²⁰⁰ Norris (2003), page 255.

²⁰¹ Parker. *Total Surveillance: Investigating the Big Brother World of E-Spies, Eavesdroppers and CCTV*. Judy Piatkus (Publishers) Ltd. London. 2000. Page 64.

²⁰² Norris (2003), pages 255–256.

²⁰³ Norris (2003), page 255. Norris & Armstrong suggest the total annual expenditure on CCTV products in 1995 was approximately £300 million and estimate that by 1999 there were more than likely in excess of 100,000 security cameras in public and semi-public spaces in Britain. Coverage expanded from transport systems and open-street schemes to residential areas, schools and hospitals. Norris & Armstrong (1999b), pages 80-81. Parker contends that prior to the beginning of the government funded CCTV expansion announced by Tony Blair in 2000, there were an estimated 1.3 million CCTV cameras dispersed throughout streets, town centres, stations, shopping centres, residential estates and general public areas in the United Kingdom. By his reckoning, there was probably a similar number again in industrial and employment settings. Parker (2000), page 66.

²⁰⁴ Garland (1996), pages 452-455.

perception of significant reductions in crime and the fear of crime, together with the feel-good factor and the hope of economic revitalisation have resulted in seemingly unanimous public²⁰⁵ and political support for the mass expansion of CCTV in Britain. The question then becomes whether CCTV in fact warrants such ardent advocacy.

The Effectiveness of CCTV – A Symposium of Evaluations:

Britain is, without doubt, the most surveilled society. Parker illustrates the comprehensiveness of British surveillance.²⁰⁶ He explains that on any particular day, an individual moving around in any large British city will be captured by in excess of 300 cameras affiliated to 30 CCTV networks. He claims this is not mere speculation, but is based solidly on official statistics issued by Home Secretary Jack Straw. He even suggests that in reality the incidence of surveillance might be greater. He goes on to tell that if the same individual was to travel the 7,500-mile expanse of the British motorway system, their vehicle would be picked up by the surveillance system every four minutes and if they were to make their way to London, on crossing the 'Ring of Steel', established to combat I.R.A. attacks, their number plate would be recorded on the vehicle recognition system and tracked for the entirety of their stay. This is ever before the individual actually does anything in the city, be it shopping or attending a football match, where they will again be observed. Relative to the ever increasing concentration of surveillance, there has not been a correlative series of comprehensive evaluations. Pawson and Tilley argue that many fervent proclamations of the success of CCTV were based on '*post hoc shoestring efforts by the untrained and self-interested practitioner*'.²⁰⁷

Before turning attention to any individual assessments of CCTV's crime prevention capabilities, it is worth noting the possible rationales behind performing such evaluations in the first place. Tilley provides an enlightening inventory of CCTV evaluation purposes.²⁰⁸ The design of the evaluation and whether it is even worthwhile at all depends upon its purpose. He lists eight possible evaluation purposes in the hopes of firstly, encouraging evaluators to more effectively and consciously address the aims and logic of their task and secondly, to reveal some technical difficulties associated with CCTV effectiveness evaluations.²⁰⁹

1. To assess whether CCTV works:²¹⁰

Does CCTV work? – While it may well be a simple question, there does not seem to be a straightforward answer. Tilley tells of the three stock responses by evaluators to this 'bottom-line' query. Optimistic evaluators conclude that yes, CCTV does work, some of the time. Others categorise the efforts of CCTV

²⁰⁵ Parker concludes from various studies that a 'running average' of 72% have no objection to the use of CCTV. Parker (2000), page 65. See further Ditton. *Public Support for Town Centre CCTV Schemes: Myth or Reality*. In Norris, Moran & Armstrong (1998). Accurately gauging public support is an arduous task, as it is more often than not guided by the questions asked and the context in which they are asked. Ditton uses an episode of the BBC's *Yes, Prime Minister* to adeptly illustrate this. See pages 223-224.

²⁰⁶ Parker (2000), pages 66-67.

²⁰⁷ Pawson & Tilley. *What works in Evaluation Research?* (1994) 34(3) British Journal of Criminology. 291. Cited in Norris & Armstrong (1998), page 14. Norris & Armstrong give the example of Chief Inspector Graham Pearson use of the findings of the Airdrie evaluation. He claimed there was a total crime reduction of 74% and a trebling of detection rates. These rates were consistently used to substantiate claims that CCTV worked and to bolster its perception as the silver bullet of crime prevention. [As will be seen later, these figures have been used somewhat out of context – See further note 99 and the accompanying text regarding the Airdrie evaluation. Norris & Armstrong (1998), page 14.]

²⁰⁸ Tilley. *Evaluating the Effectiveness of CCTV Schemes*. In Norris, Moran & Armstrong. *Surveillance, Closed Circuit Television & Social Control*. Ashgate. Aldershot. 1998. Page 139.

²⁰⁹ Tilley (1998), page 139. He suggests the various evaluation issues arising in relation to CCTV are shared with evaluations of other crime prevention initiatives. Consequently, contemplation of completed CCTV evaluations and well-considered future CCTV evaluations may well hold lessons for crime control more generally.

²¹⁰ Ibid, pages 140-144.

under the pessimistic slogan ‘nothing works’, since no, CCTV does not work all of the time. A third contingent of evaluators remains on the fence, calling for further research and the necessary funding to pursue that elusive ‘bottom-line’ answer. Inevitably, the same mixed results and their consequent inferences are the best any resultant research can hope to conclude. In short, the consensus of evaluations is that CCTV works some of the time, but not all of the time.²¹¹

Tilley explains that ordinarily on the introduction of a new crime prevention initiative, initial findings, sometimes of a cursory and often of an anecdotal nature, cast an optimistic light on the capabilities of this new measure. A drive is then ignited amongst those with responsibility for crime control to employ this new wonder measure without delaying its benefits by awaiting more thorough and longer-term analyses of its effectiveness. With time and more comprehensive evaluations, it typically becomes apparent that the initial success of this new measure was either inflated or short-lived and ‘*confidence that the measure actually does work begins to wane*’.²¹² When the dust settles, arbitrary and mixed findings seem to emerge from the body of evaluations undertaken to assess whether CCTV works or not. Tilley proceeds to shed light on the possible reasons for such ambiguity, claiming there are two types of explanation for it – the first being technical weaknesses of the evaluation and the second being the underlying reason for the inevitability of varying results. In relation to technical difficulties, he explains that some evaluation flaws result from the evaluator’s inexperience and their consequent use of improper methods, while others defy circumnavigation even by weathered evaluators. He lists nine such difficulties:²¹³

- (a) ‘*Pseudo-random fluctuations in crime*’: The occurrence of what Tilley terms ‘*wide ‘natural’ fluctuations in local crime rates*’ hinders any attempt to distinguish the impact of a crime prevention strategy.
- (b) ‘*Regression to the mean*’: In light of this phenomenon of pseudo-random fluctuations, a crime prevention initiative may be introduced in a time of abnormally high crime rates. Regardless of any new preventative measure, crime rates would be expected to return to their normal level. Where this regression coincides with the launch of that new measure, an impression of significant impact is given, which may not be entirely reliable.
- (c) ‘*Floor effects*’: Some evaluations may be located in areas with particularly low crime rates hampering the detection of any crime reducing influence of the preventative measure.
- (d) Where more general background crime rates fluctuate, the evaluator’s attempt to discern the impact of a crime prevention initiative in a specific area may be undermined.
- (e) As well as the introduction of a crime prevention strategy, the target area may experience concurrent or subsequent changes, which again would interfere with the task of marking the impact of the strategy.

²¹¹ Later in this chapter, various evaluations displaying these mixed and arbitrary findings will be addressed. See note 98 below and the accompanying text.

²¹² Tilley (1998), page 141. Tilley concedes that the initial success of new crime prevention initiatives may be more real than apparent. The introduction to new measures leaves offenders uncertain as to the risks posed. This uncertainty is accentuated by any publicity surrounding the introduction. The potential increase in risk for the offender may initially reduce offending. However, growing familiarity with the capabilities of this new initiative and the acquisition of modified skills and techniques reignites the offender’s confidence in his own capabilities and diminishes the perceived risks. Consequently, offending may increase and the initial effectiveness of the preventative measure fades with time. See Tilley (1998) note 1, page 151. On the life cycle of crime prevention initiatives, see more generally, Berry & Carter. *Assessing Crime Prevention Initiatives: The First Steps*. Crime Prevention Unit Paper 31. Home Office. London. 1992. See also below notes 166 and 158 on the ‘fade effect’.

²¹³ Tilley (1998), pages 142-143.

- (f) It is well known that not all crimes are reported and of those reported, not all are recorded. The initiation of a crime prevention tactic may influence crime reporting and recording patterns, for example a CCTV operator may acknowledge incidents, which would otherwise go unnoticed or not be brought to police attention. Changes in reporting and recording patterns would in turn impact upon the crime rates changes documented.
- (g) Where a package of measures is introduced to combat crime, it is virtually impossible to calculate the exact proportional impact of each initiative, given that the different measures may indistinguishably interact additively, synergistically or otherwise.
- (h) Displacement is another phenomenon, which poses a significant obstacle to accurate evaluation. Regardless of the difficulty in precisely measuring displacement, Tilley warns that it can never be established that no displacement has occurred and so the more robust evaluations will address this issue. Temporal, geographical, functional (different type of crime), target and possible less so tactical (different method of commission) displacement must be taken into account by evaluators and as well as displacement away from the target area. Tilley warns that displacement into the area should also be considered.
- (i) A phenomenon known as a 'diffusion of benefits' is another complication facing evaluators. A crime prevention strategy's beneficial influence may spread beyond the sharp edges of its intended target zone. The possibility of diffusion needs to be taken into account, when comparing crime rates of neighbouring areas in order to measure the preventative strategy's effect.

The above selection of technical difficulties is in some way and to some extent manageable, if only to be identified as hampering the arrival at an exact effect measurement. Together with this technically-based explanation, Tilley suggests a second, more insurmountable reason for such mixed results. He refers to Poyner's 1991 overview of 122 evaluations of 47 different crime prevention measures and Short and Ditton's 1995 overview of CCTV evaluations.²¹⁴ In both, one certain consistency emerged and that was the inconsistency in the results. Tilley explains that the circumstances around the introduction of a crime prevention measure will inevitably vary, meaning that the manner in which that measure takes effect will also vary.²¹⁵ For example, he suggests that if an area experiences significant offending by a small number of prolific offenders, the arrest and incarceration of such offenders through the use of CCTV will have a considerable impact on the crime levels. For this to occur, a small number of offenders must be responsible for the vast majority of offending, the CCTV system must be monitored and police deployed quickly to apprehend the offenders as they commit the offence or flee afterwards. On the other hand, if the CCTV system is not being monitored or there is no timely police deployment capacity, then the picture quality must be such as to allow the identification of offenders when the footage is reviewed. The convergence of these variables brings about particular evaluation findings. Altering any one of the variables will alter the findings; consequently there can never be a *'fixed universal invariant relationship between the introduction of a crime prevention measure (such as CCTV) and the change in crime levels'*.²¹⁶

For Tilley, 'Does CCTV work?' is *'not a sensible, useful or intelligible question to address, notwithstanding the frequency with which it is asked or the money and effort spent trying to answer it.'*²¹⁷

²¹⁴ Tilley (1998), page 143. Tilley refers to Poyner. *What works in Crime Prevention?* Paper presented at the British Criminology Conference. York University. 1991. Also referred to is Short & Ditton. *Does CCTV affect Crime?* 1995. Vol. 2. No 2. CCTV Today. Pages 10-12.

²¹⁵ Tilley (1998), page 144.

²¹⁶ Ibid, page 144.

²¹⁷ Tilley (1998), page 144.

2. To learn whether CCTV can work:²¹⁸

'Can CCTV work?' – This is a relatively simple question to answer. Evaluations to date, whether technically robust or not, have established to one extent or another, that CCTV can have an effect on crime. Tilley contends that there is no longer any need to address this question, since in all likelihood the potential for CCTV to impact upon crime has been realised to varying degrees of success. An evaluation concluding that CCTV has failed to have any effect on crime rates would not unring the bell of its effectiveness heard in previous evaluations. Nor would an evaluation confirming CCTV's crime reduction potential add a new dimension to or progress the answer to the question of 'can CCTV work?' Analysis of CCTV scheme effectiveness must move past this evaluation question.

3. To discover what it is about CCTV that works in what circumstances and how:²¹⁹

This purpose takes CCTV evaluations to a whole new level, delving deeper to reveal the mechanisms by which and the contexts within which CCTV operates effectively and to what exact effect it does function. Tilley advocates such 'realistic evaluation' as a means to pinpoint circumstances in which CCTV would operate most effectively and efficiently in preventing crime. By analysing in greater detail how CCTV operates, it is possible to avoid situations, where the impact of CCTV would not endure sufficiently to merit investment or where overreliance on CCTV would diminish 'natural'²²⁰ vigilance to the extent that its introduction would be counterproductive and in fact contribute to crime increases. 'Realistic evaluation' equips practitioners with the information needed to intelligently employ particular preventative strategies, rather than simply blindly following the trend of the time.

4. To aggrandize the CCTV scheme and its host town:²²¹

Tilley cautions against automatically taking evaluation findings at face value, because unfortunately sometimes seemingly independent evaluations are commissioned with an agenda to find the 'right' answers. Positive results may be welcomed as affirmation of the vision of those who instigated the introduction of the scheme.

5. To assess the cost-efficiency of CCTV:²²²

Tilley discounts this as a substantial evaluation purpose, given that it is unlikely that there would ever be sufficient data to accurately calculate the costs and benefits associated with a CCTV scheme, particularly as the list of what could be classified as a cost or benefit is potentially endless.

6. To contemplate improvements and modifications:²²³

By assessing the operation of a CCTV scheme, it is possible to adapt and improve its functioning. It can be determined through monitoring whether the system is performing in the manner envisaged and to its optimum. Where it falls short, adjustments and modifications can be made.

7. To adjudicate whether CCTV has alleviated the problem:²²⁴

Subsequent to the introduction of CCTV, evaluations can establish the status of the problem sought to be addressed by the introduction. Without actually ascertaining how exactly CCTV is impacting upon the crime rates, it can be discerned on a superficial level whether the crime rate has been reduced, increased or remained stagnant.

²¹⁸ Ibid, pages 144-145.

²¹⁹ Ibid, pages 145-149. This question is addressed in what is known as the 'Tilley Model', which will be discussed in greater detail below. See note 146 below and the accompanying text.

²²⁰ 'Natural' vigilance here refers to the individual's security consciousness as opposed to 'organised' vigilance, perhaps through technical means. Parallels could be drawn between 'natural surveillance' and 'natural vigilance'.

²²¹ Tilley (1998), page 149.

²²² Ibid, page 149.

²²³ Tilley (1998), pages 149-150.

²²⁴ Ibid, page 150.

8. To disclose what effects CCTV is having.²²⁵

As with the cost-benefit assessment, the list of effects of CCTV is possibly unending. Tilley refers to CCTV's potential to trigger a 'butterfly effect'.²²⁶ The full consequences of CCTV – social, economic, political, and so on – whether desirable or not, defy enumeration. However, evaluating CCTV schemes with a view towards contemplating its effects allows for the substantiation of speculation surrounding its widespread consequences and to regulate for the desirable effects and against the undesirable.

Having looked at Tilley's inventory of evaluation purposes, what follows are synopses of some of the most notable CCTV evaluations.

Does CCTV have an impact on crime? – A summary of some of those mixed findings.²²⁷

Airdrie.²²⁸

November 1992 saw Scotland's first open street CCTV scheme with the installation of twelve cameras in Airdrie town centre and in December 1993, the Scottish Office commissioned Short and Ditton to undertake research on the impact of CCTV in Scottish city and town centres. The Airdrie evaluation had a number of objectives, which included assessing the impact of CCTV on crime and detection rates as well as the nature and extent of displacement. Recorded crime figures from two years before and two years after the installation were analysed. Five control areas²²⁹ of increasing size were employed to assist in accounting for any external influences on crime rates and displacement. Average figures for each offence group and total offences were calculated and 'smoothed' to eliminate seasonal fluctuations and underlying trends were accounted for by reference to the data collected on the geographically wider control area (the remainder of that Strathclyde Police Division). Comparing the two years prior to and the two years after the installation of CCTV in Airdrie, the following was noted:

- (a) Total recorded crimes fell by 21%. Prior to adjustment for seasonal variations and so on, a reduction of 35% was noted in the CCTV area. The reduction experienced in the remainder of that particular division was 12% and it was 7% in the rest of the Strathclyde Police Force catchment, while the remainder of Scotland saw an increase of total recorded crimes and offences of 2%. Consequently, even though there was an overall downward trend in the Strathclyde jurisdiction, CCTV seems to have effected a significantly greater decline.
- (b) Crimes of dishonesty (namely theft of and from vehicles; house-breaking; shoplifting) decreased by 48%.
- (c) Vandalism and fireraising was reduced by 19%.

²²⁵ Ibid, page 150.

²²⁶ The 'butterfly effect' is an element of chaos theory, whereby one seemingly innocuous event or localised change can set in motion a series of other events leading to a seemingly unconnected result, for example a butterfly fluttering its wings in Peru can cause a typhoon in India.

²²⁷ What follows are merely summaries of a number of the evaluations undertaken predominantly in Britain. More comprehensive discussions of each individual evaluation are referenced below.

²²⁸ Short & Ditton. *Does Closed Circuit Television Prevent Crime? An Evaluation of the Use of CCTV Surveillance Cameras in Airdrie Town Centre. Crime & Criminal Justice Research Findings No. 8.* The Scottish Office Central Research Unit. Edinburgh. 1995. See also, Ditton & Short. *Evaluating Scotland's First Town Centre CCTV Scheme.* In Norris, Moran & Armstrong (1998). 155-173. (Ditton & Short (1998))

²²⁹ The five control areas were (i) the remainder of that 'police beat' not covered by CCTV; (ii) the remainder of that police sub-division; (iii) the remainder of that particular Strathclyde Division; (iv) the remainder of the Strathclyde Police jurisdiction and (v) the remainder of Scotland.

- (d) The clearance rate improved by 16%. This involves the police tracing, cautioning or apprehending perpetrators of vandalism, minor assaults, public order and drug-related offences in particular.
- (e) There was no apparent evidence of displacement to either the immediate surrounds or to the remainder of the police sub-division. It was noted that there was a slight increase in total crimes recorded in the remainder of the police beat not covered by CCTV and the rest of the sub-division. This was, however largely attributed to the increase in offences committed while on bail and drug possession or supply offences, which the CCTV-covered area also experienced.²³⁰
- (f) Public order offences appeared to increase by 33% following the introduction of CCTV. While this suggests CCTV was ineffective from a crime prevention point of view as regards this type of offence, Ditton & Short question the accuracy of this supposition given that the increase may be attributed to more offences coming to the attention of the authorities because of the surveillance rather than an elevation in actual commission.²³¹

In 1995 and 1996 respectively, Ditton and Short followed up on their statistical research with qualitative interviews with both the CCTV system instigators and offenders. This placed their statistical data in context and gave their results a further dimension.²³² The overall conclusion from the Airdrie evaluation was that CCTV effected a 'real reduction' in crime rates and an increase in detection.

Glasgow.²³³

As was the case with Airdrie, the Scottish Office commissioned research on CCTV in Glasgow, where the thirty-two camera city-centre scheme was instigated in November 1994. This study looked at police recorded crime rates for a two-year period prior to and a twelve-month period after installation. Researchers also undertook street surveys to assess public awareness and perceptions of CCTV and its impact. The overall conclusion reached by the researchers was that CCTV had been 'relatively' successful in Glasgow, but this was a different type of success to that experienced in Airdrie.²³⁴ Twelve months after the launch of Glasgow CityWatch, there were just over three thousand less crimes and offences recorded compared to the average of the twenty-four months prior to installation. However, when the figures were adjusted to account for the general downward trend, there was no evidence of CCTV effecting an overall reduction in crime, even though some reduction was noted in certain offence

²³⁰ Ditton & Short accept that it is possible to rule out the incidence of displacement from unaccompanied statistical data, consequently in 1996, they took their cue from Repetto and interviewed thirty offenders. As Gabor contends '*the recognition of the subjective element involved (in offending) necessitates the investigation of the offenders' motives and rationale for target selection...our inability to detect displacement [from statistics] does not mean that the phenomenon is not present.*' (Gabor. *Crime Displacement & Situational Prevention: Toward the Development of some Principles*. (1990) Vol. 32 *Canadian Journal of Criminology*. 41, page 60 cited in Ditton & Short (1998), page 163). Despite initial statistical indications, interviews with offenders suggested there was displacement to an extent. For interview excerpts, see further Ditton & Short (1998) at pages 163-169. In relation to displacement more generally, see Repetto. *Crime Prevention & the Displacement Phenomenon*. (1976) Vol. 22 *Crime & Delinquency*. 166. Also, Gabor. *Crime Displacement: The Literature & Strategies for its Investigation*. (1978) Vol. 6(2) *Crime & Justice*. 100.

²³¹ Interviews with offenders gave Ditton & Short the impression that CCTV in actual fact had a greater impact on public order offences than the statistical data led them to believe initially. Those interviewed in relation to public order offences had been caught on camera and claimed they would be more cautious in future. Ditton & Short (1998), page 169.

²³² Ditton & Short (1998), pages 155-169.

²³³ Ditton, Short, Phillips, Norris & Armstrong. *The Effect of Closed Circuit Television on Recorded Crime Rates & Public Concern about Crime in Glasgow*. *Crime & Criminal Justice Research Findings No. 30*. The Scottish Office Central Research Unit. Edinburgh. 1999.

²³⁴ For discussion of the Airdrie and Glasgow evaluations and an explanation of the divergent results, see Ditton & Short. *Yes, it works, No, it doesn't: Comparing the effects of Open-Street CCTV in Two Adjacent Scottish Town Centres*. In Painter & Tilley (Eds.) *Surveillance of Public Space: CCTV, Street Lighting & Crime Prevention*. (Clarke (Ed) *Crime Prevention Studies*. Volume 10). Criminal Justice Press. New York. 1999. (Ditton & Short (1999))

categories.²³⁵ With trend adjustments, the research showed recorded crimes and offences in fact rose by 9% and the general clear-up rate in fact fell from 64% to 60%. There was, however a slight decrease in concern about becoming the victim of crime among the three thousand people surveyed. This concern fell from 61% before installation to 55% fifteen months after the cameras were installed.

It was concluded that CCTV did not have a significant impact on crime at least during its first twelve months in Glasgow. It did, however, operate to identify incidents as they arose, which might otherwise go unnoticed and allowed for their diffusion before they went on to have serious consequences. CCTV in Glasgow permitted more cost-effective investigation, rather than significantly reducing crime rates – arguably this is another type of success.²³⁶

Doncaster.²³⁷

In October 1995, sixty-three cameras were introduced in Doncaster, a northern English town, which had been enduring economic decline and high unemployment since the 1980s.²³⁸ In evaluating the effectiveness of CCTV in Doncaster, Skinns undertook both quantitative and qualitative research over a period of twelve months prior to and twelve months after installation. Police recorded crime statistics; victimisation data and surveys of town centre-, multi-storey car park- users, school pupils and the business community; attitude surveys of those working on the frontlines, such as police officers and magistrates and finally interviews with young offenders were combined to build a picture of CCTV's impact in Doncaster. Comparisons were drawn between recorded crime data in areas in the Doncaster Police district covered by CCTV and those not and its surrounds to assess the incidence of displacement and/or diffusion of benefits. The findings were as follows:²³⁹

- (a) There was a 16% decrease in overall offences in surveilled areas. The other unsurveilled areas either experienced a lesser downward trend or an increase in overall offences. This decrease was, however, not deemed to be significant and was in fact to be expected in light of previously established trends for the town centre.²⁴⁰
- (b) Burglary and criminal damage showed a fall of 25% and 32% respectively, but again this was in line with established trends and so was not deemed significant.
- (c) Shoplifting fell by 11%, which, once again, was not significant.
- (d) 'Other thefts' and assaults displayed a slight increase, which was not significant.
- (e) Theft of and from vehicles, on the other hand, did show a decrease, which could more confidently be traced back to the installation of CCTV. The reduction experienced under this category was one of 50%.

²³⁵ While crimes of violence fell by 22%, fireraising and vandalism fell by 8% and motor vehicle offences fell by 12%, crimes of indecency, dishonesty and other offences rose by 17%, 23% and 32% respectively.

²³⁶ Ditton & Short warn against a crude, oversimplistic interpretation of the Glasgow findings, which, on first glance, appear to indicate failure of CCTV to achieve a positive impact on crime. They group together concerns under the following headings: 'Adequacy of Test's Effectiveness'; 'Types of Testing Situations' and 'Timing of CCTV Introduction'. These concerns elucidate the wisdom of not jumping to the conclusion that CCTV did not work in Glasgow. Ditton & Short (1999), pages 212-217.

²³⁷ Skinns. *Crime Reduction, Diffusion & Displacement: Evaluating the Effectiveness of CCTV*. In Norris, Moran & Armstrong. *Surveillance, Closed Circuit Television & Social Control*. Ashgate. Aldershot. 1998.

²³⁸ Skinns (1998), pages 175-176.

²³⁹ Ibid, pages 181-186.

²⁴⁰ With decreases falling in line with existing downward trends, it is not possible to attribute such reductions to the introduction of CCTV – consequently CCTV could not be said to have a significant effect.

- (f) Surveys showed a significant reduction in witnessing of crime by all categories of users. Prior to installation 24% of town centre users reported witnessing crime, while after installation 12% did.
- (g) Victimisation among the business community fell from 89% to 65% following the introduction of CCTV, while town centre user victimisation fell from 5% to 3%.
- (h) In relation to displacement and diffusion of benefits, the immediate surrounds of the covered area experienced an 11% decrease, which was not expected under existing trends and was significant. It was suggested that, while this may be a diffusion of benefits, it may also be attributable to changes in police deployment – the allocation of resources may have been informed by CCTV coverage, meaning directly or indirectly, CCTV may have played an important role in this decrease. Beyond the immediate surrounds, however, there does seem to have been evidence of displacement – data showed a 31% increase for all offences across the four outlying townships. This did not fit expectations given existing trends and was significant. Group interviews with young offenders did not reflect the crime statistic data.²⁴¹

Taking displacement and diffusion into account, Skinns calculated the overall impact of CCTV in Doncaster to be a 6% reduction in recorded crime. He urged caution, however, in regard to the findings on a number of grounds.²⁴² For example, the fact that the evaluation merely assessed the situation twelve months after installation meant that the findings were more a momentary snapshot rather than a comprehensive portrait of CCTV's capabilities. The timing of the evaluation also coincided with whatever technological and organisational 'teething troubles' the scheme was going to experience on initiation before the dust was allowed to settle. He similarly warns that because this assessment did not take place in a controlled laboratory, potential extraneous influences (changes in police practices, parking arrangements and so on) were not necessarily factored into the finding, and their impact was perhaps not capable of being measured into the mix. He concluded that what is necessary is the '*reinvesting [of] evaluation with criminological theory and undertaking a detailed examination of why and how CCTV systems affect crime.*'²⁴³

The London Underground.²⁴⁴

In November 1975, four London Underground stations were equipped with CCTV. This installation came following a year of 'special policing measures' in the vicinity to combat 'muggings', which had become somewhat of a plague on a number of Underground stations, including the four to be surveilled. Recorded offence statistic covering robberies, thefts and assaults with intent to rob (muggings) in the Underground stations between October 1973 and November 1976 were utilised.²⁴⁵ Even though the risk of falling victim to a robbery or theft on the Underground was extremely small,²⁴⁶ the southern sector, including the stations where CCTV was installed, carried a disproportionately high risk of victimisation. Consequently, special police patrols were launched in 1974 and were removed in December 1975 following the introduction of CCTV. Notices were used and the cameras and monitoring units were quite

²⁴¹ Skinns (1998), pages 183-184.

²⁴² Ibid, pages 185-186.

²⁴³ Ibid, page 186.

²⁴⁴ Burrows. *The Impact of Closed Circuit Television on Crime in the London Underground*. In Mayhew, Clarke, Burrows, Hough & Winchester. *Crime in Public View*. Home Office Research Study No. 49. Home Office Research Unit. Her Majesty's Stationary Office. London. 1979

²⁴⁵ Burrows (1979), page 21-22. In relation to the number of recorded offences, Mayhew *et al* concede that the figures used would not accurately reflect the actual incidence of such offences – not all offences are reported by victims; those that are reported may not all be recorded by the authorities – particularly if the victims were tourists not be easily contactable meaning their data remains incomplete and unverified; some offences are only discovered by the victims after leaving the Underground and so may not be attributed to the Underground. Mayhew *et al* at page 22.

²⁴⁶ One robbery for every 8.4 million journeys (i.e. journey stages) taken and one theft for every 173,000 journeys taken. Burrows (1979), pages 22-23.

conspicuous. Data from the first year following installation and the year prior to the special police patrols was compared between the four surveilled stations and other Underground stations, particularly in the southern sector. Results from the evaluation were as follows:²⁴⁷

- (a) Thefts were almost four times lower, which was a significantly greater decline than at the other fifteen southern sector stations analysed and a slightly greater decline than at the remaining stations.
- (b) The occurrence of robberies was low to start with; however, this decreased following installation, while the incidence increased in the other fifteen southern stations and doubled in the remaining stations.
- (c) In relation to displacement, it was concluded that temporal displacement did not arise as CCTV operated continuously, however some geographical displacement to the other stations could not be dismissed, nor could displacement to outside the Underground. Analysis showed theft rates fell by 27% in the other fifteen unsurveilled southern sector stations, while the decrease in the remaining stations was 39% – the difference being significant and suggestive of geographical displacement. Of those fifteen stations surrounding the CCTV-covered stations, the seven closest – with the most similar crime rates to begin with – experienced the lowest decrease of 24%, while the eight furthest away experienced a 45% decrease. The incidence of robberies was too low to draw any conclusions on displacement.

The evaluation concluded that CCTV appeared to have proved useful in its first year and, on foot of the analysis, it was extended to six central stations. Conspicuous cameras, their continuous monitoring, communication between monitors and police and publicity seemed to have operated a deterrent effect. Burrows, however warned that this may be a novelty effect, which would fade with time and encouraged further monitoring of CCTV's performance in the London Underground.²⁴⁸

Welsh and Farrington's Meta-analysis.²⁴⁹

The evaluations above are but a small selection of the many CCTV studies undertaken, which display some similar and some divergent findings. To achieve a more general impression of the effect of CCTV on crime, the Home Office commissioned a review of all the methodologically reliable CCTV evaluations. By looking at a wide range of reliable evaluations, it was thought that general conclusions on what works to reduce crime would be more attainable rather than confining the examination setting and thereby localising any findings. To undertake this cumulative assessment of the effectiveness of CCTV, Welsh and

²⁴⁷ Burrows (1979), pages 26-27.

²⁴⁸ In 1992, Webb & Laycock evaluated two other London Underground CCTV programmes and found there to be mixed results. The first programme in six stations at the south end of the northern line showed a greater decrease in robberies compared to the two control areas (62.3% as against 50% and 12.2%). There was no evidence of robbery displacement apparent, while there was evidence of a diffusion of benefits. The second programme took place at Oxford Circus Station, however, did not display such positive results. Robberies increased by almost 50% in the experimental area compared to just over 20% in the control area. Welsh & Farrington. *Crime Prevention Effects of Closed Circuit Television: A Systematic Review*. Home Office Research, Development & Statistics Directorate. London. 2002, pages 28-32. See further Webb & Laycock. *Reducing Crime on the London Underground: An Evaluation of Three Pilot Projects*. Crime Prevention Unit Series Paper 30. Home Office. London. 1992.

²⁴⁹ Welsh & Farrington (2002), page 3. Welsh & Farrington speak of the nature and methodology of this review technique – 'Systematic reviews use rigorous methods for locating, appraising and synthesising evidence from prior evaluation studies, and they are reported with the same level of detail that characterises high quality reports of original research ... They have explicit objectives, explicit criteria for including or excluding studies, extensive searches for eligible evaluation studies from all over the world, careful extraction and coding of key features of studies, and a structured and detailed report of the methods and conclusions of the review.'

Farrington assembled forty six evaluations from Britain and North America, according to strict methodological criteria.²⁵⁰ These criteria included:

- (a) CCTV was the main and most important intervention – otherwise it would be impossible to disaggregate the impacts of the various interventions.
- (b) Crime rates before and after the intervention were compared, with the minimum before intervention total number of crimes being twenty.
- (c) There was an outcome measure of crime – the most relevant being property and violent crimes.
- (d) At least one experimental and one comparable control area were included.

Of the forty-six studies selected, only twenty-two fulfilled these criteria satisfactorily. These evaluations were situated in three types of setting – city centre or public housing, public transport and car parks. The following gives a summary of the main findings:²⁵¹

- Of the twenty-two, eleven displayed a desirable effect on crime; five showed an undesirable effect; in five, there was clear evidence of null effect and in the remaining study, there was no clear evidence of an effect.
- Eighteen of the twenty-two studies had the data required for the meta-analysis. Of those, nine, all of which were British, showed a desirable effect on crime, with the other nine displaying no evidence of a desirable effect. All five studies from North America were in this category. The overall reduction was 4%.
- The five studies looking at violent crimes showed CCTV had no effect (Cambridge 2002, Burnley 1999, Montreal Metro 1997, London Underground 1992, London Underground-Oxford Circus Station 1992), while the eight evaluations involving vehicle offences indicated CCTV had a significant impact.²⁵² Together with Cambridge 2002, Newcastle 1995 and Burnley 1999, four of the five car park evaluations (Hartlepool 1993, Coventry 1993, Bradford 1993 and Sutton 1995) showed a desirable effect on vehicle crime and one displayed an undesirable effect (Guildford 1991).²⁵³

²⁵⁰ Welsh & Farrington, pages 3-4.

²⁵¹ Ibid, pages 41-45.

²⁵² Ibid, page 34.

²⁵³ Welsh & Farrington, pages 37 and 39. The studies mentioned above are:

Farrington, Bennett & Welsh. *Rigorous Evaluations of the Effects of CCTV on Crime*. Unpublished Manuscript. Institute of Criminology, University of Cambridge. Cambridge. 2002. (Cambridge 2002); Armitage, Smyth & Pease. *Burnley CCTV Evaluation*. In Painter & Tilley (Eds.) *Surveillance of Public Space: CCTV, Street Lighting & Crime Prevention*. (Clarke (Ed) *Crime Prevention Studies*. Volume 10). Criminal Justice Press. New York. 1999. (Burnley 1999); Grandmaison & Tremblay. *Evaluation des Effets de la Tele-Surveillance sur la Criminalite commise dans 13 Stations du Metro de Montreal*. (1997) 30 *Criminologie*. 93 (Montreal Metro 1997); Burrows. *The Impact of Closed Circuit Television on Crime in the London Underground*. In Mayhew, Clarke, Burrows, Hough & Winchester. *Crime in Public View*. Home Office Research Study No. 49. Home Office. London. 1979. (London Underground 1979); Webb & Laycock. *Reducing Crime on the London Underground: An Evaluation of Three Pilot Projects*. Crime Prevention Unit Series Paper 30. Home Office. London. 1992. (London Underground 1992, London Underground-Oxford Circus Station 1992); Brown. *CCTV in Town Centres: Three Case Studies*. Crime Detection & Prevention Series. Home Office. London. 1995 (Newcastle 1995); Tilley. *Understanding Car Parks, Crime & CCTV: Evaluation Lessons from Safer Cities*. Crime Prevention Unit Series Paper 42. Home Office. London. 1993. (Hartlepool, Coventry & Bradford 1993);

- In the city centre/public housing setting,²⁵⁴ overall there was a slight reduction in crime of 2% in the experimental areas compared to the control areas. There was a small, but significant effect in the five British evaluations concerned (a desirable effect in Birmingham 1995, Doncaster 1998 and Burnley 1999; an undesirable effect in Newcastle 1995 and Cambridge 2002) and no effect on the four studies from the United States (New York 1978 and three in Cincinnati 2000).²⁵⁵ Evidence of a diffusion of benefits was apparent in more studies than was evidence of displacement.
- Of the four public transport evaluations,²⁵⁶ two studies showed a positive effect (London Underground 1979 and 1992), one showed no effect (Montreal Metro 1997) and the other showed an undesirable effect on crime (London Underground – Oxford Station 1992). Because the sites of the desirable effects hosted a package of crime prevention measures, for example notices, special police patrols, mirrors and passenger alarms, the specific impact of CCTV could not be ascertained. The overall crime reduction in the public transport evaluations was a 6% decrease, which was not significant. Only the London Underground 1979 and London Underground 1992 studies examined displacement and diffusion of benefits and evidence of both was found.
- The most notable effect of CCTV is seen in the five car park evaluations (Guilford 1991, Hartlepool 1993, Bradford 1993, Coventry 1993 and Sutton 1995-1996),²⁵⁷ where a significant decrease of 41% was evident in experimental areas compared to the control areas. As with the public transportation studies, which indicated effectiveness, CCTV was not an isolated crime prevention strategy in these car parks. Improved lighting, the cutting-back of foliage and so on may have also influenced offending rates. Displacement and diffusion of benefits were largely ignored in these evaluations.

Having analysed quite a substantial collection of evaluations, Welsh and Farrington arrived at a number of conclusions in relation to the research methodologies employed. The methodological shortcomings of some evaluations undermined their integrity and limited their value to the crime control debate. Welsh and Farrington recommend focussing on comparable experimental and control areas over longer periods of time, when assessing the impact of a crime prevention initiative and its durability. They also identified the need for research on the financial costs and benefits of CCTV, on the CCTV 'dose-response relationship'²⁵⁸ and research to pinpoint the 'active ingredients' of successful CCTV programmes.²⁵⁹ This more in depth category has also been advocated and largely pioneered by the likes of Tilley and Pawson with their 'realistic evaluation', which will be discussed later in this chapter.²⁶⁰

Sarno. *Impact of CCTV on Crime*. In Bulos (Ed.). Towards a Safer Sutton? Impact of Closed Circuit Television on Sutton Town Centre. London Borough of Sutton. London. 1995. (Sutton 1995);

Poyner. *Situational Crime Prevention in Two Parking Facilities*. (1991) 2 Security Journal 96. (Guildford 1991).

²⁵⁴ Welsh & Farrington, pages 13-27.

²⁵⁵ The studies mentioned above are:

Brown. *CCTV in Town Centres: Three Case Studies*. Crime Detection & Prevention Series. Home Office. London. 1995 (Birmingham 1995);

Skinns. *Crime Reduction, Diffusion & Displacement: Evaluating the Effectiveness of CCTV*. In Norris, Moran & Armstrong. *Surveillance, Closed Circuit Television & Social Control*. Ashgate. Aldershot. 1998. (Doncaster 1998);

Musheno, Levine & Palumbo. *Television Surveillance & Crime Prevention: Evaluating an Attempt to create Defensible Space in Public Housing*. (1978) 58 Social Science Quarterly 647. (New York City 1978);

Mazerolle, Hurley & Chamlin. *Social Behaviour in Public Space: An Analysis of Behavioural Adaptations to CCTV*. Unpublished Manuscript. Griffith University, Queensland. Australia. 2000. (Cincinnati 2000).

²⁵⁶ Welsh & Farrington, pages 27-34.

²⁵⁷ Welsh & Farrington, pages 34-39.

²⁵⁸ CCTV dose-relationship refers to the number of cameras required to achieve an effect or result.

²⁵⁹ Welsh & Farrington, page 43.

²⁶⁰ See note 146 and the accompanying text.

Phillips' Meta-analysis.²⁶¹

While it could be said that Welsh and Farrington's meta-analysis looked primarily at the settings in which CCTV is utilised as a crime prevention strategy, Phillips' review could equally be said to focus on the types of crime it impacts. This review employed the Tilley/realistic evaluation model as a guide to determine the mechanics of CCTV operation in the included studies.²⁶² Suffice it to say for the moment that this method involves determining the specific outcome (i.e. offence reduction) of the crime prevention measure resulting from the firing of its mechanism(s) (i.e. effective deployment) in the particular context (i.e. numerous security staff in proximity).²⁶³ Because Phillips' undertook a meta-analysis, she relied on already assembled data by the previous evaluators. Consequently, the data available was oftentimes limited and insufficient to fully determine which mechanism was being fired in which context to attain the particular outcome. As a result, she used the Tilley method as a guide rather than a rigid structure. She also identified a number of other difficulties to accurately assessing the performance of CCTV, namely displacement, diffusion of benefits and detections.²⁶⁴ The first two come into existence when the effect of CCTV spills over into usually the adjacent or neighbouring areas in either a negative or a positive way respectively. She warns that a number of the evaluations included in her review do not comprehensively engage with displacement and diffusion, which may overstate or understate the impact of CCTV on the experimental area. Similarly, what may appear to be an increase in offending may, in actual fact, be an increase in detection. Conversely, the installation of CCTV may lead the public to abdicate any duty they may have once felt to report offences. As a result, apparent crime rates may not be real crime rates and Phillips recommends the use of victimisation surveys to ascertain rates of greater accuracy. This review assessed the performance of CCTV in relation to property crimes, personal crimes, public order offences and fear of crime. The results are summarised as follows:

- In relation to property crimes, Phillips found promising, mixed and negligible impacts on crime in the various evaluations included in her meta-analysis. The positive findings, for example included, Newcastle, where Brown found in his 1995 study that there was a reduction in the total number of incidents for all property offences after CCTV installation. The reduction was maintained in regard to burglary and criminal damage, but offences such as theft of and from vehicles experiences a fade effect with time. Brown gathered some evidence of diffusion, but none of displacement.²⁶⁵ In Tilley's study of a car park in Hull in 1993, it was found that criminal damage to vehicles fell by 45%, theft from vehicles reduced by 76% and theft of vehicles dropped by 89% following the installation of CCTV.²⁶⁶

Mixed results included Skinns' study in Doncaster, which was discussed earlier.²⁶⁷ There thefts from and of vehicles fell; however other offences such as assault and criminal damage did not. Evidence of both diffusion and displacement was found. Poyner's evaluation of CCTV effectiveness in a university car park in Surrey showed a reduction in theft from vehicles from ninety-two crimes in

²⁶¹ Phillips. *A Review of CCTV Evaluations: Crime Reduction Effects & Attitudes towards its Use*. In Painter & Tilley (Eds.) *Surveillance of Public Space: CCTV, Street Lighting & Crime Prevention*. (Clarke (Ed) *Crime Prevention Studies*. Volume 10). Criminal Justice Press. New York. 1999.

²⁶² Phillips, pages 125-127.

²⁶³ The Tilley model will be discussed in greater detail later in this chapter. See further note 146 and the accompanying text below.

²⁶⁴ Phillips, pages 127-128.

²⁶⁵ Ibid, page 129. See further Brown. *CCTV in Town Centres: Three Case Studies*. Crime Detection & Prevention Series. Home Office. London. 1995.

²⁶⁶ Phillips, page 131. See further Tilley. *Understanding Car Parks, Crime & CCTV: Evaluation Lessons from Safer Cities*. Crime Prevention Unit Series Paper 42. Home Office. London. 1993. This study is dealt with in greater detail later in this chapter. See further note 148 and the accompanying text.

²⁶⁷ See above note 108 and the accompanying text.

1985, the year CCTV was introduced, to thirty-one in 1986. However, little impact was made on criminal damage rates.²⁶⁸

An example of a negligible impact by CCTV is seen in Musheno *et al*'s evaluation of CCTV in a New York housing project, where no crime reduction effect was evident. Cameras were placed in the lobbies and elevators of three housing blocks, with residents monitoring on their televisions. When surveyed, only 14% of residents said they viewed the images at least once a day and given that much crime was committed by residents, deterrence was not particularly active. Four of the eight crime types increased after installation, while the remaining four experienced a negligible reduction.²⁶⁹

- As regards personal crime and public order offences, mixed results seem to be the order of the day. In Kings Lynn, Brown found a decrease in assaults and woundings after the installation of CCTV, because the police had defused situations before they escalated into offences.²⁷⁰ Sivarajasingam and Shepherd observed a 24% drop in police recorded violent crime in Rhyl town centre in Wales, while they also noted an increase of 35% in assaults in emergency rooms records. Swansea displayed a similar discrepancy, while Cardiff showed a 20% increase in police recorded assaults, but emergency room records showed a 12% decrease.²⁷¹ This underlines the need to broaden data sources in the quest for accuracy.

Phillips concludes that CCTV may be quite effective on property crimes in certain settings, such as car parks, but not so effective, for example where the rationale behind installation was faulty.²⁷² The deterrent potential of CCTV does not appear to have an impact on personal violence or public order offences. However, Phillips points to Brown's argument that CCTV enables effective deployment, the prevention of incident escalation and efficient post-event investigation in relation to these offence types.²⁷³ She recommends further research to ascertain the mechanisms by which CCTV operates to have a positive impact on crime. Research to date, where it has explored mechanisms, seems to indicate deterrence holds more potential than the apprehension of offenders in the crime reduction stakes.²⁷⁴ The evaluation framework for future research advocated by Phillips is the Tilley method, which seeks to delve deeper into how exactly CCTV works, when it does 'work'. Research of this nature promises to be invaluable to crime prevention policymakers and practitioners. What follows is an analysis of what is known as the Tilley model or the realistic evaluation method.

How does CCTV effect this impact? – The Tilley Model

Pawson and Tilley put forward a very rudimentary, and yet not so frequently addressed question.²⁷⁵ The effectiveness of CCTV initiatives seems to be most evident in combating vehicle crime in car parks – just what is it about CCTV that makes it effective? Pawson and Tilley conclude that the CCTV camera takes

²⁶⁸ Phillips, pages 133-134. See further Poyner. *Situational Crime Prevention in Two Parking Facilities*. In Clarke (Ed.). *Situational Crime Prevention: Successful Case Studies*. Harrow & Heston. New York. 1992.

²⁶⁹ Phillips, page 135. See further Musheno, Levine & Palumbo. *Television Surveillance & Crime Prevention: Evaluating an Attempt to create Defensible Space in Public Housing*. (1978) 58 Social Science Quarterly 647

²⁷⁰ Ibid, page 136. See further Brown (1995)

²⁷¹ Ibid, page 136. See further Sivarajasingam & Shepherd. *Effect of Closed Circuit Television on Urban Violence*. (1999) 26 Journal of Accident & Emergency Medicine 225.

²⁷² Such faulty reasoning was evident in the New York housing study by Musheno *et al*, where reliance on residents monitoring the system undermined any deterrent potential, given that most residents did not monitor the system and many offences were perpetrated by residents knowing of the absence of a diligent monitor.

²⁷³ Phillips, page 141. See further Brown (1995).

²⁷⁴ Ibid, page 142-143.

²⁷⁵ Pawson & Tilley. *Realistic Evaluation*. Sage Publications. London. 1997. Pages 78-82.

effect by triggering ‘a chain of reasoning and reaction’²⁷⁶ and through their realist evaluation, they seek to identify the mechanisms and contexts in which CCTV factors into the thought-process of the potential offender, causes them to desist and leads to the realisation of the crime control capabilities of surveillance.

Tilley undertook answering this question when he applied what has become known as the ‘Tilley model’ in assessing the effectiveness of CCTV on the rate of vehicle crime in a number of car parks in the early 1990s.²⁷⁷ Firstly, however, his reasons for targeting this category of crime in this particular setting should be established. His justification for doing so is clearly evident when looking at the relevant crime figures.²⁷⁸ The most recent Home Office crime statistics available to him at the time (July 1991 to June 1992) revealed that vehicle crime constituted 28% of all recorded crime in England and Wales, having increased by 7% on the previous year. According to the British Crime Survey undertaken by Mayhew and Aye Maung in 1992, 99% of the 571, 700 vehicle thefts were reported and 93% were recorded. 53% of the 931, 300 thefts from vehicles were reported and 32% were recorded. Mayhew and Aye Maung also discovered that in the decade from 1981 to 1991, according to both police recorded crime figures and British Crime Survey data, attempted theft of and from vehicles saw the greatest rise, with respective increases of 336% and 395%. This clearly displays the height of activity of car thieves. In light of these figures, it is easy to see why vehicle offences would capture attention. While Hope, using the 1984 British Crime Survey, found that most of these offences tend to occur in the locality of the driver’s residence, Webb, Brown and Bennett concluded that on average 20% of thefts from vehicles and 22% of thefts of vehicle occurred in car parks. This suggested car parks as the likely setting for evaluation. In using the ‘Tilley model’, Tilley made it clear that pinpointing exactly what it was that gave CCTV the potential to reduce vehicle crime and deducing the optimum circumstances for the most effective exercise of this potential should be of the utmost importance to those involved in crime control policy and practice.²⁷⁹ Consequently, delving deeper than the traditional ‘does it or doesn’t it work?’ he phrased his evaluation question – ‘under what initial circumstances (context) and how can CCTV be used (mechanism) to reduce specified car crimes and for how long (outcome pattern)?’²⁸⁰

A mechanism fired by a crime prevention measure is the way in which it achieves a particular outcome or result in a particular context. The context referred to is the set of conditions required for the crime prevention strategy to fire its potential mechanisms to produce that result. Logically then, the outcome pattern is the practical effect(s) of the mechanism fired in the particular context – for instance, the type of crime reduced through deterrence, detection and disablement or displacement and whether the effect was short term or enduring.²⁸¹ Tilley explains the thrust of realistic evaluation is ‘to construct context-mechanism-outcome pattern configurations’, which ‘specify contextual conditions for triggering identified mechanisms to generate particular outcome patterns.’²⁸²

²⁷⁶ Ibid, page 78.

²⁷⁷ Tilley. *Understanding Car Parks, Crime & CCTV: Evaluation Lessons from Safer Cities*. Home Office Police Research Group. Crime Prevention Unit Series Paper No. 42. London. 1993. Tilley evaluated the CCTV schemes installed under the Safer Cities programme in Hartlepool, Hull, Lewisham, Bradford, Coventry and Wolverhampton.

²⁷⁸ Tilley (1993), page 1. Tilley cites figures and conclusions reached in the following: Hope. *Residential Aspects of Autocrime*. 1987 Research Bulletin No.23 28. Mayhew & Aye Maung. *Surveying Crime: Findings from the 1992 British Crime Survey*. Research Findings No.2. Home Office Research & Statistics Department. 1992. Webb, Brown & Bennett. *Preventing Car Crime in Car Parks*. Crime Prevention Unit Paper 34. Home Office. London. 1992.

²⁷⁹ Tilley (1993), page 2.

²⁸⁰ Tilley (1993), page 6.

²⁸¹ Other outcome patterns would include increased detection, increased or decreased usage by different groups, improved profitability of business, altered distribution of crime and/or incivilities and so on. See further Tilley (1998), pages 147-148.

²⁸² Tilley (1998), page 148.

Pawson and Tilley have identified some of the mechanisms typically launched by CCTV and the contexts in which those mechanisms might operate:

Mechanisms:²⁸³

- *The 'caught in the act'/removal mechanism* is whereby an actual perpetrator is observed offending, arrested, punished and deterred.
- *The 'you've been framed' mechanism* arises where the risk of apprehension and conviction based on video evidence of their exploits is enough to deter potential offenders.
- *The effective deployment mechanism* involves CCTV facilitating the deterrence of potential offenders and the apprehension and removal of actual offenders through the effective and targeted distribution of security personnel or police in response to observed suspicious behaviour.
- *The publicity mechanism* operates where the combination of CCTV and associated signage represent a serious attitude towards crime and its reduction. Potential offenders may apprehend an increased risk of detection and punishment because of the perception of a greater commitment to crime reduction. Usage of the area may increase due to the perception of greater security, thereby augmenting natural surveillance and consequently also the risk of apprehension.
- *The time for crime mechanism* takes effect where the time available to commit a particular offence is a matter for consideration.²⁸⁴ The more time a crime takes to commit, the greater the probability that security personnel or the police will be deployed or that the offender will be captured on CCTV footage. Offences that are committed in shorter periods of time are less likely to be affected by this particular mechanism.
- *The memory jogging mechanism* functions when CCTV and its notices remind individuals that they or their property may be vulnerable and spur them on to take precautions for their own security.
- *The appeal to the cautious mechanism* operates when those most security-conscious frequent an area with CCTV coverage. The combination of a cautious attitude, the consequent employment of additional security devices and CCTV surveillance provides an overall synergetic increase in protection of the area.

Contexts:²⁸⁵

- *The criminal clustering context* – the number of offences in a given area is attributable to a number of offenders. For example, one hundred recorded car crimes might be the work of a single very active individual, a number of individuals or a group of individuals. Removing an offender, for example through the 'caught in the act' mechanism, could significantly alter the offender-offence ratio.
- *The style of usage context* – an area not regularly frequented may have a high per user crime rate. A CCTV-fired mechanism that increases usage, while increasing the number of offences, could reduce the per user rate.
- *The lie of the land context* – an area falling in a camera blind spot will be vulnerable to crime. The 'caught in the act' and 'you've been framed' mechanisms would be of little effect in this context,

²⁸³ Pawson & Tilley (1997), pages 78-79. Also, Tilley (1993), pages 3-4 and Tilley (1998), page 147.

²⁸⁴ Time here is what Cornish & Clarke term a '*choice-structuring property*'. Refer to note 40 in Chapter 2: (Crime Prevention Strategies to combat Rational Choice Offenders) and the accompanying text. See also Cornish & Clarke, *Understanding Crime Displacement: An Application of Rational Choice Theory*. In Henry & Einstadter, *The Criminology Theory Reader*. New York University Press. New York 1998. Pages 47-49.

²⁸⁵ Pawson & Tilley (1997), pages 79-80. Also, Tilley (1993), pages 4-5 and Tilley (1998), pages 147-147.

however a mechanism which altered user attitudes, such as the 'memory jogging' mechanism could have a significant impact.

- *The alternative targets context* – if there are other targets in the vicinity and offenders are so-disposed, any of the mechanisms could operate to effect displacement away from the CCTV-covered area.
- *The resource context* – if an area is not fitted with adequate resources, for example security personnel or nearby police patrols, the effective deployment mechanism will not be fired effectively.
- *The surveillance culture context* – the pervasiveness of CCTV surveillance throughout society and its portrayal in the media is reflected in the response it receives.

Tilley clarifies that crime prevention strategies may fire any number of mechanisms and emphasises that whether a potential mechanism is fired at all and whether it is, in fact, effective will be dependent upon the given context. The implementation of the CCTV system will also have a considerable impact upon the mechanism firing potential. Tilley elaborates by reference to picture quality and monitoring. If the CCTV system installed does not offer clear footage, then it is unlikely that apprehension and conviction based on video evidence will result. Consequently, deterrence of potential offenders on foot of this risk will not be the crime prevention outcome. Similarly, in situations where CCTV is not monitored, the effective deployment mechanism will not be launched.²⁸⁶ As is evident in a number of evaluations, where the deterrence mechanism operates by way of a perceived increased risk of apprehension and that risk does not materialise, the crime reduction effect fades.²⁸⁷ Unless the perception of an increased risk is realised at least periodically and this is publicised, then offenders will regard the CCTV system as an empty gesture.

Having established the goal of the evaluation – to ascertain in what context and how precisely CCTV operated to achieve a particular effect on crime – Tilley identified a number of characteristics, which marked a scheme as best suited to his realist evaluation:²⁸⁸

1. Stipulation of the mechanism(s) intended to be launched.
2. Analysis of how the system is to be implemented and operated so as to trigger the mechanism(s).
3. Identification of the outcome-pattern expected.
4. The employment of means to monitor implementation and operation to ensure optimal-mechanism firing and to evaluate those fired mechanisms and their outcomes.

To reiterate, Tilley's objective in undertaking this realist evaluation was to identify how CCTV works best, when it does, by ascertaining the context-mechanism correlation most favourable to achieve the optimum outcome-pattern in a given setting. Engaging in this type of thematic study may well set in motion a trend of well-thought through and effective CCTV-directed crime control, rather than haphazardly installing CCTV systems without considering how to optimise their effect or to even have an effect in the first place.

Following his examination of the car parks in the six Safer Cities urban centres of Hartlepool, Hull, Lewisham, Bradford, Coventry and Wolverhampton, Tilley determined that there was '*quite strong evidence*' that CCTV '*generally led to reductions*' in various types of vehicle offences. He conceded that

²⁸⁶ Tilley (1993), page 5.

²⁸⁷ For an example of this 'fade effect', see note 166 below and the accompanying text regarding Hartlepool and the life cycle of crime prevention initiatives.

²⁸⁸ Tilley (1993) at page 6.

given the attainable data, it was difficult to conclude with certainty which mechanisms operated and impossible to ascertain the extent of any temporal, spatial or functional displacement. From his observations, he was, however, able to surmise that:²⁸⁹

1. CCTV systems do not need to be very technically advanced and continuous monitoring is not an essential requirement in order to have an effect in car parks. The Lewisham study concerned three fixed lens, unadjustable cameras and a dummy camera, which were not continuously monitored and were of poor playback quality.²⁹⁰ Even though data on the overall Lewisham crime rates were not available, it seemed that background patterns of offending would not account for the considerable reductions experienced – leaving CCTV together with the notices and substantial publicity campaign as the obvious explanation. The cost of initial installation in 1991 was a little over £13,000 and because the system is relatively unsophisticated, subsequent expense was negligible.

In most cases, images were not sufficiently clear to render identification possible and Hartlepool was the only location, where effective deployment was a likelihood. There, the control room was continuously staffed and seven security officers were available (not simultaneously) for dispatch according to the monitor's observations. Guided by CCTV, deployment was effective and accurate.²⁹¹

2. Given the insignificant number of arrests after CCTV installation, the 'caught in the act' mechanism does not seem to effect any occurring reduction.²⁹² Tilley goes on to question whether this would ever be the case in light of the fact that it would demand more highly sophisticated technology, greater manpower and resources to identify, pursue and convict offenders. For this mechanism to be fired, it would require a much more significant financial outlay and arguably, it would not be necessary to expend such amounts, when other mechanisms fired by CCTV alongside additional situational crime prevention measures succeeds in effecting reduction.
3. CCTV works best when aligned with other crime prevention measures. In Hull, Coventry and Bradford, CCTV was installed together with lighting in the car parks, which were also painted.²⁹³ In Lewisham, the potential for identifying offenders was publicised,²⁹⁴ while in Hartlepool, visible

²⁸⁹ Ibid, pages 23-25.

²⁹⁰ The unsophisticated nature of the Lewisham system contrasts sharply with the Hartlepool scheme, which involved tilt, pan and zoom cameras with infra-red capability. The Hartlepool cameras could be effectively used night and day, covering vast areas and still zooming in for closer detail. They were continuously monitored with a band of security personnel awaiting deployment. Tilley (1993), pages 14-15 regarding the Lewisham study and at pages 8-12 regarding Hartlepool.

²⁹¹ Tilley (1993), page 8.

²⁹² In Hartlepool, there were a number of well-publicised convictions on foot of CCTV evidence. On some occasions, security personnel testified as to what they had witnessed, while on others, defence lawyers advised against contesting cases, having viewed the CCTV footage. Tilley (1993), page 8. The Hartlepool scheme is by comparison sophisticated, rendering relatively useful evidence for prosecutions.

²⁹³ Coventry, in particular, saw the periodic introduction of a battery of crime prevention measures with funding from Safer Cities. The height of walls was reduced, foliage was cut back and lighting was upgraded, all leading to improved visibility. High fencing was erected, thereby restricting pedestrian access. The Whitefriars car park, in particular, saw a considerable reduction in theft of and theft from vehicles consequent to the introduction of CCTV and fencing. Efforts to sustain the improved surveillance continued with the frequent trimming of foliage. Tilley (1993), pages 18-21.

²⁹⁴ Prominent notices declaring CCTV surveillance in the car park itself, substantial publicity in the local newspaper and visits by a patrol officer to the adjacent junior school ensured widespread awareness of the systems installation and the potential to identify culprits, thereby highlighting the perceived risk of apprehension for potential offenders and the encouragement of cautious behaviour among the car park users as the probable fired mechanisms. Tilley (1993), page 15.

security personnel were deployed and any successes were publicised. In Wolverhampton, Tilley found that this synergetic impact was least notable where the CCTV was least supported by other measures. By employing a number of measures, especially measures designed to complement each other, the impression that crime is being taken seriously is reinforced. Such a comprehensive strategy encourages the perception of an increased risk to potential offenders.

4. Where the potential of CCTV for apprehension does not materialise, its effect fades. Its crime reduction potency can, however, be reignited by periodically, at least, casting the spotlight on its successes. For example, where CCTV led to an apprehension, the role it played should be emphasised, even to the point of over-statement, so that potential offenders can be in no doubt that CCTV poses a credible threat. Hartlepool showed signs of following the *'life cycle of initiatives'*,²⁹⁵ experiencing a fade effect.
5. Many CCTV studies cover a relatively short period of time – most look at twelve months before and twelve months after installation. This short-spanned evaluation method inhibits any productive empirical analysis of the durability of the impact CCTV has on crime. This would facilitate the induction of a theoretical framework to direct the employment of either an 'all systems' or a 'drip-feed' approach when implementing a programme of crime prevention. An 'all systems' approach is where a package of measures is installed. While there is evidence that such a strategy is effective, it is questionable whether this effect will be sustained. Tilley's study also found significant support for the 'life cycle' model, whereby intermittent surges of preventative activity encouraged a rejuvenation of effectiveness. In order to select the most suitable approach, it is necessary to identify the relevant context-mechanism partnership.
6. Another conclusion induced by Tilley was that offenders perpetrating vehicle crimes do not experience homogeneous difficulties. Theft of vehicles and theft from vehicles incorporate different considerations for the offender. By the same token, preventative measures may not operate uniformly to combat the various subcategories of offence. Tilley uses the example of a fixed CCTV camera focussed on a pedestrian exit. While this may well increase the perceived risk to potential perpetrators of theft from vehicles, as their escape will more than likely be by foot, it is improbable that this measure would have any impact on the theft of vehicles.

Tilley's evaluation goes deeper than merely ascertaining whether or not CCTV was an effective crime reduction tool in the car park setting. He looks for the 'how' and the 'why' and cautions that post hoc evaluations will be confined by the data at hand.²⁹⁶ The gathering of data informed at the first instance by the context, mechanism and outcome-pattern framework promises to produce a most instructive evaluation containing specific conclusions. Successive evaluations of this more comprehensive and illuminating nature would collaborate to produce a *'cumulative understanding of what can work in what circumstances'*,²⁹⁷ with a more attainable aspiration of accuracy and efficiency in subsequent CCTV deployment.

Gill and Turbin took their cue from Pawson and Tilley and employed the realistic evaluation method in two retail stores in Leeds. In undertaking this study, they had two aims – the first being an evaluation of

²⁹⁵ See more generally, Berry & Carter. *Assessing Crime Prevention Initiatives: The First Steps*. Crime Prevention Unit Paper 31. Home Office. London. 1992. The vehicle offence rate in car park facilities throughout Hartlepool showed an overall downward trend prior to the introduction of CCTV. After the installation of CCTV, this continued in the covered car parks, while non-CCTV covered experienced an increase in vehicle offences. The significance of the reduction began to fade over time in the CCTV-covered car parks, with the underlying local trends beginning to reassert themselves. While this may be the 'fade effect' stage of the life cycle of crime preventative measures, Tilley ponders whether it might be attributable to temporary displacement from CCTV-covered to non-covered car parks. Tilley (1993), page 9.

²⁹⁶ Tilley (1993), page 25.

²⁹⁷ Ibid, page 25.

the impact of CCTV in the retail stores and the second, an examination of the realistic evaluation methodology itself and its practicalities.²⁹⁸

In their assessment of the impact of CCTV in the two stores, Gill and Turbin concluded that the dynamic between CCTV, staff and offenders merited further exploration. The role of staff in particular was a focal point given that staff proved to form part of the context and the mechanism elements of the context-mechanism-outcome configurations. The effectiveness of CCTV was contingent upon the attitudes and involvement of staff, making CCTV a tool to combat shop theft rather than a silver bullet. It was concluded that training and involvement of management and staff in the operation of in-store CCTV systems would be pivotal in maximising the mechanism-firing potential of CCTV. Where staff was positively disposed towards installation, they engaged with it in the performance of their security duties. The firing of one mechanism was made evident in some staff interviews, in which it was explained that the presence of CCTV increased staff confidence in approaching and confronting suspects – increased challenging by staff may operate as a deterrent to would-be shoplifters. Whereas the mechanism proposing that staff would become over-reliant on CCTV and therefore less vigilant themselves seemed to be largely rejected. It was hypothesised that in fact the opposite was true – CCTV accentuated staff awareness of security. Another mechanism proposed that CCTV tapes would be of evidentiary use in the prosecution of offenders. Given that only two prosecutions followed the transfer to tapes to the police, it was submitted that CCTV in these retail stores operated as a deterrent rather than the facilitation of prosecutions.²⁹⁹ Overall, Gill and Turbin deduced that some of their twelve suggested mechanisms did fire in the contexts of these retail stores, while others did not – the upshot being that security managers and crime prevention practitioners in general should be context-mechanism sensitive in order to avoid the futile and inappropriate deployment of CCTV. The methodology of realistic evaluation serves this task well.

In relation to this methodology, Gill and Turbin profess it bestows a very promising future upon crime prevention strategy evaluations; however they do concede that it will require refinement. This innovative method provides a logical framework, which enables a comprehensive examination of how a crime control initiative effects a particular impact. According to Gill and Turbin, *'the methodology demonstrates that by identifying 'how' CCTV impacts on theft it is possible to begin to understand in what circumstances a similar effect may be produced elsewhere.'*³⁰⁰ They go as far as to suggest that an apparent 'failure' by a CCTV scheme to impact upon crime levels may, in fact, be attributable to the context in which it was expected to perform as opposed to the incompetence of the system itself.³⁰¹ By delving behind the 'does it or doesn't it work' façade to ascertain the mechanics of its effect, CCTV can be accurately and efficiently deployed, thereby ensuring the firing of the optimal mechanism(s) in the particular context to achieve the desired outcome. Even though realistic evaluation does not make such a smooth transition into practical research results, Gill and Turbin claim this is not an insurmountable problem. The primary difficulty posed is that of data collection. The Tilley model adds further dimensions to the evaluation process. This inevitably increases the volume and impacts the nature of the data required to render realistic evaluation more than a mere theory. Nevertheless, the Tilley method of evaluation has the potential to culminate in the deployment of appropriate, effective and efficient crime prevention strategies.

²⁹⁸ For a more detailed discussion of the first of Gill & Turbin's aims, refer to Gill & Turbin. *CCTV & Shop Theft: Towards a Realistic Evaluation*. In Norris, Moran & Armstrong (1998). In relation to the second aim, see Gill & Turbin. *Evaluating 'Realistic Evaluation': Evidence from a Study of CCTV*. In Painter & Tilley (1999). (Eds.) *Surveillance of Public Space: CCTV, Street Lighting & Crime Prevention*. (Clarke (Ed) *Crime Prevention Studies*. Volume 10). Criminal Justice Press. New York. 1999.

²⁹⁹ Gill & Turbin (1998), pages 194-197. These are just three of the twelve mechanisms explored by Gill & Turbin. See further Gill & Turbin (1998), pages 194-200.

³⁰⁰ Ibid, page 201.

³⁰¹ Gill & Turbin (1998), page 201.

In order to do this, such evaluations must first distill what makes such crime prevention measures effective. Arguably, the effort by Gill and Spriggs is the most robust such evaluation to date, when they undertook an evaluation of 13 CCTV projects.³⁰² Their research led them to arrive at a number of most enlightening and informative observations, which will undoubtedly instruct future deployment of CCTV. The following summarises a number of those conclusions:³⁰³

1. The usefulness of crime rates in evaluating CCTV effectiveness is overestimated. An increase in crime rates can indicate the successful firing of a crime detection mechanism. However, where such a mechanism is fired along with another, which reduces crime, the mechanisms can cancel each other out in terms of crime rates. This is another reinforcement of the need to delve deeper into CCTV's effect.
2. As well as reducing crime, the use of CCTV for evidentiary purposes should not be ignored. It can be employed to identify witnesses, perpetrators and victims, eliminate individuals from police enquiries and so on.
3. CCTV should not be oversold as a 'silver bullet'. What constitutes success should be determined at the outset and systems should be evaluated with reference to such objectives. It is imperative for such a tailored evaluation that the system is installed and managed in such a way as to strive towards these objectives. Otherwise, the system is destined to fail in the eyes of the evaluation.
4. For the most part, CCTV seems to work best in smaller, enclosed areas, such as car parks and also some residential estates. The researchers did caution however that it could not be definitively concluded to what extent CCTV was responsible for any reductions.
5. While a higher camera density does seem to correlate with greater crime reduction, this should not be taken for granted and the characteristics for each area should be considered. These include population density, area size and so on.
6. 'Acquisitive' crimes such as vehicle theft seem to be most susceptible to CCTV's impact. The Hawkeye car parks showed the most impressive results in this regard, but they did have the added advantage among others of being self-contained.
7. CCTV schemes employed to target specific issues such as drug-related offences showed promising results.
8. Control room studies indicated CCTV proved most effective, where there was a close and cooperative relationship between operators and the police.
9. CCTV operates impressively when properly integrated with and used in compliment to other preventative measures such as Retail and Pub Radio, whereby intelligence can be circulated between operators, thereby optimising the effect of CCTV particularly in relation to retail crime in urban centres.
10. Proper lighting will obviously impact upon the effectiveness of CCTV.
11. The centralisation of monitoring can mean that one or more areas can suffer for the benefit of other more active areas. Quieter areas tend to be less monitored on a contemporary basis.

³⁰² Gill & Spriggs. *Assessing the Impact of CCTV*. Home Office Research Study 292. Home Office Research, Development & Statistics Directorate. London. 2005. This evaluation in fact combined two methodologies, being the quasi-experimental techniques and the realistic evaluation techniques. In brief, as far as the quasi-experimental model is concerned, the researchers compared changes in police recorded crime rates and fear of crime rates in the target area to those in comparable control areas. Public attitude studies were also carried out. In relation to the realistic evaluation model, various data sets were combined with observations, interviews, desk-based documentation study and so on. See further Gill & Spriggs, pages 123-135.

³⁰³ Ibid, pages 115-121.

Evidence showed that where CCTV did have an impact on particular offences in quieter areas, it did so by way of deterrence and such areas enjoyed fewer on-the-spot apprehensions and provided less recorded evidence for police investigation.

12. On the whole, the public's feelings of safety did not increase in the presence of CCTV and for the most part, they perceived it to be less effective as regards crime reduction than first thought. Despite this, there was no urge to abandon CCTV and little evidence of any major concerns regarding civil liberties.

Looking at these observations and conclusions, it is easy to conceive how a well-rounded, multi-dimensional evaluation can be most effective in informing proper future deployment of crime prevention strategies.

Asking the old question of whether or not CCTV works is not instructive. The answer to that question is somewhat of a moveable feast. Different contexts and different mechanisms impact, producing different outcomes – some more desired than others. Ascertaining the success of CCTV as a crime control strategy depends on what constitutes 'success'. Is it measured according to the number of offences not committed, the number of offences detected or the number of offences 'cleared up' by the police or all of the above? Enlightenment comes from ascertaining why, and how, CCTV works when it does work. Evaluations on the effect of CCTV need to exceed the boundaries of the traditional empirical studies. By broadening the scope of inquiry beyond a mere before-and-after comparison, it is possible to identify the ideal conditions for optimal CCTV effectiveness and its suitability in the first place, as well as how to maintain this effectiveness. As Pawson and Tilley conclude *'without a theory of why CCTV may be effective, and a theory of the conditions which promote this potential, research into its usage is blind.'*³⁰⁴

Conclusion.

The emergence of the 'risk' and 'stranger' society and the consequent rise of actuarial justice have set the scene for the arrival of the surveillance as the 'in vogue' method of managing the crime predicament. This chapter briefly explored the theoretical basis for surveillance as a social control mechanism as a backdrop to the use of CCTV as a crime control mechanism. Tracing the path of surveillance from Bentham's Panopticon up to today's mass surveillance society provides an understanding as to how CCTV has come to be the primary situational crime prevention measure to tackle the rational choice offender. CCTV-fever seemed to take hold and pre-empt any comprehensive exploration of the merits and appropriateness of this form of surveillance. This void has more recently been addressed by the plethora of evaluations, which have uncovered quite a chequered performance record for CCTV. Frustration with mixed and ambiguous results has encouraged the abandonment of the original question of whether CCTV works in favour of the question 'how does it work?'

This rephrasing of the evaluation question has proven, and undoubtedly will continue to prove, most instructive. It is steering crime prevention policy and practice in a more fruitful direction and suggests that even though CCTV may not be the silver bullet for crime, it is by no means a failure. While CCTV will not be suitable in every situation, existing data and research indicate that some settings, such as car parks, are more receptive to the impact of CCTV than others and certain categories of crime, particularly property offences, are more susceptible to its effect. Rather than making a sweeping claim on the effectiveness of CCTV, the Tilley model of evaluation shines a light in the direction of precisely-targeted CCTV deployment. The ability to identify the mechanics of CCTV effectiveness brings with it the potential to reproduce its 'success', potentially also in settings other than car parks and on offences other than vehicle crimes. It also endows practitioners with a framework from which to identify contexts, where an

³⁰⁴ Pawson & Tilley (1997), page 82.

effective CCTV mechanism will not be fired, therefore resources will not be wasted on futile deployment – instead, alternative, more suitable crime prevention initiatives can be employed.

Because Britain has been the forerunner in this mass surveillance age, British, and to a much lesser extent, North American CCTV systems and evaluations have been the focus of this chapter. The next chapter will look at the developing net of CCTV surveillance in Ireland, and particularly Cork City's CCTV system, and CCTV's potential to effect crime control here.

Chapter 5:

CCTV in Ireland – The Story so Far.

Introduction.

Up until relatively recently, public CCTV systems in Ireland had been instituted and controlled by An Garda Síochána. In June 2005 however, Michael McDowell, Minister for Justice, Equality and Law Reform launched a *Community Based CCTV Scheme*, whereby local communities throughout the country would have the opportunity to install and maintain CCTV systems with a view to minimising criminal activity and anti-social behaviour and increasing public safety as a whole in their areas.³⁰⁵ The Scheme is set to provide funding to a number of successful applicants each year to support the introduction of CCTV into that local community. This is a relatively recent development in the Irish CCTV story and before it is explored further, it is prudent to trace the background to this latest event.

While Britain enjoys a much more mature love affair with CCTV, dating back to the 1970s, Ireland's experience of public CCTV is comparatively much younger. This is not to say, however, that Irish CCTV is unsophisticated. Rather it is fledgling in terms of its coverage, but that is changing. The lessons learned through Britain's decades of experience with CCTV have been taken on board here. The previous chapter detailed the power of surveillance as a social control mechanism and the rise of CCTV as the most prevalent form of surveillance. To date British society is the most surveilled in the world. Having said that, even though the amount of research undertaken on the effect of CCTV as a crime control mechanism is increasing, it still pales in comparison to the proliferation of CCTV itself. Though Ireland has an amount of ground to make up before it reaches the same concentrations of surveillance experienced in Britain, we are not plagued by a similar dearth of research on the impact of CCTV on crime levels in Irish society. Currently out of the nine 'established' public area CCTV systems, six have been evaluated.³⁰⁶ It can only be prudent to continue to engage in localised studies of the effects of surveillance and CCTV in particular in Ireland and with the realisation of the Community-Based CCTV Scheme, it is hoped that the resultant golden opportunity to continue this impetus will not go abegging in the coming years. There have been a number of quite significant reports completed to date on the use of CCTV.³⁰⁷ Unfortunately, not all of those reports are currently accessible due to the fact that they

³⁰⁵ *Minister Launches Grants for Community CCTV Systems*. Progressive Democrats Press Release. 15th June 2005. Available at http://www.progressivedemocrats.ie/press_room/1444/

See also *O Cuiv welcomes Community Based CCTV Scheme in RAPID Areas*. Department of Community, Rural & Gaeltacht Affairs Press Release. 15th June 2005. Available at <http://www.pobail.ie/en/PressReleases/2005/June/htmltext.6264,en.html>.

³⁰⁶ In order to evaluate a CCTV system, it has to be operational for a certain period of time before sufficient data can be accumulated for use in the evaluation. More recent systems are not yet ready for evaluation. These six established systems are operated and have been evaluated by An Garda Síochána. Unfortunately, many of the evaluations are as yet not readily accessible for operational reasons.

³⁰⁷ Kavanagh, D. *Towards Economic Evaluation of Closed Circuit Television in Public Places as an Aid to An Garda Síochána*. The Institute of Public Administration, Dublin. (Unpublished Dissertation). 1999.

O'Dwyer, K. & Furey, M. *CCTV in Dublin & Tralee – Preliminary Evaluation*. Research Report No. 1/00. Garda Research Unit. Templemore. (Unpublished Report). 2000.

Parsons, S. *Watching the Watchers: An Garda Síochána & CCTV in Dublin's North City Centre*. Trinity College, Dublin. (Unpublished Dissertation). 2001.

Lynch, E. *Evaluation of CCTV in Dun Laoghaire*. Research Report No. 7/06. Garda Research Unit. Templemore. (Unpublished Report) 2006.

Lynch, E. *Evaluation of CCTV in Dundalk*. Research Report No. 8/06. Garda Research Unit. Templemore. (Unpublished Report) 2006.

contain sensitive operational material, whose confidential status An Garda Síochána has seen fit to maintain.³⁰⁸ Consequently, any analysis of the research completed on the impact of CCTV in Ireland will be limited. What follows is a history of the use of public CCTV in Ireland, an examination of its future trajectory and an exploration of the accessible research that has been completed.

The Road to Public CCTV in Ireland.

Kavanagh, in his 1999 unpublished dissertation *Towards Economic Evaluation of Closed Circuit Television in Public Places as an Aid to An Garda Síochána*, tells of how An Garda Síochána has nurtured the expansion of public town centre surveillance systems.³⁰⁹ One very significant step came in 1996 with the drafting of a policy document by the Garda Commissioner.³¹⁰ This document was distributed throughout Ireland's Garda Divisions with a view to standardising the implementation and use of CCTV systems. While the document advocated the expansion of town centre surveillance, it was adamant that CCTV would be a tool to aid An Garda Síochána rather than a replacement for Gardaí on the street. As well as including a code of practice setting out the duties of those involved and the handling of video recordings, this policy document also signalled the establishment of an Advisory Committee comprised of Senior Garda Officers together with Garda telecommunication specialists. The role of this committee was to be one of oversight. It was to monitor the implementation of the Garda CCTV programme and prioritise applications. In the spirit of cooperation and increased 'civilianisation' in the force, the policy document envisaged local Gardaí consulting with interested parties when CCTV was being considered for a particular area and suggested that civilian personnel would undertake monitoring duties under direct Garda supervision, while overall management responsibilities would rest with An Garda Síochána. Funding would be primarily sourced from central government; however the local business community, which would be a major beneficiary, would be requested to contribute to the set-up and running costs of the system.

The Realisation of Public CCTV in Ireland.

By 1999 there were three public CCTV systems in operation in Ireland. The first such system was introduced in the Temple Bar area of Dublin in October 1995 with Pearse Street Garda Station being the monitoring centre. At the time of the introduction of the eight CCTV cameras into the area, Temple Bar was undergoing significant redevelopment and rejuvenation. Since then Temple Bar has thrived as one of Dublin's mostly frequented districts and CCTV is seen as having contributed greatly to this. Consequently the Department of Justice together with the local business community funded the extension of the Temple Bar system onto the Grafton Street – St. Stephen's Green area to incorporate a total of twenty four cameras.³¹¹

Also in 1995, Tralee, Co. Kerry was the location of a pilot scheme, which saw four CCTV cameras strategically dispatched on a temporary basis in the town. The following year the system was expanded to twenty-four cameras and put on a permanent basis. Tralee Garda Station is the monitoring centre;

Browne, P. *Evaluation of CCTV in Cork*. Research Report No. 15/07. Garda Research Unit. Templemore. (Unpublished Report) 2007.

³⁰⁸ Of the abovementioned evaluations, only that of Kavanagh and O'Dwyer & Furey were accessible to the writer.

³⁰⁹ Kavanagh, D.T. *Towards Economic Evaluation of Closed Circuit Television in Public Places as an Aid to An Garda Síochána*. Unpublished dissertation. The Institute of Public Administration. Dublin. August 1999. Pages 38-43.

³¹⁰ An Garda Síochána. *Policy Document on Closed Circuit Television in Public Places*. (Unpublished). 1996.

³¹¹ Kavanagh, D.T. *Towards Economic Evaluation of Closed Circuit Television in Public Places as an Aid to An Garda Síochána*. (Unpublished dissertation.) The Institute of Public Administration. Dublin. August 1999. Pages 39-40.

however monitoring is not constant due to staff restrictions. Instead the cameras are viewed at peak times.³¹²

The third major and arguably more extensive public CCTV system was that on O'Connell Street in Dublin and this location was the main focus of Kavanagh's study. The reign of this system took in the Store Street Garda District with the Garda Public Office in O'Connell Street being the monitoring centre. Kavanagh undertook an economic analysis of the impact of this CCTV system on crime in the area by way of an eighteen month 'before and after' assessment.³¹³

In 1999, Kavanagh explained that plans for the introduction of CCTV in Cork City based out of Anglesea Street Garda Station were advanced. In October 2001, Cork had five public CCTV cameras. By May 2002, Cork City centre CCTV system was officially launched with a total of twenty-nine cameras by June 2002.³¹⁴ The cameras are strategically located, often at street junctions with the capacity to be panned in different directions in accordance with peak times for different activities. The Department of Justice invested approximately €500,000, while the Cork Business Association also put up significant funding in support of the installation. According to Sergeant Michael O'Donoghue, Crime Prevention Officer in Anglesea Street Garda Station, the twenty-nine monitors are not constantly viewed, even though the control room is constantly staffed. During the day, the CCTV system becomes most useful when the Station's control room receives a call. The appropriate screen is summoned upon to assess whether the call is genuine and what resources should be deployed to deal with the incident, if any. At particularly busy times in the city centre, for example at night and during the lead-up to Christmas, the cameras are more heavily monitored. Resources are deployed in a timely fashion to diffuse troubled situations before they escalate and to accurately identify 'trouble-makers' or offenders. CCTV has proved most useful in Cork City centre, particularly in relation to the investigation of criminal damage, shoplifting and also public order offences. Footage from CCTV cameras is also a very useful tool in corroborating a complaint or a statement made to An Garda Síochána regarding a person's account of events or their movements. As well as being a most valuable aid to the detection and investigation of crime in Cork City, the CCTV system provides great help in relation to traffic management. Again appropriate resources can be quickly deployed to disperse traffic congestion. For example, if there is an accident in the Jack Lynch Tunnel, CCTV cameras located there can quickly alert An Garda Síochána, who can if necessary close down the traffic lane involved from the Anglesea Street Headquarters. According to Sergeant O'Donoghue, the public seem to have received the CCTV system well. For the most part there has not appeared to be any significant disquiet amongst the public in relation to issues of human rights and the invasion of privacy. He explained that the monitoring Gardaí do not target or exclusively focus on particular individuals on a whim. The twenty-nine cameras take in a wide span and consequently, the monitoring staff observes the 'bigger picture', unless their attention is drawn to something untoward. Though clearly a proponent of CCTV as a tool to policing, Sergeant O'Donoghue is adamant that, in his own sentiment, CCTV is but one cog in the policing machine. It is by no means the silver bullet in the crime prevention arsenal.

The CCTV systems in Dublin, Tralee and Cork City are the most established schemes in the State. As Kavanagh explained, by 1999 there were applications from thirty other potential locations. All of these, however largely come down to efforts by An Garda Síochána. More recently though, a new stage in the life of Ireland's public CCTV was entered. In 2005, Minister for Justice, Equality and Law Reform Michael McDowell launched the *Community Based CCTV Scheme*.

³¹² Ibid page 40.

³¹³ Ibid pages 40-41.

³¹⁴ Details of the Cork City centre CCTV system were furnished by Sergeant Michael O'Donoghue, Crime Prevention Officer of Anglesea Street Garda Station at Anglesea Street Garda Station on 28th October 2005.

The Emerging Trajectory of Ireland's Public CCTV – The Community-Based CCTV Scheme.

On June 15th 2005, Michael McDowell launched a grant scheme to support local communities install and maintain CCTV systems. In the Minister's own words:

*'This initiative will facilitate communities to press ahead with their own local CCTV system. Many communities are willing and eager to take a proactive approach to improving the safety and well-being of their area in co-operation with An Garda Síochána. This scheme provides an ideal opportunity for communities to work with their local Gardaí and Local Authority to get the systems in place. CCTV has proved extremely successful in the prevention and detection of crime and is part of a series of measures aimed at tackling street assaults, public disorder and fear of crime.'*³¹⁵

Under the Scheme, financial assistance of up to €100,000 is available from the Department of Justice, Equality and Law Reform towards the capital costs of installing local community systems. Successful applicants under the Scheme may also avail of a top-up grant from the Department of Community, Rural and Gaeltacht Affairs of up to €100,000, where they have been designated as disadvantaged areas under the RAPID (Revitalising Areas by Planning, Investment and Development) Scheme. Pobal (formerly known as Area Development Management Ltd. (ADM)) manages the Community-Based CCTV Scheme on behalf of the Department of Justice, Equality and Law Reform.³¹⁶

A Project Board, comprising of representatives from the Department of Justice, Equality and Law Reform, the Department of Community, Rural and Gaeltacht Affairs, the Department of Environment and Local Government, the Chambers of Commerce of Ireland, Pobal and An Garda Síochána, was instituted to provide oversight for the implementation of the scheme.³¹⁷ In recognition of the fact that not all interested communities would be prepared to submit a fully-fledged application, a two-stream process was established. Under Stage 1, applications could be sought for a grant of up to €5,000 to allow those successful applicants to formulate comprehensive applications for Stage 2 funding. This second stage receives applications for the full scheme funding. By 20th September 2005, the closing date for the first round of applications, eighty-three applications had been received. On 30th December 2005, the Minister for Justice, Equality and Law Reform announced a package of approximately €1.5 million to assist communities throughout the country install their own CCTV systems. Twenty-four applicants received preliminary funding under Stage 1 and thirteen under Stage 2. Negotiations between Pobal and the relevant community groups would determine the exact grant to be awarded to that community. Blackpool in Cork, Clonmel, New Ross, Ballina and Tallaght received the preliminary funding in this round of applications, while Letterkenny, Tralee, Sligo, Waterford and Drogheda were among the thirteen to receive the Stage 2 Grant.³¹⁸ Tuam, Ballinasloe and Athy were successful Stage 2 applicants, which were also designated under the RAPID Scheme and therefore will receive matching grants from the Department of Community, Rural and Gaeltacht Affairs.

³¹⁵ *Minister Launches Grants for Community CCTV Systems.* Progressive Democrats Press Release. 15th June 2005. Available at http://www.progressivedemocrats.ie/press_room/1444/

³¹⁶ *Minister Launches Grants for Community CCTV Systems.* Progressive Democrats Press Release. 15th June 2005. Available at http://www.progressivedemocrats.ie/press_room/1444/. The RAPID Scheme is a targeted Government initiative focusing on Ireland's forty-five most disadvantaged communities. The scheme is operated under the auspices of the Department of Community, Rural & Gaeltacht Affairs with Pobal (formerly ADM Ltd.) co-ordinating the implementation of the scheme. For further details on the scheme see <http://www.pobal.ie/live/RAPID>.

³¹⁷ See further *Community-Based CCTV Archive* at <http://www.pobal.ie/live/CCTV/174.html>.

³¹⁸ Brennan, M. *More Security 'Eyes' on Alert in Country Towns.* Irish Independent. 31st December 2005. Also, Brennan, M. *'McDowell eyes €1.5m CCTV Roll-Out.* Irish Examiner. 31st December 2005.

It is envisaged that awards of financial support be made on an annual basis. The closing date for the second round of grants was 28th February 2007.³¹⁹ In applying the local community must demonstrate the support of local organisations and groups, the need for a CCTV system in their area and the potential 'to develop, implement, operate and maintain such a system into the future.'³²⁰ The eligibility criteria in relation to Stage 2 applications include:

1. The support of the local Divisional Officer of An Garda Síochána is forthcoming.
2. The proposal adheres to the *Code of Practice for Community-Based CCTV Systems Authorised under Section 38(3)(C), Garda Síochána Act 2005*.
3. The proposal adheres to the *Technical Specifications for Community-Based CCTV Systems Authorised under Section 38(3)(C), Garda Síochána Act 2005*.
4. Evidence that the local authority has agreed to act as Data Controller must accompany the application and
5. The applicant must be 'an existing, legally registered body with an established track record in relation to the expenditure of public funds.'³²¹

The recent launch of the Community-Based CCTV Scheme will undoubtedly catapult Ireland firmly into a new age of mass surveillance and arguably sets us on course towards the maximum surveillance society discussed in the previous chapter. As we progress along this journey, whispers of concern regarding the regulation and circumscription of the powers of the potentially omnipresent watcher will surely become more vivid.

The Regulation of Public CCTV in Ireland.

With the advent of this largely civilian-based CCTV scheme, the level of surveillance in Ireland's public spaces is set to increase rapidly and with it grow concerns regarding data protection, privacy and the potential for abuse of the panoptic power.³²² One would think that the mass proliferation of CCTV would raise the issue of its regulation up the agenda; however from the experience in Britain, one can see that this is not necessarily the case. Benjamin Goold explains how the regulation of public CCTV in Britain is by and large a sidelined issue.³²³ Though the British central government has been a leading proponent in the drive towards expanding the web of public surveillance, it has to date shied away from imposing restraints on the use of CCTV and other surveillance technology by local authorities and the police. Instead it has been left to system controllers to set down limits and to define what constituted legitimate

³¹⁹ Pobal. *Community-Based CCTV Scheme Guidelines for Application & Appraisals Process*. Department of Justice, Equality & Law Reform. 2006. Page 19. This document together with the *Code of Practice for Community-Based CCTV Systems Authorised under Section 38(3)(C), Garda Síochána Act 2005*, the *Technical Specifications for Community-Based CCTV Systems Authorised under Section 38(3)(C), Garda Síochána Act 2005* and the application forms for both Stages are available at <http://www.pobal.ie/live/CCTV/294.html>.

³²⁰ Pobal. *Community-Based CCTV Scheme Guidelines for Application & Appraisals Process*. Department of Justice, Equality & Law Reform. 2006. Page 4.

³²¹ Pobal. *Community-Based CCTV Scheme Guidelines for Application & Appraisals Process*. Department of Justice, Equality & Law Reform. 2006. Page 11.

³²² The Irish Council for Civil Liberties has regularly questioned the effectiveness and need for CCTV and its expansion, arguing that the likes of improved street lighting could achieve similar results without being as intrusive. See further *ICCL Questions Effectiveness of CCTV*. Irish Council for Civil Liberties Press Release. 26th June 2002. Also, *Expansion of CCTV Scheme Criticised*. Irish Council for Civil Liberties Press Release. 21st November 2000. Both available at http://www.iccl.ie/DB_Data/issues/Privacy_10006_General.htm

³²³ Goold, B. *CCTV & Policing: Public Area Surveillance and Police Practices in Britain*. Oxford University Press. Oxford. 2004. Chapter 4.

use of such technology.³²⁴ Goold even suggests that the reluctance of central government to regulate CCTV has directly fuelled its fierce propagation. He expresses doubt, however, as to whether public surveillance will continue to expand in such an unfettered fashion. Recent changes in British data protection legislation and the incorporation of the European Convention of Human Rights may present a looming shadow over the legality of public CCTV.³²⁵ As it currently stands, there is little real regulation of public area surveillance.

- *Right to Privacy:*

Traditionally, a general right to privacy has not been acknowledged in English law.³²⁶ Unlike the Irish situation, the absence of a written constitution in Britain means legal rights, if they are to be recognised, are developed by analogy from existing law. This significantly hampers the emergence of 'new' rights. Similarly, English tort law has arguably been creatively interpreted in order to provide some sort of protection to individuals against intrusions into their private life. Yet, this falls far short of establishing a distinct right to privacy, which, even if it were to come into being, would have a questionable role in relation to surveillance in public spaces. After all, just how much of an expectation of privacy can one have on a public street?³²⁷ Goold discusses a number of cases involving Article 8 of *European Convention of Human Rights*, namely right to respect of privacy, to illustrate how the European Court of Human Rights has explored the ambit of this right and the extent to which it percolates into the public sphere. In *Friedl v. Austria*,³²⁸ the European Court of Human Rights found that Article 8 does not confine private life to one's 'inner circle', rather 'private life' seeps into the outside world to an extent. However, it found that the taking of photographs by police of the applicant, who was involved in a public demonstration in Vienna, did not constitute a breach of Article 8. Goold asserts that this case may very well be authority in favour of the argument that the right to privacy may, in certain circumstances, be claimed in public spaces. In *Peck v. United Kingdom*,³²⁹ another case concerning Article 8, the Court found that not all types of public surveillance were equally acceptable and that distinctions could be drawn between different types of public activities and circumstances. As of yet, the right to privacy in Britain does not present much of a shield in the face of the virtually omnipresent panoptic power that is CCTV.

The existence in Ireland of a written constitution arguably provides greater protection of privacy than is the case in Britain. The case of *Kennedy & Arnold v. Ireland*³³⁰ recognised an individual's right to privacy for the first time under the Doctrine of Unenumerated Rights.³³¹ Further acknowledgment is paid to privacy by Ireland's incorporation of the *European Convention of Human Rights* into domestic law by way of the *European Convention of Human Rights Act 2003*. The drafting of the *Privacy Bill 2006* is yet another significant copper fastening of the right to privacy in Irish law. This recent piece of draft legislation establishes a tort of violation of privacy under Section 2 and in Section 3, it sets out an individual's entitlement to privacy as one '*which is reasonable in all the circumstances having regard to the rights of others and to the requirements of public order, public morality and the common good.*' The Bill also permits a number of defences to a privacy action under Section 5, which include authorised

³²⁴ Goold, page 89.

³²⁵ Ibid, page 90.

³²⁶ Ibid, pages 90-95.

³²⁷ Ibid, pages 91-92.

³²⁸ *Friedl v. Austria* (1996) 21 EHRR 83 referred to in Goold, pages 92-94.

³²⁹ *Peck v. United Kingdom* (2003) ECHR Application No. 44647/98 referred to in Goold, pages 94-95. The applicant in this case argued that the release of CCTV footage of his attempted suicide and subsequent arrest to the local media by Brentwood County Council interfered with his Article 8 rights. It was held that the footage was disclosed for a legitimate purpose, that being public safety. Goold interestingly notes that this case concerned the disclosure of CCTV footage as opposed to the surveillance itself or the recording of the images. See also, Kelleher, D. *Under Surveillance*. [2006] Law Society Gazette. June. 24. Page 24.

³³⁰ *Kennedy & Arnold v. Ireland*. [1988] ILRM 472.

³³¹ Kelleher, page 24.

surveillance by way of CCTV. Further evidence of the protection of privacy in Irish law is seen in an example proffered by Kelleher where a criminal prosecution under Section 10 of the *Non-Fatal Offences Against the Person Act 1997* was taken in respect of a landlord in Galway, who used miniature cameras to secretly film his tenant's bedroom and bathroom.³³² Galway District Court sentenced the landlord to 16 months for harassment. This offence is defined under Section 10 as arising where a person '*intentionally or recklessly seriously interferes with the other's ... privacy and his or her acts are such that a reasonable person would realise that the acts would seriously interfere with the other's ... privacy.*' This said, however, there was a clear and indisputable expectation of privacy held by the complainants in the circumstances of that particular case. There has to date been no privacy case to reach the Irish courts regarding an invasion of privacy by way of public area surveillance systems, so it remains to be seen to what extent does protection of privacy in Ireland stand up to public CCTV.³³³ Without doubt though, it is arguable that the right to privacy in Ireland enjoys much more substance than that in Britain and the Irish Data Protection Commissioner, while accepting the value of CCTV in the fight against crime and also its potential for misuse, contends that ordinary data protection rules and principles are well-equipped to avoid widespread infringements of the individual's right to privacy.³³⁴

- *Data Protection:*

Recent changes in British data protection legislation appear, at least at a glance, to provide some glimmer of hope for privacy campaigners.³³⁵ Under the *Data Protection Act 1998*, CCTV systems operating in areas to which the public have open access must be registered with the Information Commissioner and must adhere to the general principles set down in the data protection legislation. Compliance with data protection principles is not particularly arduous. It requires, for example, the secure storage of equipment and recordings and the posting signs indicating to the public the operation of surveillance. The legislation does not specify how the surveillance is to be undertaken nor does it direct how the subject of surveillance is to be selected. Public surveillance systems are lawful under the Act once they are employed for a purpose in the public interest, such as crime control and public safety. The Act provides a very broad definition for 'public interest'; therefore it seems there is significant scope to find public area surveillance lawful.

Irish data protection law consists of the *Data Protection Acts 1988-2003*. The more recent 2003 Act, just as Britain's *Data Protection Act 1998*, implements the *EC Data Protection Directive 1998*, the core objective of which is to foster development of the internal market.³³⁶ The protection of privacy is not its goal; rather privacy is shielded by it only so far as it does not hinder the nurturing of the internal market. This data protection legislation largely functions to regulate the processing of personal data, and consequently does not exercise significant influence of the operation of public CCTV.

³³² Kelleher, page 24.

³³³ The case of *Atherton v. D.P.P.* does, to an extent, look at the issue of the right to privacy in quasi-public areas. This case saw a dispute between neighbours about damage to a hedge spill over into the covert surveillance and recording of one of them on their own property. When asked to assess the admissibility of footage attained from the camera in a subsequent prosecution for criminal damage, the High Court took a very restrictive view of privacy. The Court found there to have been no breach of the right to privacy, because the images captured could have been witnessed by anyone standing in the window where the camera was situated and testimony from such a person would not be inadmissible. This was despite the fact that 70% of the surveillance covered the front of applicant's house rather than the site of the alleged offence. *Atherton v. D.P.P.* [2005] IEHC 429. Carolan laments the High Court's failure to fully engage with the concept of privacy. According to him, the rigid public/private sphere distinction employed by the High Court here significantly undermines the strength of the right to privacy and the Court's approach is not in line with the expansive view of privacy taken in ECHR cases. See further Carolan. *Stars of Citizen CCTV: Video Surveillance & the Right to Privacy in Public Places.* (2006) DULJ 326a.

³³⁴ See further Case Study 14/96: 'Use of Closed Circuit Television (CCTV)-Privacy Implications-Does the Data Protection Act apply?' At <http://www.dataprotection.ie>.

³³⁵ Goold, pages 95-98.

³³⁶ Kelleher, page 25.

In relation to the specific interaction of data protection and CCTV surveillance, the Irish legislation sets out a number of requirements.³³⁷ One of the primary principles in Irish data protection legislation is that of 'fair obtaining.' In order to satisfy this requirement, it is necessary to inform those whose images are captured of the identity of the data controller and the purpose of the data processing. This can be achieved simply by the positioning of signs setting out the identity of the data controller and the purpose of the surveillance. Normally the location will inform on the identity of the controller and since security is the default purpose, it is common practice to have clear signs prominently displayed at all entrances telling merely of the presence of CCTV and including a contact number. Where CCTV is used for other purposes, the potential subjects must be made aware of that other purpose before the cameras are used for such. It is also important that cameras are positioned in such a way as not to exceed their purpose. It would be disproportionate, for instance, for camera coverage to seep into the private property of another. Also, where a surveillance system is used for security purposes, while it may be acceptable for cameras to be positioned in publicly accessible areas, coverage of private staff areas would be excessive.

Another requirement of data protection concerns storage and retention of data. Data protection legislation permits the retention of data for no longer than is necessary for the purposes set out. The Data Commissioner recommends a twenty-eight-day cycle and discourages the taking advantage of newer technology, which allows for greater storage capacity and duration. The Commissioner accepts, however, that images may be retained for longer periods, where they speak to a specific incident that is being or may be investigated. Secure storage, restriction of access to authorised personnel and a log of such access should be maintained in relation to the stored images.

In relation to access by An Garda Síochána to stored images for the purposes of a specific investigation, the data controller must be satisfied that a genuine investigation is being undertaken. Covert surveillance is permitted in limited circumstances with a view to crime prevention, detection and investigation. Such surveillance, according to the Data Commissioner, should be short-term and focussed and should either involve actual Garda involvement or an intention to so involve. The Commissioner however suggests that overt rather than covert surveillance would be more suited to crime prevention as well as being less intrusive as far as privacy is concerned. Under data protection legislation, security companies would be classified as data processors and their clients would be the data controllers. Section 16 of the Acts require such data processors to be registered with the Data Protection Commissioner and such processors are also required to employ suitable security measures to prevent unlawful processing.

While reassuringly data protection legislation does provide a good general structure regarding the processing and storage of data gleaned from CCTV surveillance, it does not harness the operation of public area CCTV in terms of how the surveillance is undertaken on the ground and how the subject is selected for monitoring.

- *The Rules of Evidence:*

As with data protection legislation, the rules of evidence provide little to no guidance and structure for the performance of surveillance.³³⁸ Rules of evidence are concerned with the handling and storage of footage gleaned from surveillance cameras as opposed to how the cameras are used. With the dawn of the digital age, the authentication of video recordings is emerging as the main issue of debate on the use of video evidence. Sergeant Michael O'Donoghue, Crime Prevention Officer at Anglesea Street Garda

³³⁷ For further details see *Data Protection & CCTV: Fair Obtaining* at <http://www.dataprotection.ie/documents/guidance/CCTV.doc>. It seems that there is little confusion as to whether CCTV images fall under the ambit of data protection. Section 1 of the Data Protection Act 1988 defines 'personal data' as 'data relating to a living individual who can be identified either from the data or from the data in conjunction with other information in the possession of the data controller.'

³³⁸ Goold, pages 95-96.

Station, explained that the Anglesea Street system uses analogue recordings as opposed to digital.³³⁹ The reason for this being that the original recording, as required under the rules of evidence in Ireland, is the videotape from an analogue system, whereas with digital recordings the original is located on the computer hard drive itself. CD versions of the footage are merely copies. Technological advances in software also breed concerns over digital tampering. The main drawback of continuing to use an analogue system is that the recorded footage is not of as high a quality as that viewed on the monitors as the incident happens. Until such time as the rules of evidence are amended to keep pace with technological advances, it seems analogue recordings will remain the only admissible surveillance recordings. Generally speaking though, CCTV footage is readily accepted as admissible evidence and system managers in Britain are well aware of the need to show that the footage is genuine and has not been tampered with. Similarly, given that the established public CCTV systems in Ireland are operated under the auspices of An Garda Síochána and that the Community-Based CCTV systems will be operated with significant input from An Garda Síochána, the rules of evidence are and will no doubt continue to be a featuring concern, but this concern is largely limited to the storage and handling of potential evidence in the prosecution of offences.

Such evidentiary rules include the principle that the defence should be afforded the opportunity to examine evidence on the basis of fair procedure. Fennell sets out the caselaw illustrating the duty to preserve and the right of the defence to access and examine the material.³⁴⁰ Interestingly, much of the caselaw in this regard deals with CCTV footage. In *Murphy v. D.P.P.*³⁴¹, it was held that the destruction of a car in which the alleged offences occurred was a breach of fair procedure given that the accused's fingerprint expert could not examine it. It seems, although that the duty to preserve does not necessarily cover all CCTV recordings. In *Mitchell v. D.P.P.*³⁴², it was found that the Gardaí are not obliged to retain all CCTV footage, however there would be situations where the Gardaí would be required to inform the defence of the existence of the recordings and of the intention to destroy it. The case of *Braddish v. D.P.P.*³⁴³ set out that the Gardaí have a duty to seek out as well as retain evidence pertaining to guilt or innocence whether it is to be relied upon by the prosecution or not. This was reiterated in *Dunne v. D.P.P.*³⁴⁴, where surveillance footage of the filling station which the accused allegedly robbed was not forthcoming. Even though the duty to seek out and preserve was again emphasised, it was found that the defence's delay of 12 months in seeking the footage was fatal to their claim. The majority held that the test was whether there was a real risk that the accused will not receive a fair trial without the missing evidence.

In relation to the actual use of CCTV footage as evidence, McGrath³⁴⁵ refers to the case of *People (D.P.P.) v. Maguire*³⁴⁶, in which the Court of Criminal Appeal looked at the issue of identification and the role of video evidence. Here Justice Barron set out three situations in which the jury may be presented with video footage or stills. The first is where the footage or stills are used to bolster the evidence of a witness at the scene – in other words, the footage or stills are used to establish whether or not the witness had a reasonable opportunity to make the identification. In this case the footage is used to gauge the credibility or reliability of the witness and not as stand-alone identification evidence. Similarly, the second scenario deals with witness credibility. Here, footage or stills may be used to identify the accused as the perpetrator by someone, who was not at the scene, but who knew the defendant. To introduce such evidence, it must be shown in which capacity and how well the witness knows the defendant.

³³⁹ Details of the Cork City centre CCTV system were furnished by Sergeant Michael O'Donoghue, Crime Prevention Officer of Anglesea Street Garda Station at Anglesea Street Garda Station on 28th October, 2005.

³⁴⁰ Fennell. *The Law of Evidence in Ireland*. 2nd Edition. Lexis Nexis Butterworths. Dublin 2003. Page 177-178.

³⁴¹ *Murphy v. D.P.P.* [1989] I.L.R.M. 71

³⁴² *Mitchell v. D.P.P.* [2000] 2 I.L.R.M. 396.

³⁴³ *Braddish v. D.P.P.* [2002] 1 I.L.R.M. 151.

³⁴⁴ *Dunne v. D.P.P.* Unreported, Supreme Court. April 25th, 2002.

³⁴⁵ McGrath. *Evidence*. Thomson Round Hall. Dublin. 2005. Pages 207-208.

³⁴⁶ *People (D.P.P.) v. Maguire*. [1995] 2 I.R. 286.

Justice Barron acknowledged the danger of prejudice arising out of the occupation of the witness, however if identification in this manner by a police officer, for example, is more prejudicial than probative, the footage or stills may be excluded. The final situation is where the jury themselves view the footage or stills and form their own view on identity. This arises where no other witnesses are forthcoming. In *Maguire*, the Court of Criminal Appeal reiterated that the standard caution in relation to identification evidence should be given to the jury in cases where video footage or stills are used. It also emphasised that in the first two situations, where witnesses were forthcoming, the trial judge should clarify to the jury that the footage or stills are to be used by them to assess the credibility of the witnesses and not to draw their own conclusions on identity from it.³⁴⁷

Healy recognises a number of concerns arising out of the use of video footage or stills.³⁴⁸ Primarily, he lists the main issues as being the quality of the image, the fact that the accused may bear merely a resemblance to the person captured on the footage, the possibility of the footage being manipulated and the extent to which the witness was exposed to the footage or stills prior to giving evidence (in other words how strong was the witness's identification in itself and what did the footage bring to it.) Nevertheless, footage from surveillance cameras and stills extracted from them have successfully been used as evidence. Having said all of this though, the rules of evidence provide no real regulation of the actual operation of CCTV surveillance here and in Britain. Informal codes of practice go much further in filling this gap.

- *Codes of Practice:*

In Britain, the absence of formal regulation from central government has rendered informal codes of practice as the primary limitation on the operation of public area surveillance systems.³⁴⁹ Such codes of practice provide guidance on the daily operation of the CCTV system, detailing issues such as control and operation of cameras, security of and access to the system, tape handling and storage and so on. Unfortunately, however, as Norris and Armstrong point out, there is little consistency between the different codes.³⁵⁰ This is most likely because of the absence of any central and standardised direction on the content and legal status of such codes. Goold refers to a comprehensive survey of the variety of codes of practice for CCTV systems throughout Britain undertaken by Bulos and Sarno.³⁵¹ The findings of this survey indicate that the majority of codes focussed on 'operational questions' and technical matters including *'the need for proper and secure video storage, retrieval and use of tapes, with particular attention being paid to the way in which video material could be used for evidential purposes.'* Bulos and Sarno went on to assert that *'almost as evident was the idiosyncratic and partial way in which other matters such as accountability, provision of information, monitoring and evaluation were addressed.'*³⁵² Procedures concerning the actual operation, for example ascertaining 'suspicious behaviour', subject targeting and undertaking prolonged surveillance, were rarely dealt with in detail and instead were left to the discretion of the operator. Privacy, ethics and accountability scarcely featured on the agenda of the formulators of codes of practice. Goold cautions that this survey was undertaken in 1995 and since that date there has been some progress towards consistency in codes of practice with the Home Office, among others, issuing guidelines on best practice as regards codes of practice for CCTV use. The most significant development however came from the Local Government

³⁴⁷ The standard identification caution is found in *People (A.G.) v. Casey (No. 2)* [1963] I.R. 33. (Pages 39-40). In general terms, the caution includes a warning to the jury that on occasion identification evidence has been found to be incorrect and that if their finding of guilty rests on identification evidence, they should be particularly careful before accepting such evidence and be satisfied beyond all reasonable doubt in light of all the circumstances that the identification evidence is correct.

³⁴⁸ Healy. *Irish Laws of Evidence*. Thomson Round Hall. Dublin. 2004. Pages 180-183.

³⁴⁹ Goold, pages 98-113.

³⁵⁰ Norris & Armstrong. *The Maximum Surveillance Society: The Rise of CCTV*. Berg. Oxford. 1999. Page 100.

³⁵¹ Bulos, M. & Sarno, C. *Codes of Practice & Public Closed Circuit Television Systems*. Local Government Information Unit. London. 1996. Page 17. Cited in Goold at page 99.

³⁵² Bulos & Sarno, page 17. Cited in Goold at page 99.

Information Unit on foot of the survey by Bulos and Sarno. In 1996, *A Watching Brief: A Code of Practice for CCTV* was published.³⁵³ This document has achieved much in the way of promoting uniformity amongst CCTV codes of practice. Its efforts were reinforced by the Home Office requirement that bids in the national CCTV Challenge Competition, which did not include at least a draft code of practice would fail.

As regards codes of practice in Ireland, An Garda Síochána's *Declaration of Professional Values & Ethical Standards*³⁵⁴ pays due consideration to the need to maintain confidentiality in all Garda matters.³⁵⁵ Kavanagh asserts that this document also states that '*the actions of members of An Garda Síochána, including the use of CCTV technology, must be in accordance with the basic human rights principles of necessity, legality, proportionality and accountability.*'³⁵⁶ Unfortunately, due to the fact that this is an internal Garda document, access to it is restricted. Nevertheless, a specific code of practice has been drafted with respect to the code of practice for the newly launched Community-Based CCTV Scheme and this is readily available. Furthermore, in order to advance in the application process, it must be shown that the proposed system for the local community will comply with the code of practice. This feature of the scheme goes a long way towards avoiding the lack of uniformity in codes of practice that has plagued British CCTV systems. At the outset, this code of practice aims to maintain public confidence and avoid improper use of the CCTV system. It sets out the legal obligations established under data protection legislation and proclaims that it will be kept under constant review so as to ensure it remains relevant and up-to-date. Perhaps note has been taken of the lessons learned in Britain.

Having a code of practice is one thing. Following and enforcing it are completely different. At least requiring applicants in the British national CCTV Challenge Competition to attach a draft code of practice at the very least is a step in the right direction. Perhaps a subsequent survey will tell whether those draft codes have been fully developed, employed and reviewed. Nevertheless, it is reassuring to note, as will be explained shortly, that Ireland's venture into the formal regulation of CCTV includes the possibility of revoking authorisation to operate a community-based CCTV system for non-compliance with the terms and conditions of that authorisation, which would include observance of the requirements of the code of practice.

- *Garda Síochána Act 2005:*

Unlike in Britain, there has been some attempt by the Irish Government to set down parameters for public area surveillance. The aforementioned Community-Based CCTV Scheme operates in accordance with Section 38 of the Garda Síochána Act 2005. In basic terms, this Section sets out, *inter alia*, that the Garda Commissioner may authorise the installation and operation of CCTV '*for the sole or primary purpose of securing public order and safety in public places by facilitating the deterrence, prevention, detection and prosecution of offences.*'³⁵⁷ Section 38(3)(c) establishes the statutory basis for local communities to operate their own CCTV systems. The *Code of Practice* and *Technical Specification* were prepared by the Department of Justice, Equality and Law Reform together with An Garda Síochána in accordance with this provision. Adherence to both of these documents is central to the operation of the Scheme and where an applicant falls short of the requirements of either document, their application will cease to be considered in the running for funding. Section 38(5) allows for the Government to set out the criteria with which those local communities must comply. Section 38(7) dictates that those

³⁵³ Kitchen, H. *A Watching Brief: A Code of Practice for CCTV*. Local Government Information Unit. London. 1996. Cited in Goold at page 100-101.

³⁵⁴ An Garda Síochána. *Declaration of Professional Values & Ethical Standards*. Dublin. 2003.

³⁵⁵ Article 7 of the *Declaration of Professional Values & Ethical Standards* as cited in Kavanagh, *Safer Streets? CCTV Management*. Communiqué: An Garda Síochána a Management Journal. September 2003. 30 at page 35. (Kavanagh 2003).

³⁵⁶ Kavanagh (2003), page 35.

³⁵⁷ Section 38(1) of the Garda Síochána Act 2005.

authorised to operate the CCTV system by the Garda Commissioner must permit members of An Garda Síochána to have access to the CCTV at all times in order to supervise and control the operation of the CCTV system on behalf of the Garda Commissioner or to retrieve recorded data or information. Section 38(8) allows the Garda Commissioner to issue directions with regard to installation or operation to those authorised to operate the CCTV system. Also under this provision, the Garda Commissioner may, with the consent of Minister for Justice, Equality and Law Reform revoke his authorisation for failure to comply with his issued direction or failure to adhere to the terms and conditions of the authorisation. On notification of this revocation, the once-authorised person must cease to operate the system under Section 38(9). Failure to do so is decreed to be an offence under Section 38(10) subject to a fine on summary conviction of up to €2,500 and/or imprisonment for up to six months.

Gladly, the most recent development in Ireland's CCTV journey, namely the Community-Based CCTV Scheme, enjoys a statutory footing. This is not the case in relation to the multitude of CCTV systems in Britain. Having touched quite generally on the issue of regulation of CCTV in Ireland and Britain, it is now prudent to assess the few evaluations that have been completed to ascertain the impact and performance of Ireland's more established CCTV systems.

Contemplating the Impact of Public CCTV in Ireland.

To date the CCTV systems located in areas of Dublin, Tralee, Dun Laoghaire, Dundalk and Cork have been the subject of impact and effectiveness analysis. The Garda Research Unit based at the Garda Síochána College in Templemore was given the mandate of undertaking research on the effect of Garda CCTV in Ireland. In 2000, the first report was completed in relation to the systems in Dublin (Temple Bar and O'Connell Street) and Tralee.³⁵⁸ In the summer of 2006, the Garda Research Unit initiated further evaluations of public CCTV systems in Dun Laoghaire and Dundalk. In doing so, the Unit pursued a before-and-after analysis of the crime statistics from around the 2003-2005 period to assess the impact of CCTV in Dundalk and Dun Laoighaire, with Drogheda and Blackrock as the respective comparable control zones.³⁵⁹ More recently, the Unit completed a study of the impact of CCTV in Cork City. While in 2001, a report was undertaken by Sarah Parsons on the use of CCTV by An Garda Síochána in Dublin's North Inner City area.³⁶⁰ Unfortunately, as was the case with the recent Dun Laoghaire, Dundalk and Cork evaluations, this research was not accessible for inclusion in this report. While An Garda Síochána have been responsible for the installation and evaluation of the more established CCTV systems, the emergence of community-based CCTV schemes brings with it the opportunity for CCTV to be increasingly

³⁵⁸ O'Dwyer, K. & Furey, M. *CCTV in Dublin & Tralee – Preliminary Evaluation*. Research Report No. 1/00. Garda Research Unit. Templemore. (Unpublished Report). 2000. This report will be discussed in more detail later in this chapter. See note 74 and the accompanying text.

³⁵⁹ Eamon Lynch, Research Officer in the Garda Research Unit, Templemore explained the research mandate in relation to the impact of CCTV in a telephone interview on 20th July, 2006 and also 11th December, 2007. The lapse in time between the Tralee/Dublin evaluation in 2000 and the more recent studies of Dundalk and Dun Laoghaire was unavoidable. A CCTV system must be in place for over a year in order to evaluate and compare a full year's crime data before and after the installation date. Given that the Dundalk and Dun Laoghaire systems became operational in 2004, 2006 was the earliest evaluations could be undertaken. The evaluations on the Dun Laoghaire, Dundalk and Cork systems were not accessible for inclusion in this report.

Lynch, E. *Evaluation of CCTV in Dun Laoghaire*. Research Report No. 7/06. Garda Research Unit. Templemore. (Unpublished Report) 2006.

Lynch, E. *Evaluation of CCTV in Dundalk*. Research Report No. 8/06. Garda Research Unit. Templemore. (Unpublished Report) 2006.

Browne, P. *Evaluation of CCTV in Cork*. Research Report No. 15/07. Garda Research Unit. Templemore. (Unpublished Report) 2007.

³⁶⁰ Parsons, S. *Watching the Watchers: An Garda Síochána & CCTV in Dublin's North City Centre*. Trinity College, Dublin. (Unpublished Dissertation). 2001. This dissertation was completed with co-operation from An Garda Síochána in pursuit of an MSc in Applied Social Research from Trinity College, Dublin.

evaluated as a crime control/prevention mechanism. To this end, it is hoped that data and statistics collected and made available will make reference to the presence of CCTV and ideally will align with CCTV coverage and non-coverage in order to accurately portray the impact of CCTV.³⁶¹

While there are a number of evaluations, which were not accessible for the purposes of this report, for the time being however, there are a couple of evaluations which do shed light, though limited, on the impact of CCTV in Ireland to date. The first such assessment to be looked at came in 1999, when Kavanagh completed his economic analysis of the CCTV system on O'Connell Street in Dublin. Kavanagh favoured this economic approach, because at that stage there were three active CCTV systems in the State in Temple Bar, Tralee and O'Connell Street. Cork City centre was well on its way to becoming the next location for a public surveillance system with approximately thirty towns and cities all over the country proffering applications for consideration.³⁶² Given that tenders for public sector funding far outreach the span of such finance, it is of the utmost importance that the allocation of scarce resources be done in a prudent and cost effective manner. Kavanagh saw the want of evaluations assessing the value and effectiveness of CCTV schemes as incongruous with this aspiration towards the shrewd distribution of sparse resources. Consequently he undertook an economic analysis of CCTV in O'Connell Street. This system was selected primarily because the installation and manning of CCTV required quite a significant investment and if it could not be economically justified in such a busy city centre area with a relatively high level of reported crime, then it is questionable whether it could be justified anywhere.³⁶³

In relying particularly on the economic theories of Cost Effectiveness Analysis and Cost-Benefit Analysis, Kavanagh acknowledges the difficulties posed in applying such theories to the practical realities of policing activities and the use of CCTV. For example, the Cost-Benefit Analysis theory involves the identification of the gains and losses of a project and the expression of these in a common medium, in other words, the translation of the costs and benefits of a project into monetary terms in the hopes of selecting the most profitable and beneficial project.³⁶⁴ Transposing such economic theories into the realities of policing and the use of CCTV proves difficult in that not all 'outputs' are measurable, for instance the reduction of the fear of crime hardly has an accurate monetary value. Similarly, if one takes an increase in arrests as an output; it cannot be taken that all arrests do not necessarily share the same price tag. Drug-related arrests are plausibly worth more to society than public order arrests.³⁶⁵ These are difficulties arrived at only after addressing a fundamental underlying, and arguably insurmountable, weakness, which is the fact that CCTV does not operate in a vacuum. Other policing activities may blur the distinction between outputs attributable to CCTV itself and those due to a combination of crime prevention efforts or those brought about solely by those other endeavours.³⁶⁶ External factors, such as overall crime trends, are also complicating factors, as would be other non-policing activities, such as redevelopment or changes in social or economic activities in the area. Nevertheless, Kavanagh employs the Cost Effectiveness Analysis and Cost-Benefit Analysis methods of economic evaluation to ascertain

³⁶¹ The Garda IT system, PULSE (Police Using Leading Systems Effectively), does provide crime data by street by year, thereby allowing for more accurate assessment of the performance of CCTV. (Eamon Lynch, December, 11th, 2007). Crime statistics are more widely available in the Annual Report of An Garda Síochána, which is published on the website of An Garda Síochána. This data only refers to Garda Divisions. CCTV cameras are located on streets within Garda Districts, which themselves are within Garda Divisions. The crime statistics are published by reference to the Garda Divisions, therefore crime rates between CCTV-covered and non-CCTV covered areas are indistinguishable. The Central Statistics Office has also begun to provide statistics on crime and offending, however again there may be the difficulty of aligning the data with the locations surveilled by CCTV.

³⁶² Kavanagh, page 11.

³⁶³ Kavanagh, page 25.

³⁶⁴ *Ibid*, page 17.

³⁶⁵ *Ibid*, page 26.

³⁶⁶ *Ibid*, page 24.

the merits of CCTV as an aid to An Garda Síochána; as such an approach provides *‘a structured method for making difficult decisions about resource allocation.’*³⁶⁷

Having identified the aim of the O’Connell Street system as being the prevention and deterrence of crime, the next step in Kavanagh’s economic analysis was to set out the relevant inputs and outputs. In overly simplistic terms, the costs of installation and operation were recognised as the inputs, while the reduction of crime was identified as the primary output.³⁶⁸ In undertaking his analysis, Kavanagh looked at crime data collected between January 1st 1996 and December 31st 1998. During that period, recorded crime levels fell. However the area covered by CCTV enjoyed one of the more significant decreases at 23.3% with the overall Dublin Metropolitan Area Region experiencing a fall of 17.8%.³⁶⁹ In relation to detection rates, the CCTV-covered area hosted the greatest increase, being almost 9%, rising from 45% to 53.9%, while the total detection rate for the Dublin Metropolitan Area Region excluding the CCTV area increased by 0.5% from 37.5% to 38%.³⁷⁰

With the inputs and outputs identified, the next step for Kavanagh was to translate them into the common medium that is money. He acknowledged the difficulty in assessing the lifespan of any such system, which is necessary to execute the arduous task of arriving at a monetary figure for the operational costs involved. This is especially so given the increasingly rapid evolution of technology. As a result, Kavanagh assumed a seven-year lifespan for the purposes of fixing a figure for the input.³⁷¹ He ascertained that the bulk of the input costs was made up by the cost of operating the system and that 78% of the total operating expenditure over those seven years could be traced back to the monitoring costs, thus he concluded serious consideration should be given to how the system should be monitored and by whom, for instance by civilian personnel or members of An Garda Síochána. Other operating costs would include maintenance and the provision of videotapes.

The actual monetary figures affixed to these inputs are as follows:³⁷²

1. The capital or installation costs for the O’Connell Street CCTV system were discerned to be £786,500.
2. The total annual salary for manning the system came to £295,614.³⁷³ This was the actual expenditure for staffing the system with shifts of one, two and three Gardaí. Kavanagh put forward four other staffing suggestions which varied from manning the system around-the-clock with three members of An Garda Síochána at a total annual salary of £417,057.60 to manning it with three civilians at a total annual salary of £258,154. The other two scenarios involved a combination of civilian and Garda monitors.

³⁶⁷ Ibid, page 28.

³⁶⁸ For a more comprehensive account of Kavanagh’s economic analysis of the O’Connell Street CCTV system see Kavanagh, Chapter 3. Kavanagh lists a number of other outputs, which include (a) the benefits of solving crime early, (b) improved public perceptions, (c) increased ability to target resources, (d) increased intelligence opportunities, (e) increased officer safety and (f) provision of a better service. These outputs were identified in a Benefits Management Study undertaken in the National Strategy for Police Information Systems in 1996. Kavanagh goes on to list reduction of the fear of crime, improved traffic flow and reduced prosecution/court costs as other recognised outputs. Of these outputs, some are tangible, while unfortunately others are intangible. Pages 52-53.

³⁶⁹ Kavanagh, pages 45-47.

³⁷⁰ Ibid, pages 48-51.

³⁷¹ Ibid, page 52.

³⁷² Ibid, pages 53-56.

³⁷³ Using the five possible staffing scenarios, Kavanagh applied the Cost Effectiveness Analysis to rank the five different projects in their delivery of the same output and thus find the most cost-effective manner of staffing the CCTV system. Given that the inputs for all five projects were identical with the exception the cost of staffing, the projects were ranked by reference to the staffing inputs. For a fuller discussion of this, see Kavanagh, pages 58-60.

3. The maintenance cost was assessed at 6% of the installation cost for the seven-year lifespan, being £47,190.
4. The provision of videotapes was estimated at £2,000.

To place a monetary value on the primary output – the reduction in recorded crime, Kavanagh manually extracted the relevant figures from the total figures given for the C District, within which the O’Connell Street CCTV system catchment area is located.³⁷⁴ Using the statistics, the cost of recorded crime, the cost of arson or criminal damage and the value of the property recovered by An Garda Síochána were calculated. By combining the costs of crime and of arson or criminal damage and then subtracting the value of the recovered property, the net cost of crime was calculated. The net cost of crime in the eighteen-month period prior to the installation of CCTV in the O’Connell Street area was £2,792,983. The net cost for the eighteen months following installation was £2,090,433, meaning a net saving of £702,550. This is assuming that CCTV was responsible for the entire reduction in crime and consequent saving. To factor in externalities, which may impact the efforts of CCTV in both a positive and negative way, Kavanagh applied the theory of sensitivity analysis.³⁷⁵ This is significant, as, for example, if only 60% rather than 100% of the reduction in the costs of crime is attributable to CCTV, the net project value (the net saving/reduction in crime costs less the project inputs) will be materially affected. Where the net project value is a negative, in other words, where the net benefits fall short of the net costs, then the project is undesirable.

In this Cost-Benefit Analysis including the sensitivity analysis, Kavanagh concluded that the successful projects (which were the actual staffing arrangement, combinations of Garda and civilian staff and civilian staff alone) were very sensitive to the level of success attributable to the CCTV system. The minimum level of success or effectiveness required for a project to be successful was 87%, meaning that CCTV had to be responsible for 87% of the saving or reduction. While limiting the benefits or outputs of the system to the reduction of crime and the consequent saving for the sake of ease of measurement and ease of application of the Cost Effectiveness Analysis and the Cost-Benefit Analysis to CCTV on O’Connell Street, Kavanagh acknowledged that this *‘does not present a fair reflection of the net social benefit provided by CCTV systems.’*³⁷⁶ He proceeded to advocate the pursuit of wider studies in the hopes of identifying other cost savings and less tangible benefits in order to bestow a more accurate indication of the real impact of CCTV systems.³⁷⁷

The public coffers will never stretch to humour every whim. Limited resources must be allocated thoughtfully. Thus in the spirit of the guidelines proffered by the Department of Finance to appraise investment or capital projects, Kavanagh employed the Cost Effectiveness Analysis and the Cost-Benefit Analysis to use of CCTV as an aid to policing. Cost Effectiveness Analysis permits the ranking in order of different means of achieving the same goal. Cost-Benefit Analysis translates the benefits and costs of project into monetary terms allowing for the most suitable project to be selected. Both methods

³⁷⁴ Kavanagh, page 57.

³⁷⁵ Ibid, pages 61-63.

³⁷⁶ Ibid, page 63.

³⁷⁷ Kavanagh outlines the potential for evaluating other such benefits through the Cost-Benefit Analysis in his Chapter 4, where he looks at four other tangible benefits. For example, he discusses the potential for savings to the Criminal Justice System from increased guilty pleas from offenders presented with CCTV footage arguably establishing the prosecution’s case against them. Unfortunately however, as Kavanagh concedes, the data required to calculate the impact of CCTV on guilty pleas and the resultant savings to the Criminal Justice System is not available. The other tangible benefits are the increased accuracy in the assessment of the cost of crime through the analysis of the CCTV system, improved detection rates and the more efficient and effective allocation of Garda resources through the use of CCTV and adjustments in the behaviour of the insurance market in response to a safer environment due to the presence of CCTV. He also refers to a number of intangible benefits such as public attitudes, the sense of safety and reduced fear of crime, which, while clearly being benefits, are not easily affixed with monetary values.

concluded that employing three civilian staff to monitor the O'Connell Street system was the most feasible and efficient means of operating the system. On foot of this Kavanagh suggested reviewing the Garda Síochána Policy Document on CCTV in terms of civilian monitoring. He also indicated that for the purposes of future more robust evaluations, more considered data collection and improved data collection mechanisms should be undertaken. This would hope to include the less tangible or heretofore unaccounted for costs and benefits, in order that a more holistic and comprehensive interpretation of the impact of CCTV might be achieved.

The other significant report was undertaken by Kieran O'Dwyer and Garda Maeve Furey of the Garda Research Unit in Templemore.³⁷⁸ The objective in this 2000 report was to measure the impact of CCTV in Tralee, Co. Kerry and in the O'Connell Street and Temple Bar areas of Dublin City. The expected beneficial outcomes of the CCTV systems included increased detections, reduced crime and disorder, more efficient deployment of Garda resources, more efficient court processing through increased 'guilty' pleas, improved feelings of safety and security among the public. Perceived disadvantages were displacement of crime and fears among the public of invasion of privacy. Though O'Dwyer and Furey were satisfied that there was much anecdotal evidence of the worth of CCTV as a policing tool for An Garda Síochána, ultimately their findings could neither support nor contradict the suppositions regarding the aforementioned benefits of CCTV. This was said to be largely due to limitations of data and methodological difficulties in discerning the actual effects of CCTV shorn of any other influences.³⁷⁹

To ascertain the impact of CCTV on crime and detection rates, O'Dwyer and Furey undertook a before-and-after analysis in relation to all three subject areas and then attempted to discern whether any differences noted were attributable to the CCTV system involved. As regards O'Connell Street, the evaluation spanned eighteen months before and after installation, from 1996 to 1998. The Temple Bar area proved less straightforward. Due to the fact that prior to the installation of CCTV, this area did not experience much economic activity. The arrival of CCTV in Temple Bar in 1995 coincided with major regeneration in the area, and so it would be misleading and futile to engage in a before-and-after analysis. Instead a data for the post-CCTV 1996-1998 period underwent a comparative analysis. Data collected during two eight month periods either side of the installation of Tralee's twenty-four cameras from January to August in 1998 and 1999 were examined.³⁸⁰

While differences between before and after figures may seem obvious, those differences are not necessarily, in their entirety or otherwise, attributable to CCTV. Any effect that CCTV may have will not emerge in a vacuum; therefore this preliminary study took into account other influences of crime rates. The general crime trend was used as a backdrop to distinguish effects which may be realistically accredited to CCTV from those carried along in the current of the overall crime trend. Specific Garda operations along the lines of Operation Clean Streets, which targeted street drug-dealing and other developments in the relevant areas such as the significant urban regeneration occurring in Temple Bar, which coincided with the installation of CCTV, were also considered.³⁸¹ To further assist in the isolation of the real CCTV effect, a comparative analysis was undertaken between CCTV-covered areas and adjacent and non-adjacent similar areas, which were not covered by CCTV. This endeavour would also go some way towards ascertaining whether geographical displacement or a diffusion of benefits had occurred.³⁸²

³⁷⁸ O'Dwyer & Furey. *CCTV in Dublin & Tralee – Preliminary Evaluation*. Garda Research Unit. Research Report No.1/00. (Unpublished.) 2000.

³⁷⁹ Ibid, page 3.

³⁸⁰ Ibid, page 7.

³⁸¹ Ibid, pages 6-7.

³⁸² Ibid, page 7.

Another significant step in deducing the impact of CCTV on crime levels and detections is distinguishing between different types of crime. Some crimes are more susceptible to deterrence than others. For example, personal violence is usually relatively spontaneous and public order offences are generally associated with alcohol consumption. The motivations or triggers for these types of offending are rarely influenced by the presence of a deterrent, be it a member of An Garda Síochána in proximity or a monitored CCTV camera. In relation to analysing crime data, O'Dwyer and Furey explained that they experienced delays and difficulties in accessing complete and precise information in an appropriate format. More often than not, the catchment area of the CCTV cameras did not coincide with the district boundaries of the data collected. As a result, any findings will lack precision. For example, the possible effect of three of the thirty-five cameras in the O'Connell Street area fell within the adjacent area's data. Consequently, the impact of the O'Connell Street CCTV system would more than likely be understated.³⁸³

From the data examined in relation to the O'Connell Street CCTV system, the following findings were made:³⁸⁴

1. The overall level of indictable crime in the CCTV-covered area fell substantially in the period after installation. However, the general crime trend showed a decline prior to the introduction of CCTV anyway. The level of decline enjoyed by the CCTV-covered area was slightly more than the Dublin average, but slightly less than the neighbouring district.
2. Again in comparison to the control areas, the CCTV-covered area performed better in relation to offences against the person and pickpocketing, but not as well with regard to larcenies and muggings.
3. Data showed that the CCTV-covered area enjoyed favourable findings in relation to some non-indictable offences, such as disorderly conduct and vehicle-related offences. However these positive findings did not extend to public intoxication, criminal damage and assault. The optimistic response to such mixed findings would be that increases were due to elevations in detection rates, while reductions were brought about through the deterrent effect of CCTV.
4. Data analysis did not suggest displacement, although local Garda intelligence did accept some geographical displacement did occur.
5. The overall detection rate was seen to increase by 21%. The neighbouring 'U' District performed better, but the CCTV-covered area excelled in relation to mugging and pickpocketing detections.

According to the Temple Bar findings:³⁸⁵

1. In comparison to the comparator and control areas, the CCTV-covered area performed well as regards robbery (-56%) and muggings (-37%), but not so in relation to pickpocketing (-11%). In relation to indictable offences as a whole, the CCTV-covered area performed on par.
2. Detection rates were greater than the control area, but did not experience any change following the introduction of CCTV.

The Tralee findings revealed:³⁸⁶

1. An increase of 14% in indictable crime after CCTV was installed in the town as compared to the pre-CCTV situation.

³⁸³ Ibid, pages 7-8.

³⁸⁴ Ibid, pages 10-16.

³⁸⁵ Ibid, page 17-18.

³⁸⁶ Ibid, page 18-19.

2. An increase in overall detections of 14%. Criminal damage detections increased by 46%. However larcenies from vehicles decreased by 5%.
3. Local intelligence suggested some displacement from Tralee to Killarney especially in relation to burglaries.

Given that the data concerned small numbers of offences, caution should be invoked when drawing conclusions from apparently significant changes.

An awareness of the presence of CCTV in an area can have very different effects on public perceptions, with fears for privacy and civil liberties on the one hand and reassurance and increased feelings of safety and security on the other.³⁸⁷ A survey of public perceptions after the installation of CCTV was undertaken in July 1999 to uncover the public's response to CCTV. No comparative survey was completed prior to the installation. Because the business community is called on to contribute towards and support CCTV schemes around the country, a survey was also commissioned to ascertain its perception of CCTV. Both surveys undertaken by Irish Marketing Surveys in all three evaluated areas showed high levels of support for CCTV with 85% of public respondents thinking it is 'an excellent or good idea' and 84% of the business community surveyed. 10% of the public thought it is 'fairly good idea' and 11% of the business community.

Some other findings were as follows:³⁸⁸

1. There was also a predominant belief that it deters crime – 89% of public respondents and 67% of the business community.
2. 54% of public respondents felt the same about the safety and security of the area with CCTV as they did before CCTV was introduced. This is understandable given that the majority of respondents from both the business community and the general public were not particularly concerned with or affected by crime prior to the installation of CCTV. However, 73% of the business community felt safer with the presence of CCTV.
3. Most (78% of public respondents and 90% of the business community) were of the opinion that more funding should be made available for CCTV projects in areas with high crime levels. However when asked about expenditure priorities, there was a strong preference towards increasing Garda presence on the streets.
4. The business community seemed not to be overly enthusiastic about being called upon for financial support. 55% said they would not be prepared to contribute financially and with merely 27% saying they would.
5. A significantly greater number considered crime rates to have increased or remained unchanged since the introduction of CCTV, than believed it to have decreased.
6. Most were aware of the presence of CCTV in the area, but a considerable number were not. 80% of the public took no notice of public signs regarding CCTV.
7. The majority (two-thirds of the public) gave no thought to threats to their privacy posed by CCTV, while 6% of the public and 12% of the business community strongly agreed that CCTV interfered with personal privacy.

Other benefits for which there was supporting anecdotal evidence, but no definitive data, include the more effective and the more accurate allocation of Garda resources. False alarms are weeded out and

³⁸⁷ Ibid, page 9.

³⁸⁸ Ibid, pages 24-26. 643 members of the public and 97 members of the business community responded to the survey.

Garda intervention is tailored and timely. Offenders confronted with videoed evidence of them committing crime are more likely to enter guilty pleas, thereby accelerating their processing by the Criminal Justice System and saving the cost of a contested trial. Unfortunately, empirical data in support to the anecdotal evidence in favour of CCTV resulting in such benefits was not at hand for this preliminary report.

O'Dwyer and Furey found that *'the picture regarding the impact of CCTV in crime levels in unconvincing, at least based on the partial aggregate data available.'*³⁸⁹ Difficulties with the available information prevented a robust evaluation in this case, consequently they recommended a repeat evaluation equipped with a greater variety of more extensive data. For future reference, O'Dwyer and Furey make a number of recommendations in relation to subsequent evaluations.³⁹⁰ Prior to the establishment of new schemes, they advocate the compiling of more specific information, including detailed pre-CCTV data, precise data on offences and crime and by reference to CCTV/non-CCTV borders, information on the costs of crime and prosecutions, details of the use of CCTV footage as evidence and surveys of the general public and business community before and after the installation. They also recommend a well-publicised Code of Practice & Ethics to allay fears and concerns regarding privacy.

All in all, even though the findings appear disappointing, they are not altogether out of line with the plethora of mixed results from the British evaluations. One significant and most interesting way in which Ireland's public CCTV was found to differ from that in Britain was in the attitude of Garda managers towards the publicity of CCTV.³⁹¹ Rather than the high profile use of CCTV, which may have the effect of displacing offenders, An Garda Síochána seems to opt for discreet use of CCTV evidence to catch, convict and remove offenders from circulation. This is a complete departure from the recommendations of the Home Office in the United Kingdom, which, as was discussed in the previous chapter, advocates maximising publicity surrounding CCTV successes in the hopes of optimising its deterrent effect. O'Dwyer and Furey accept, however, that this latter approach may be appropriate in areas suffering from high rates of offending and fear of crime and also perhaps at the initial stages of CCTV installation.

Despite not being able to draw any definitive conclusions regarding the impact of CCTV in relation to crime prevention, O'Dwyer and Furey recognise the significance of CCTV to monitor police actions. This is important from the point of view of Garda management, but also as a tool to safeguard individual rights and to protect Gardaí from false accusations.³⁹² The data available to O'Dwyer and Furey was not sufficient to undertake a comprehensive evaluation of the three most established public CCTV systems in Ireland. Anecdotal suppositions can be drawn, but nothing more substantial. Perhaps future evaluative attempt will have more in-depth and specific information at hand. Until such time as the studies initiated by the Garda Research Unit in the summer of 2006 have been completed, it will remain to be seen whether the lessons of Kavanagh and O'Dwyer and Furey will be taken on board. No doubt those findings will be the eagerly awaited but the question is 'at what point will they be accessible?'

Conclusion.

While Britain may be the most surveilled society in the world, Ireland, though its venture into the arena of public surveillance could be said to be in its infancy, is arguably on its way to catching up. The story of Ireland's widespread public area surveillance systems began with a policy document from the commissioner of An Garda Síochána in the mid-1990s. Since then, CCTV systems have sprung up in town and city centres throughout the country. To date, An Garda Síochána can be credited with being the

³⁸⁹ Ibid, page 36.

³⁹⁰ Ibid, pages 38-40.

³⁹¹ Ibid, page 37.

³⁹² Ibid, page 37.

driving force behind the initial spread. However in recognition of the considerable desire among community groups and out of frustration at the slow pace of the development of the Garda CCTV network,³⁹³ Michael McDowell, then Minister for Justice, Equality and Law Reform announced the launch of the Community-Based CCTV Scheme in June 2005. No doubt this will add a new dimension to the character of CCTV surveillance in Ireland.

It can only be hoped that, in light of the assessments that have been completed, sufficient data will be accumulated and proper resources allocated to evaluate the impact of the forthcoming CCTV systems, particularly on crime. There have been indications that Ireland's public CCTV has produced disappointingly mixed results similar to those in Britain. However, as Kavanagh and O'Dwyer and Furey point out, not all the effects of CCTV are tangible and those that are ascertainable are often cloaked by inadequate and imprecise data. With the dawn of this new age for Irish public area surveillance, it is hoped that a determined drive to monitor the performance of CCTV will follow suit.

When asked for his thoughts on the impact of this recent development in Ireland's public CCTV story, Eamon Lynch, the Research Officer, who evaluated CCTV in Dun Laoghaire and Dundalk surmised that, given the lessons learned in Britain, the impact will initially be relatively impressive.³⁹⁴ With time, however, this will lessen because the areas to which CCTV will first be deployed will be those areas in which it will have the greatest impact. These areas will be most in need and will likely benefit most from the presence of CCTV. The more CCTV systems that operate, the more their potential to significantly affect crime rates will wane. Eventually as community CCTV systems percolate more and more throughout the country, they will eventually percolate to locations that do not suffer from particularly high rates of crime susceptible to the effects of CCTV. CCTV will not continue to make such a relatively impressive and sustained impact.

As regards the oft-forgotten issue of regulation, it seems Ireland has at least the seeds for more significant controls of public area surveillance. With a recognised right to privacy, a new *Privacy Bill* and a uniform code of practice in the works, together with some form of formal regulation under the Garda Síochána Act 2005, Ireland appears to be on better footing than Britain as regards controlling the use of CCTV surveillance. It will only be when cases come before the courts that the force of these restraints will be realised.

³⁹³ Brennan, M. *More security 'Eyes' on Alert in Country Towns*. Irish Independent. 31st December, 2006. Also, Brennan, M. *'McDowell eyes €1.5m CCTV Roll-Out*. Irish Examiner. 31st December, 2005.

³⁹⁴ Based on a telephone interview with Eamon Lynch, Research Officer in the Garda Research Unit in Templemore on 20th July, 2006.

Chapter 6:

Conclusions & Recommendations.

Introduction.

Whether warranted or not, by the end of the Twentieth Century, CCTV had become a fact of everyday life and there are no indications that this is about to change. Go to buy a pint of milk or fill your car with petrol and more often than not that supermarket or filling station will be displaying signs alerting you to the fact that you are being surveilled. For most people, while it may fan their feelings of safety and security, it is of no real consequence for them personally or so it would seem. They go about their everyday business, largely unaffected by the prospect that someone, somewhere may be watching their every move.³⁹⁵ However, for the alleged targets of this surveillance, namely offenders and potential offenders, it may well be significant. CCTV is arguably the form of crime prevention that most prominently springs to mind. Previous chapters explored the emergence of the phenomenon of surveillance and in particular CCTV as a crime control mechanism, tracing from its theoretical underpinnings through to its evaluated effects and up to its future trajectory.

The Theoretical Underpinnings.

Originally, the criminal was seen as an aberration; anomalous in the face of all law-abiding members of society. Nowadays however, crime is as normal and commonplace as taxation and any other of life's discomforts.

Over the centuries, multiple theories have abounded as to why people commit crimes. This preoccupation with trying to pinpoint the driving force behind criminality has led to the birth of criminology. It was hoped that by identifying the triggers for offending, it would be possible to eliminate crime. When classicism and neo-classicism failed to free society of criminality, favour turned towards alternative theories of offending and positivism was born. While classicist theory viewed the individual as a rational thinker in control of his path, positivism doubted such control. It determined that human behaviour is attributable to forces beyond the control of the individual. By ascertaining these forces, be they internal or external to the individual, it would be possible to rehabilitate and remedy them and consequently eliminate crime.

Classicists and positivists made little inroad in ridding society of crime. As a result, environmental criminology took hold and pulled the focus back from the individual. It took in the wider perspective of the individual within the spatio-temporal situation and advocated altering this situation so as to deter criminality. This provided a much more holistic view of offending. Unfortunately, however it lacked a strong theoretical basis linking the practical potential of an environmental approach to the decision-making process of a potential offender. The new criminologies of everyday life stepped into the breach.

³⁹⁵ Or not watching. It should be noted that not everyone is selected for surveillance. In fact most people are not watched and of those that are a much smaller number again are actually the subject of police deployment. Goold studied six CCTV monitoring centres for eighteen months in 1998 and 1999 recording 376 cases where subjects were targeted for surveillance. Only 7 police deployments resulted from the 376 surveillances. This indicates that the level of CCTV monitoring and detections is likely to be very low. See further Goold B.J. *CCTV and Policing: Public Area Surveillance and Police Practice in Britain*. Clarendon Studies in Criminology, Oxford. Oxford University Press. 2004. In particular pages 141-166.

Rational choice theory and routine activity theory are the primary components of this recent wave in criminology. These theories work from the premise that where a willing offender converges with a suitable target in the absence of a capable guardian a crime will occur. Rather than looking at the individual or the environment, rational choice theory and routine activity theory look at the convergence of the two. These theories, when combined with the theory of situational crime prevention set the backdrop for the emergence and mass proliferation of CCTV.

The Realisation of Theories.

Centuries of theorising without any practical effectiveness rendered a state of pessimism. Nothing seemed to work. Despite its efforts, the State failed to banish crime. With time, the inevitability of crime was accepted; however its intensity was not accepted as inevitable. Focus then turned to controlling crime and minimizing the impact that it has on society. While previously the responsibility for the crime predicament rested squarely on the shoulders of the State, now it has been diffused throughout society as a whole. Individuals, local communities and others contribute to containing the crime problem.³⁹⁶ Situational crime prevention, with its theoretical underpinnings in rational choice theory and routine activity theory, effectively facilitates this new approach.

Crime prevention as a concept possesses no universal or standard definition. Situational crime prevention has been acknowledged as one of the most recognized crime prevention strategies. This form of crime prevention seeks to thwart the incidence of crime by reducing the opportunity to offend and increasing the risks associated with offending. This practical approach complements the rational choice and routine activity theories. Under rational choice theory, the potential offender undertakes a cost-benefit analysis of offending. Routine activity theory propounds that crime rates correspond to the convergence of a willing offender, a suitable target and the absence of a capable guardian. Situational crime prevention advocates practical and targeted measures to alter the criminogenic environment and promote processes of informal social control. It concentrates on the interaction between the offence and the situation and seeks to alter the situation, in the hopes of defusing the opportunity to offend and increasing the prospects of detection. In doing so, situational crime prevention aims to manipulate the potential offenders rational decision-making process by increasing the effort required to successfully offend, increasing the risk of being apprehended and reducing the awards of offending.

Situational crime prevention gives physical form to routine activity and rational choice theories. Surveillance and in particular, CCTV have emerged as arguably, the most predominant form of situational crime prevention.

Panoptic Power and the Rise of Surveillance.

The diffusion of responsibility for crime control between the State and its citizenry brought about an increased level of consciousness of crime among the public. Now that the buck no longer rested with the State, individuals took more heed of crime and impact it could have on them and they on it. With the realisation that crime would never ultimately be defeated; a risk society began to emerge with the assessment and management of risk at its core. Mass surveillance rose to become a prominent intervention that feeds into and feeds off this risk society. As well as facilitating the assessment of risks through the accumulation of information on potential trouble-makers, surveillance also contributes to the management of risks. The capacity of surveillance as a social control mechanism is arguably most

³⁹⁶ Arguably, this may be as it should be. O Síochán defines a crime, “*the crime is the **public wrong**, affecting the welfare, security and interests of the community at large...*” (his emphasis). O Síochán, P. *Criminal Law of Ireland*. 8th Ed. Foilsuachainde. Dublin. 1988.

vividly seen in Bentham's Panopticon, which exemplified how constant observation reinforced by the threat of coercion would secure conformity. Though this architectural idea was never realised, its underlying principles have seeped into the outside world with CCTV being its modern embodiment.

With its panoptic capacity, CCTV fits comfortably into the modern risk society. Its incredible proliferation has also been fuelled by the emergence of the stranger society. The decentralisation of responsibility for crime control has increased awareness in society of the threats posed by 'others'. In an attempt to shield themselves from crime, individuals and communities have opted to batten down the hatches to keep malefactors out. Gated residential communities, private security and CCTV are a number of the symptoms of this fortress mentality. Arguably, they also contribute to their own necessity by encouraging the heightening of suspicion and distrust of others. In a relatively short period of time, the consequent pervasiveness of CCTV has brought us into an age of mass surveillance, which will predictably metamorphose into maximum surveillance given the recent interaction between CCTV, digitalisation and complementary software.

The British Experience.

Britain is acknowledged to be the most surveilled society in the world. Its road to this throne began as far back as the 1970s and with the passage of time, its pace has only quickened. Unfortunately, the rate of CCTV proliferation was not equally matched with the evaluation of established systems. Indeed, evidence-based satisfaction that CCTV is the appropriate tool for the task has never seemed to be a prerequisite for the spread of CCTV throughout public spaces. This is not to say however, that the need to evaluate existing systems is not on the crime prevention agenda. On the contrary, it has been realised that there is a pressing need to assess the impact of CCTV.

For the most part, evaluations of CCTV systems have garnered mixed findings. Initial efforts to ascertain the impact of CCTV on crime involved the simple question 'does CCTV work?' Experience showed there was no consistent answer to this overly simplistic question. It was soon realised that greater instruction could be gleaned from rephrasing the research question along the lines of 'how does CCTV work when it does work?' This would enable crime prevention practitioners and policy makers to ascertain in which circumstances CCTV would operate most effectively and efficiently to prevent crime. It is hoped that in the future, this lesson will inspire the well-considered and targeted employment of CCTV rather than thoughtless blanket coverage.

CCTV in Ireland.

Public area surveillance in the form of CCTV reached Irish shores some two decades after it took hold in Britain. Since then, we have witnessed a rapid increase in the level of CCTV surveillance of Irish streets. Tralee, Dublin and Cork host some of the most established and extensive systems in this jurisdiction. To date An Garda Síochána has been responsible for the spread of public CCTV in Ireland. However limited resources meant that the roll-out of CCTV systems had slowed. This was all set to change, however with the launch by Michael McDowell, then Minister for Justice, Equality and Law Reform of a Community-Based CCTV Scheme whereby funding would be provided to facilitate local communities installing their own systems. The recipients of the first round of funding were announced at the end of 2005. This is a most significant development in the Irish CCTV story and will no doubt lead to a dramatic increase in the level of public area surveillance in the coming years.

Despite the pervasiveness of CCTV on British streets and the seemingly unequalled rate of intensification, Britain has not instituted any level of formal regulation to control the use of CCTV

surveillance. Data protection and the rules of evidence, for example, provide limited guidance, which predominantly concerns the use of footage. As regards regulation, Ireland has arguably been in a better position from the start. The presence of a written constitution, which hosts the unenumerated right to privacy, combined with the incorporation of the European Convention on Human Rights in to domestic law, has meant that the use of CCTV must take account of an individual's rights. Data protection and the rules of evidence also provide some limitation. The recent initiation of community-based CCTV was accompanied by formal regulation in the form of the Garda Síochána Act 2005. Together with the proposals laid out in the Privacy Bill 2006, this seems to indicate that CCTV in Ireland is not so much an unfettered exercise of surveillant power as it can be said to be in Britain. For the time being however, we await activity in the courts to determine the actual effectiveness of what regulation we do have.

Thankfully, Ireland has not suffered the same problem as that which previously plagued Britain, namely the relative absence of CCTV evaluations. To date, the Garda Research Unit of An Garda Síochána has evaluated six of the nine established Garda CCTV systems.³⁹⁷ Other studies have been completed with the co-operation of An Garda Síochána.³⁹⁸ Given the presence of 'operational material' in these evaluations, access to them has been limited or restricted. However what has been learned from those that are accessible, is that Irish CCTV displays similar mixed results to those in British studies. While this seems most disappointing, it must be said that the availability of insufficient and imprecise data has hindered accurate analyses. It can only be hoped that, with the arrival of the new community-based CCTV systems, further evaluations will be undertaken incorporating the lessons learned in those that have been completed. In the coming years, it will be most interesting to see how the Irish CCTV story progresses. For the time being, however, below are some general recommendations offered in light of what has been seen to date.

Recommendations:

1. CCTV is not a panacea for the predicament of crime control and should not be treated as such.

Generally speaking, it seems to operate most effectively in relation to vehicle related offences in car parks. Not all offences are susceptible to the deterrent effect of CCTV. For example, where excess of alcohol is involved, an individual's inhibitions will be removed and more often than not with those go the influence CCTV might have had on their behaviour. To avoid disappointment and disillusionment in CCTV, it should not be presented as a silver bullet in the arsenal against crime.

2. Serious consideration should be given when selecting the areas to which CCTV is deployed.

Rather than undertaking a mass roll-out of CCTV systems merely because it is the in vogue situational crime prevention measure, locations and situations should be carefully selected to efficiently maximise

³⁹⁷ Those locations evaluated by the Garda Research Unit are Temple Bar/Grafton Street, Dublin (2000); O'Connell Street, Dublin (2000); Tralee (2000); Dun Laoghaire (2006); Dundalk (2006) and Cork (2008).

O'Dwyer, K. & Furey, M. *CCTV in Dublin & Tralee – Preliminary Evaluation*. Research Report No. 1/00. Garda Research Unit. Templemore. (Unpublished Report). 2000.

Lynch, E. *Evaluation of CCTV in Dun Laoghaire*. Research Report No. 7/06. Garda Research Unit. Templemore. (Unpublished Report) 2006.

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Browne, P. *Evaluation of CCTV in Cork*. Research Report No. 15/07. Garda Research Unit. Templemore. (Unpublished Report) 2007.

³⁹⁸ Kavanagh, D. *Towards Economic Evaluation of Closed Circuit Television in Public Places as an Aid to An Garda Síochána*. The Institute of Public Administration, Dublin. (Unpublished Dissertation). 1999.

Parsons, S. *Watching the Watchers: An Garda Síochána & CCTV in Dublin's North City Centre*. Trinity College, Dublin. (Unpublished Dissertation). 2001.

the preventative impact of CCTV. It should be determined whether CCTV is best suited to the circumstances or whether an alternative crime prevention measure would be more appropriate.

3. The impact of existing CCTV systems should be assessed and reviewed in such a manner as to inform on best practice for the future deployment of CCTV.

Instead of asking the simple question of ‘does CCTV work?’ evaluations should strive to discover the circumstances in which CCTV works best and exactly how it works in those circumstances. Compiling a body of assessments based on the context-mechanism-output (Tilley) method would prove most useful in the attempt to maximise the efficiency and effectiveness of CCTV as a crime prevention strategy.

4. In undertaking evaluations of CCTV systems, it should be determined what exactly constitutes success.

Even though CCTV is largely spoken of as a crime prevention strategy which operates by deterrence, it does possess other talents. As can be seen with the Anglesea Street system, An Garda Síochána can quickly assess a situation and deploy appropriate resources to defuse an incident. Valuable time is not wasted, as CCTV allows Gardaí to weed out hoax calls in CCTV-covered areas and again time is not lost, when CCTV permits Gardaí to quickly intervene before an incident escalates. It has also shown to be most useful as an investigatory tool and for the purposes of traffic control. Prosecutions may be processed more speedily by way of convincing CCTV footage evidence and guilty pleas. This undoubtedly results in savings to the Criminal Justice System. The effective and efficient allocation of Garda resources and greater efficiency in the operation of the Criminal Justice System are but two examples of how CCTV can succeed apart from acting as a deterrent to crime. Others include increased clearance rates, reduced fear of crime, increased economic activity in and around the covered area and increased detection.

5. Appropriate data should be collected to investigate whether CCTV succeeds in achieving the identified objectives.

The method of evaluation and the collection of data should be tailored to assess whether the objectives of CCTV installation have been met. Data used should go beyond mere crime rates to gain a fuller impression of CCTV’s effect. For example, the costs involved in prosecutions and the number of guilty pleas entered because of the use of CCTV footage should be gathered to ascertain the performance of CCTV in this regard. CCTV should be assessed in terms of its objectives and data of the correct nature and type is necessary for this task.

6. Data should be assembled in a timely fashion in such a way as to shed light on the way in which CCTV operates.

Before and after analyses are most helpful when ascertaining the difference in crime rates after the installation of CCTV. In order for an accurate impression to be given of the impact of CCTV in an area, a bank of data should be collected in regard to the periods prior to the installation. Proper and comparable control areas should be selected and sufficient data collected in relation to those. Also, if at all possible the boundaries of the data should correspond with the boundaries between CCTV and non-CCTV areas. This would go far in distinguishing between the effect of the CCTV system and that brought about by other factors. It would also prove useful in relation to assessing the extent, if any, of displacement and diffusion of benefits. The data should be of a quality and level of detail sufficient to undertake a robust evaluation of how CCTV impacts. This should become easier in the coming years with the integration of Court Services, Garda and Central Statistics Office data and IT systems.³⁹⁹

³⁹⁹ Based on a telephone interview with Eamon Lynch, Research Officer with the Garda Research Unit on 11th December, 2007.

7. The type of data assembled should be of a nature appropriate to ascertain the tangible and less tangible effects of CCTV.

Differences in incidences of crime may be determined by comparing annual crime rates, but interviews and surveys are potential tools to shed light on whether there has been displacement or diffusion and of what type and whether CCTV has effected a reduction in fear of crime or whether is it seen as an excessive invasion of privacy. This could only offer a more comprehensive and realistic impression of the impact of CCTV.

8. With the introduction of the Community-Based CCTV Scheme, the opportunity should be taken to audit the impact of CCTV in accordance with the methodology lessons learned in previous evaluations.

Data of an appropriate nature and level of precision should be assembled from now on with a view to auditing the newer systems as they come on line and begin operating. In this way, it can be determined whether the Community-Based System merits extension and how best to do that. Ideally, following a sufficient number of localised studies, a meta-analysis would be undertaken on a national level to instruct on the best practice of CCTV deployment.

9. Any codes of practice used should be of a uniform standard and should be reviewed periodically to ensure they remain relevant.

Such codes should deal with how the CCTV is to be operated as a system and as a crime prevention measure. In other words, as well as the technical and operational specifications, codes of practice should direct, for example, how subjects are to be selected for surveillance.

10. Training and guidelines should be issued to those operating CCTV systems.

To avoid discriminatory targeting, what constitutes 'suspicious behaviour' should be explored and should not be left to the absolute discretion of the monitor.

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