On the Threshold to Urban Panopticon? Analysing the Employment of CCTV in European Cities and Assessing its Social and Political Impacts

urbaneye

RTD-Project (September 2001 – February 2004) 5th Framework Programme of the European Commission Contract No.: HPSE-CT2001-00094

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Working Paper No.3

CCTV in Britain

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March 2002

Project Co-ordination:

Centre for Technology and Society Technical University Berlin www.ztg.tu-berlin.de



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Executive summary

Background information

- In 1999 the population of the UK was estimated to be 59.5 million making it the 20th largest in the world.
- In Spring 2000, about one person in fifteen in Great Britain was from an ethnic minority group.
- In 1991 almost 90 per cent of the population were living in urban areas. The largest of these urban areas is Greater London with a resident population of approximately 7.2 million residents.
- In 1998-99, 18 per cent of the population in Great Britain lived in households on a 'low income' (i.e. 60 per cent of median equivalised household disposable income).
- On the International Labour Organisation definition, in spring 2001 there were 539,000 unemployed women of working age, a rate of 4.3 per cent compared with 5.3 per cent for men (Labour Market Trends, March 2002).
- The most recent crime figures show that in total, 5.2 million offences were recorded by the police in 2000/01, a fall of 2.5 per cent (Home Office, 2001).

History of CCTV

- In 1985 the first open-street CCTV surveillance system was erected in the seaside town of Bournemouth.
- Between 1994 and 1997 seventy eight per cent of Home Office crime prevention budget was spent on CCTV.
- Between 1992 and 2002 over £250,000,000 of public money has been spent on CCTV.

The findings of evaluation studies conducted in the UK are very mixed. For instance:

- In Burnley, Armitage et al. (1999) found a reduction of 25% sustained over two years.
- In Airdrie there was a 21% reduction in crime (Short and Ditton 1996).

- In Doncaster there was a 16% reduction in crime, but this reduction was offset by a statistically significant increase for nearly all major offence categories in the outer lying townships.
- In Glasgow total recorded crime rose by 9% after the cameras were installed (Ditton et al. 1999).

The current debate

- The dominant five 'news themes' in our sample of 434 CCTV stories were 'caught on camera', 'speed cameras', 'fighting crime', 'searching tapes', and 'September 11th'.
- In those CCTV stories that contained quoted sources there were exactly the same number of 'critical voices (42%) as there were 'supportive' voices (42%).
- The main discursive strategy used in these stories was what van Dijk (1998) has described as 'positive self-presentation and negative other-presentation' (1998: 61). In the context of our current analysis of CCTV reporting, we found that generally speaking cameras that monitor Them (e.g. thieves, robbers, muggers, etc.) are good, while cameras that monitor Us (e.g. motorists, workers etc.) are bad.

The legal framework

- In October 2000 the European Convention on Human Rights was fully incorporated into British law under the 1998 Human Rights Act. In the context of CCTV two provisions stand out - Article 6, the right to a fair trial, and Article 8, the right to respect for family and private life.
- The passing of the Regulation of Investigatory Powers Act 2000 was driven largely by the need to provide a statutory framework for the covert investigative surveillance techniques of state agencies such as the police and the security services.
- Following the implementation of The Data Protection Act 1998 (pre-existing CCTV systems were not required to comply with the Act until the 24th October 2001) there must now be an explicit legal basis for the operation of CCTV systems in public space.

1 Background information

1.1 Population

In 1999 the population of the UK was estimated to be 59.5 million making it the 20th largest in the world (Social Trends 2001: 30).

Table 1: Population o	f the United Kingdom	in Thousands
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	1801	1851	1901	1951	1991	1999	2021	2026
England	8,305	16,764	30,515	41,159	48,208	49,753	53,715	54,443
Wales	587	1,163	2,013	2,599	2,891	2,937	3,047	3,062
Scotland	1,608	2,899	4,472	5,096	5,107	5,119	5,058	5,016
Northern Ireland		1,443	1,237	1,371	1,607	1,692	1,821	1,835
United Kingdom		22,259	38,237	50,225	57,814	59,501	63,642	64,355

Source: Social Trends (2001), London: The Stationary Office, No. 31, p. 30.

Geographical distribution

In 1991 almost 90 per cent of the population were living in urban areas. The largest of these urban areas is Greater London with a resident population of approximately 7.2 million residents.

1831	1901	1991
London	London	London
Glasgow	Glasgow	West Midlands
Manchester	Liverpool	Manchester
Edinburgh	Manchester	West Yorkshire
Liverpool	Birmingham	Tyneside

Table 2: The five largest urban agglomerations in Great Britain

Source: Social Trends (2001), London: The Stationary Office, No. 31, p. 35.

Age and gender

The age structure of the population was first recorded in the early 19th century and then, as now, there were more females in total than males living in Great Britain. In 1821, for example, women began to outnumber men by the time they reached their twenties, whereas they are now in the minority until their fifties This is due to the rapid improvement in male mortality at younger ages (Social Trends 2001: 31).

Ethnicity

In Spring 2000, about one person in fifteen in Great Britain was from an ethnic minority group. Generally speaking, ethnic minority groups have a younger age structure than the White population, reflecting past immigration and fertility patterns. For instance, the 'Other Black' category has the youngest age structure with 56 per cent aged under 16. The Bangladeshi group also has a young age structure, with 40 per cent aged under 16 in 1999-2000. This was double the proportion of the White group.

	Under 16	16-34	35-64	65 and over	All ages (=100%) (millions)
White	20	26	39	16	53.1
Black					
Black Caribbean	22	28	40	10	0.5
Black African	33	35	30		0.4
Other Black groups	56	31	13		0.3
All Black groups	34	31	30	5	1.2
Indian	24	31	38	7	0.9
Pakistan/Bangladeshi					
Pakistani	36	35	25	4	0.7
Bangladeshi	40	34	23		0.3
Pakistani/Bangladeshi	37	35	24	4	0.9
Other groups					
Chinese	16	40	39		0.1
None of the above	36	30	31	3	0.6
All other groups	33	32	32	3	0.8
All ethnic groups	20	26	38	15	56.9

Source: Social Trends (2001), London: The Stationary Office, No. 31, p. 32.

1.2 Socio-economic context

Unemployment

On the International Labour Organisation definition, in spring 2001 there were 539,000 unemployed women of working age, a rate of 4.3 per cent compared with 5.3 per cent for men. There was considerable variation by age: for 16 to 24-year-old women the rate was 8.7 per cent, compared with 2.6 per cent for women aged 40 or over (Labour Market Trends, March 2002).

Income distribution

In 1998-99, 18 per cent of the population in Great Britain lived in households on a 'low income' (i.e. 60 per cent of median equivalised household disposable income). While the 1970's saw relatively little change in the distribution of disposable income among households in the UK, the 1980's were characterised by a large increase in inequality. During the first half of the 1990's, the income distribution appeared to stabilise, but in the most recent period there appears to have been a further small increase in inequality (Social Trends 2001: 103).

1.3 Crime trends

The key official publication in respect of crime figures is *Criminal Statistics England and Wales*, the annual compilation of data derived from police and court records throughout England and Wales, which is collated and tabulated by the Home Office Research and Statistics Department. As Maguire (1994: 246-47) points out, despite the caution with which they are now treated by criminologists and Home Office statisticians alike these statistics remain the primary 'barometer of crime' used by politicians and highlighted in the media.

Post-war trends

As a number of writers have shown, it was from the mid-1950's onwards that recorded crime displayed the 'true beginnings of the modern crime problem' (Morris 1989: 90). Trends in the total number of offences recorded by the police in England and Wales show steady increases from the 1950's, when there were less than half a million per year, to a peak of 5.6 million in 1992. They then decreased to 4.5 million in 1998-99 under the old counting rules. The most recent figures show that in total, 5.2 million offences were recorded by the police in 2000/01, a fall of 2.5 per cent. A simplified breakdown of the 5,170,843 crimes recorded in 2000 into broad offence groupings gives the following figures: other theft (23%), theft of and from vehicles (19%), criminal

damage (19%), burglary (16%), violent crime (14%), fraud and forgery (6%), drugs (2%) and other offences (1%). Out of a total of 5.2 million recorded crimes in 2000/01, therefore, 4.3 million or 82 per cent were crimes against property, 733,300 or 14 per cent were violent crimes and the remaining 176,700 were other types crime.

Geographical distribution

There are striking regional variations in recorded crime. In general, those police force areas that include large urban conurbations have higher rates of recorded crime than those in suburban or rural locations. In 2000/01, the highest rate was in greater Manchester with 14,100 offences per 100,000 population, followed by West Midlands (13,900) and the Metropolitan Police (13,800, including the City of London).

British Crime Survey

The 2001 BCS provides estimates for offences committed in 2000. It shows that, for those crimes that can be compared, the amount of crime actually committed is almost four times the number of crimes recorded by the police, although this varies considerably between offences:

- There were over 40 per cent more thefts of vehicles estimated by the BCS to have been committed than were recorded;
- over twice as many domestic burglaries;
- over twice as many woundings;
- over three times as many bicycle thefts;
- over three times as many thefts from vehicles;
- over three times as many robberies;
- five times as many offences of vandalism;
- seven times as many thefts from the person; and
- ten times as many common assaults.

2 The history of CCTV in Britain

2.1 The early history of CCTV 1960-1992

It was only with the advent of videotape and the Video Cassette Recorder (VCR) in the 1960s, that the images from a camera could be captured on film without the need for chemical processing, allowing a cheap and simple method of recording and the prospect of instant play-back. It was now possible to have cameras linked to centralised control rooms where the images could be monitored, remotely, by a single person and a permanent record kept of everything that was seen. The significance of these technological developments was not lost on those who wished to suppress crime and in Britain in 1967, Photoscan launched CCTV into the retail sector primarily as a means of deterring and apprehending shoplifters.

For the next twenty years CCTV was primarily deployed in the private retail sector and CCTV became a routine a feature in the corner shop, supermarket and department store (Beck and Willis 1995). Thus, while shoppers were increasingly under the ever present gaze of the camera, this was in the private space of the commercial store. The blanket surveillance of citizens in fully public spaces was not yet on the agenda, and what occurred in the 1970s and early eighties was the gradual extension of CCTV from private to fully public space.

The first permanent and systematic use of CCTV outside the private retail sector came in 1975. In an effort to combat robbery and assaults on staff, London Transport introduced CCTV cameras in the semi-public space of the stations on the Northern Line of the London Underground system and over the next decade, other, small scale, systems were introduced on the eastern end of the Central Line and at Oxford Circus. (Webb and Laycock 1992). On the roads, it was congestion rather than crime that gave the initial impetus to the deployment of cameras and, by 1974, in an attempt to speed the flow of traffic on London's streets, 145 cameras were deployed to monitor the major arterial roads of the capital under its Central Integrated Traffic Control system. (Manwaring-White 1983: 91).

The police were not slow to realise that a system introduced for one purpose could be used for another and the facility existed to switch the system to the operations room at Scotland Yard used to monitor public order incidents and demonstrations (BSSRS 1985: 41-42). It was also public order policing which provided the rationale for a further extension in the public domain: of central London demonstrations; through the use of the eight cameras of the Lynx system which was permanently installed to provide a surveillance capacity on the major rallying points for public protest (BSSRS 1985); of pickets during the miners strike of 1984-5 (Coulter et al. 1985) and of football supporters (Armstrong and Giulianotti 1998). In this last case, the Football Trust, a charitable company funded by the pools, provided grants to football clubs so they could establish CCTV systems in their grounds, and to the police for a mobile surveillance facility 'the Hoolivan' which could be deployed outside the grounds (Davies 1996: 186). But this extension into public space was still limited to the monitoring of traffic flow and specific events thought likely to cause disorder and, by implication, of people deemed to be marginal - the demonstrator, the picket and the football hooligan.

It was only in 1985 that the permanent surveillance of public space and of all those who ventured into it became a reality with the opening of a locally funded system, covering the promenade of an English seaside town – Bournemouth . By the end of the decade there were, as far as we are aware, only 5 public systems covering town centre city streets in Kings Lynn, Coventry, Wolverhampton and Plymouth (see also Bulos and Sarno 1994). In 1990, 16 years after its introduction on the London Underground, and five years after the Bournemouth system was launched, CCTV occupied a marginal position in the history of detection and crime prevention.

Over the next decade there was gradual diffusion of the technology to other towns and cities. Even so, by 1991 there were no more than ten city-centre/high-street systems in operation - they were all financed at the local level. By 1994 the Home Office reported that 79 towns or cities had some form of open street CCTV systems although many of them were small scale systems, financed predominately at the local level, either by police, local authorities, private business, or some combination of all three (Home Office 1994). This gradual diffusion was not the result of some centralised direction but driven by entrepreneurial and innovative individuals in either local government or the police. The point made by Ditton and Short in respect to the open street systems in the small Scottish town of Airdrie in 1992 would be true of most of the early systems: The system:

was not part of any specific national or local government policy initiative. Indeed, it was principally and initially due to the single handed efforts of a single police officer working there (Ditton and Short 1998: 155)

Over the next decade however, CCTV was set to become the single most important crime reduction strategy, which has enjoyed political support from both Conservative and Labour administrations. Before we go on to explore the exponential growth of CCTV between 1994 and 2002, it is necessary to examine the changes in the political climate surrounding the politics of law and order from the 1970s to the 1990s and how this facilitated the introduction of CCTV.

2.2 The politics of CCTV surveillance

While the technology of mass video surveillance became available from the early 1970s, the political climate retarded its introduction. The 1970s and early 1980s saw a fierce political confrontation between elements of the local state, particularly Labour controlled local authorities and the police regarding accountability (Bundred 1982; Simey 1982). This confrontation was encapsulated in a flurry of books published at the time which highlighted the growing technological sophistication of policing, how it was deployed against trade unionists, peace campaigners and animal rights activists, and how there was little or no democratic control over these practices (Bunyan 1977; Hain 1979; Aubrey 1981; Manwaring-White 1983). Moreover for many, on the labour left, the inner city riots of the early 1980s were a response to the hostile, aggressive and essentially racist policing of ethnic minorities (Scraton 1982).

For those not convinced by the radicals' rhetoric of the drift towards totalitarianism there were, however, more pragmatic reasons for the slow uptake of CCTV - money. The early 1980s, saw local authorities financially constrained by a Conservative government committed to reducing public expenditure and curbing, what it saw as, the excesses of predominantly Labour controlled local councils. Faced with having to cut back on its most basic services, even if a local authority wanted to install a CCTV system, the cost, involving in excess of a hundred thousand pounds of capital expenditure and tens of thousands of pounds in annual running costs, could not be justified in the context of cuts in other areas.

But while many local authorities were either ideologically or financially opposed to the introduction of CCTV, the Conservative government was dismayed by its inability to stem the seemingly unstoppable rise of recorded crime. They had increased police pay, increased police staffing levels and, between 1982 and 1991, increased capital and revenue spending on the police by 43 per cent (Audit Commission 1993). Despite this, between 1979 and 1992, recorded crime doubled from just under three million offences per annum to over six million and, in 1991 and 1992, there were two massive rises of 17 and 16 per cent respectively.

In the wake of this huge rise in recorded crime, in 1992 the Audit Commission turned its attention to the efficiency of the Criminal Investigations Departments. The Audit Commission had been set up by a previous Conservative administration to promote, within government departments, a 'well-defined responsibility for making the best use of their resources, including a critical scrutiny of output and value for money' (Home Office 1982). The report published in the following year was scathing about the inability of the

police to stem rising crime rates or catch those responsible. It stated, given current trends in crime figures and clear-ups, by 2002 the number of recorded crimes will have exceeded 9 million and the overall clear up rate could drop to 18%. Society is thus in danger of losing the 'battle against crime' (Audit Commission 1993: 8-9). The Commission called for a massive expansion of proactive, intelligence-led policing, and singled out CCTV as having a major role to play in crime prevention. Its report stated that the introduction of CCTV to Airdrie Town centre led to a 75 per cent reduction in recorded crime and an increase in the clear-up rate to 71 per cent (But see the section on evaluation for the real figures form Airdrie.)

CCTV was attractive to the government in other ways. It dovetailed neatly with their ideological demands for privatisation of the public sector. The private sector would be fully involved in building, equipping and maintaining the systems. In many cases, private security firms were responsible for monitoring the screens in the control rooms and, as business had contributed to the setting up of the systems, it would have a say in the shape of the systems and how they were run. Moreover, given that local councils were rate-capped and unable to pay for increased expenditure through increased taxation, this silver bullet could be financed with almost no implication for the public sector borrowing requirement.

Moreover, the Labour Party had been transformed by the process of modernisation, started by Neil Kinnock in the early 1980s and concluding with the launch of New Labour, by Tony Blair in the 1990s. New Labour was no longer in ideological battle with the police over accountability, and its shadow Home Secretary, Jack Straw, was determined that Labour would not be accused of being soft on crime or anti-police as they had been in the 1970s and 1980s (Reiner 1992: 261-6). Like the criminologist Jock Young, the Labour Party had undergone a conversion from Left Idealism to New Left Realism, with its stress on the victim, the impact of crime on the working classes, and lived realities of crime (Young 1991). Indeed, CCTV was eagerly embraced by the Labour leadership. The former Labour leader, John Smith, publicly officiated at the opening of the Airdrie System and Tony Blair opened the Chester-le-Street system, declaring that CCTV was having a 'tremendous impact' (CCTV Today, July 1996). This was reflected at a local level with councils such as Lewisham in South London which, in the early 1980s had followed a policy of non-cooperation with the police (Reiner 1992: 239), actively forging a partnership with the police for the purposes of setting up CCTV systems. Even the civil liberty pressure group, Liberty, was not opposed to the introduction of mass surveillance, but merely argued for statutory regulation of the CCTV industry. It would appear they had no answer to the populist rhetoric of the Prime Minister who declared: 'I have no doubt we will hear some protest about a threat to civil liberties. Well I have no sympathy what so ever for so-called liberties of that kind' (Independent, 27 February, 1994).

There is another element in this story as to why there was by 1994 almost no political resistance to CCTV. The tragic murder of the toddler Jamie Bulger, in Bootle, Merseyside by two ten-year-old schoolboys, in February 1993, had served to crystallise fears about public safety and the nature of childhood. It had also dramatically launched CCTV into the public debate surrounding the control of crime as the fuzzy pictures of the little boy being led from the shopping centre were replayed night after night on television. Even if CCTV had not saved the toddler, at least it contributed to the identification of the killers (Smith 1995). The public mood in the wake of the killing, as evidenced by the newspapers of the time, made those who tried to raise objections to CCTV seem either callous or too concerned with the rights of criminals.

Finally, there is one last aspect to the rise of CCTV in Britain and that is its role in counter terrorism. Certainly the terrorist threat, presented primarily by the IRA, was important, in the development of some CCTV systems. For instance, the so called 'Ring of Steel' that was erected around the City of London after the Bishopsgate bombing of 1993. However, in the main, the issue of terrorism was of secondary relevance to the mass of high street systems which emerged in the 1990s. So while the adoption of CCTV at vulnerable locations such as airports and the main London rail terminals was driven by the threat of terrorism, in high streets and town centres it was the threat of low level crime and disorder, perceptions of public safety and the need to counter the economic threat from 'out-of-town' retail parks which provided the more immediate and tangible rationale.

2.3 The exponential growth of CCTV – 1994-2002

In 1994 then, in the wake of a spiralling crime rate, and the public anxieties unleashed by the tragic killing of Jamie Bulger the Conservative Government announced that the Home Office was setting aside $\pounds 2$ million to support open-street city centre CCTV through a City Challenge Competition. Bids had to be in the form of a partnership with matched funding from other sources particularly the business sector, the local authority, the police or even other Government Agencies. The competition would only fund up to 50% of the total capital costs and no contribution would be made for the annual running costs which could be as much as $\pounds 250,000$. (Webster 1998). The competition was to be focussed not on large urban centres but on "bids from smaller centres of population and local neighbourhoods." (CCTV Today, January 1995: 7). Over 480 bids were received from towns throughout the country and although funding was increased to ± 5 million only 106 schemes were allocated grants. The awards ranged from ± 2000 to $\pm 100,000$, the maximum allowable under the scheme. There also appeared to be party political considerations in determining who was successful in the bidding round, seventy-six (72%) went to Tory constituencies, thirty-two of them considered marginal at the next election. As Norris and Armstrong commented, the fact that high crime areas such as Londons Elephant and Castle in a Labour Constituency were turned down for funding, while affluent Tory suburbs such as Harrogate in Yorkshire were successful, led some commentators to accuse the Home Secretary of gerry-mandering (1999: 37).

The first competition appears not to have been planned as part of a rolling programme of funding. Home Office Minister Mr Maclean declared in 1995 that, 'the possibility of a further competition in the future has not been ruled out but it is too early to give a firm commitment' (CCTV Today, September 1995: 2). In the event, and pushed by the strength of demand, between 1996 and 1999 three further City Challenge competitions were held which dispensed £34 million of Home Office funds but levered another £51 million of capital funding from other sources. Each of the competitions had a slightly different focus.

The second round was open to larger city centre bids and also included a separately funded $\pounds 2m$ allocation for improving school security paid for by the Welsh Office and the Department of Education and Employment. This new concern with school security was given urgency by events at Dunblane, a small Scottish town, where a gunman entered a primary school and opened fire, killing 16 school children and their teacher.¹ One-hundred and thirty eight town centre or high street systems (including car-parks), were funded and many benefited from an increase in the upper limit of funding from $\pounds 100,000$ to $\pounds 250,000$. Forty-eight of the bids received capital funding of $\pounds 100,000$ or over, eleven of these being for $\pounds 200,000$ or more. Of the 90 school systems many were for small scale systems, around one third of them being for less than $\pounds 15,000$.

For the first time Home Office funding was available for schemes targeting predominately residential communities, for instance, the Meadowhall public housing estate in the North East of England, which had been the scene of rioting in the early 1990s, received a grant of $\pm 66,500$ as part of a $\pm 140,000$ capital investment. In total 11 schemes involving surveillance of residential areas received in the region of $\pm 800,000$ of central government funding. In the light of this strong demand between 1995 and 1998 three further Competitions were held the last, under the new Labour

¹ See: http://www.dunblane.braveheart.com/dunblane.htm

administration, which had ousted the Tories in the 1997 General Election. These later schemes also expanded the criteria for inclusion to include schools, hospitals, and residential areas as eligible for funding. In total, the four competitions raised £85 million to secure the capital funding of 580 CCTV schemes, £31 million from Home Office Funding and £54 million from the partnerships (CCTV Today, November 1995: 4; Hansard; written answers for 2 November 1999: pt 10).

For some commentators the change in Government signalled the end of the CCTV boom with the final competition under New Labour taking two years to put in place and only allocating an additional £1 million pounds above previously agreed Tory Spending plans (Webster 1998). However in 1999 the New Labour Government announced an ambitious crime reduction programme, and at its heart was the continuing expansion of CCTV, and £153 million of Home Office money was set aside to support expansion over the next three years. In the first round of the competition some 750 bids were received and by November 2000, 339 new schemes had been granted capital funding at a total cost of £59 million. The results of the second round of the competition were announced in July 2001 and from the 800 bids received 108 schemes were awarded a total of £79 million.

In the decade 1992-2002 central government, through its City Challenge Competition and Crime Reduction Programmes, will have committed over a quarter of a Billion pounds of predominantly public money to the expansion of CCTV and this only represents a fraction of the overall investment in CCTV.

On the roads, railways, metro systems, in schools and hospitals, in retail shops, department stores, and shopping malls the cameras have proliferated. During the early part of the 1990s the total value of the equipment market for CCTV products in the UK was around £100 million per annum (Evans 1998: 20). Between 1996 and 2000 the average annual value of the total UK CCTV market including equipment, installation and maintenance costs was £361 million and according to Drury such trends are predicted to continue for the next five years (2001: 6). On the basis of these figures, over the decade 1992 - 2002 we would estimate that around three billion pounds has been spent on the installation of CCTV and maintenance of CCTV systems, and this excludes the monitoring costs associated with these systems.

In the UK precisely how many cameras this represents is unclear, as the Home Office minister, Charles Clarke told parliament, in November 1999: 'Information on the number of police, public sector and private operators of CCTV systems currently in operation and the number of cameras in use is not held centrally' (Hansard; written answers for 2

November 1999: pt 10). Suffice to say, in the first decade of the new millennium, when the average Briton leaves their home what will be remarkable is if their presence is not seen, their behaviour not monitored and their movements not recorded by the omnipresence of the cameras, CCTV operators, and video recorders.

2.4 Administrative Criminology and the Evaluation of CCTV

It may be thought that the rush to install CCTV during the 1990s was based on a firm foundation of supporting research evidence as to its effectiveness. This was not so. CCTV was introduced in town centres and the government funded the expansion prior to conducting any systematic evaluation of its effectiveness in reducing crime in such locations. What evidence did exist prior to 1994 came from small-scale evaluations on systems in car parks (Poyner 1992), buses (Poyner 1988), housing estates (Musheno et al. 1978), football stadia (Hancox and Morgan 1975), and the London Underground (Burrows 1979). As Short and Ditton note, the results of these independent and competently conducted evaluations were 'fairly contradictory regarding the effectiveness of CCTV as a crime prevention method' (Short and Ditton 1995: 11), with some initiatives showing no effect (Musheno et al. 1978), others suggesting high levels of displacement, rather than an overall reduction (Burrows 1979), and others showing clear reductions (Poyner 1988 and 1992). However by 1995 the Home Secretary Michael Howard was boasting:

CCTV catches criminals. It spots crimes, identifies lawbreakers and helps convict the guilty. The spread of this technology means that more town centres, shopping precincts, business centres and car parks around the country will become no-go areas for the criminal ... CCTV is a wonderful technological supplement to the police.

However, the evidence for the Home Secretary's belief in the 'wonderful' technology was not that of the professional and independent evaluator but from 'post hoc shoestring efforts by the untrained and self interested practitioner' (Pawson and Tilley 1994). And as Pease has recently observed 'for those exercising stewardship of public money, good evidence about effects should be necessary before public money is spent, although one is tempted to ask where rigorous standards went in the head long rush to CCTV deployment (Pease 1999: 53). Thus even though hundreds of millions of pounds have been spent on CCTV over the last decade, by business, local communities and central government, there are still major questions about its effectiveness.

To date in Britain there have been 13 independently conducted 'quasi experimental' evaluations which can be used to inform our judgement as to the effectiveness of CCTV

in reducing town centre crime.² Collectively, these studies represent the only reliable data as to the effectiveness of CCTV in town centres, since their findings are based on a minimum level of methodological adequacy which rule out some of the major threats to internal validity.

- They all utilise before and after measures, based on an analysis of police recorded crime figures. In all cases this is not just by measuring two distinct points of time but by a form of trend analysis, either rolling averages or regression analysis. This enables the impact of both random fluctuations and wider long term trends in crime rates to be addressed, both of which might spuriously influence the results.
- They all utilise some form of control group. This is rather different from the classic experimental control since none of the studies used another, similar town without CCTV as a comparison. However, by separating out the area under surveillance and comparing it to the immediate surrounding area and the wider area, this in effect creates a form of control because one can compare the changes in the rate between areas with CCTV and those without.
- They all recognised the issue of displacement and attempted to assess the extent to which crime was simply moved from areas with cameras to areas without cameras.
- None of the studies treat crime as merely an aggregate category, but examine changes in the recorded crime rate for different offence types.

Some of the threats still remain:

- The problem of reactivity is rarely addressed, although the main threat would be if the police deliberately changed their recording practices in order to directly influence the results of the study. In the absence of any data suggesting that they did, we will assume that reactivity is not a particular problem.
- The problem of changes to the area under surveillance occurring during the time of the evaluation which may also have impacted on the crime rate is only addressed by two of the studies. Again, in the absence of any data suggesting that there were such changes, we shall assume that this was not a particular problem.

² These studies have been conducted in Airdrie (Ditton and Short 1998; Short and Ditton 1996), Birmingham (Brown 1995), Brighton (Squires and Measor 1996 1997), Burgess Hill (Squires 1998c), Burnley (Armitage, Smyth and Pease 1999), Crawley (Squires 1998b), Doncaster (Skinns 1998), East Grinstead (Squires 1998a) Glasgow (Ditton and Short 1999), Ilford (Squires 1998d), Kings Lynn (Brown 1995), Newcastle (Brown 1995), and Sutton (Sarno 1996).

General changes to reporting and recording practices. Only one study explicitly
mentions changes to recording practices that may have influenced the data. But,
more importantly, only two of the studies utilise before and after victimisation
surveys which would allow us to see if there had been a change in the 'real' rate of
criminal victimisation, rather than just a change in police recorded crime data.

The findings

In Burnley, Armitage et al. (1999), found a reduction of 25% sustained over two years. A decrease was found for every offence type measured by the study; importantly, the fact that the reductions were sustained over a period of two years indicated that they were not merely the result of quasi-random fluctuations in the crime rate. There was no evidence of displacement and some evidence of a diffusion of benefits. In crime prevention terms this is undoubtedly a success; however, as we shall see, no other study has found such consistent and positive results.

In Airdrie (Short and Ditton 1996) there was an overall reduction of crime of 21%, which the research demonstrated was greater than one would expect on the basis of the downward trends in the surrounding area. The reductions were sustained over a two-year period. However, unlike in Burnley, there were significant differences in changes to recorded crime levels for different offences. A number of offences categories showed increases, such as drug offences, low level public order offences and minor traffic violations, while crimes of dishonesty, such as housebreaking and theft of and from motor vehicles showed a dramatic reduction of 48%. Since these crimes of dishonesty account for about 40% of overall recorded crime, reducing them by nearly half more than offsets the rise in other offence types. Moreover as the authors state, increases in these offence categories 'are not necessarily indicative of the failure of CCTV ... and increases in drug offences may reflect the surveillance ability of CCTV to detect crimes that might otherwise have gone unnoticed. The same could be said of "breach of the peace" offences, and minor traffic violations' (Ditton and Short 1999: 206). The researchers found no evidence of functional or geographical displacement and no evidence of a diffusion of benefits.

These success stories are paralleled by the findings from Newcastle and Kings Lynn (Brown 1995). In Newcastle, for example, although Brown does not provide figures for the decrease in recorded crime as a whole, he showed reductions in the major offence categories of burglary (-57%), criminal damage (-34%), theft of and from motor vehicles (-49%). The reductions were greater in the CCTV area than in the control areas. There

was no evidence of displacement but some of diffusion of benefits, and there was some evidence that for motor vehicle crime the effects were fading over time.

These rather unequivocal success stories have to be measured against rather more mixed findings. Skinns' evaluation of Doncaster showed a 16% reduction which initially would seem to make the scheme an unequivocal success. However, this reduction was offset by a statistically significant increase for nearly all major offence categories in the outer lying townships. There was also evidence, particularly for burglary, of a diffusion of benefits to the areas immediately surrounding the scheme. Overall, however, when both diffusion of benefits and displacement were taken into account the overall reduction was only 6%. Moreover, in the town centre, although there were reductions in recorded offences for burglary (-25%), criminal damage (-32%), and shoplifting (-11%), all these reductions are what would have been expected on the basis of pre-existing trends; the only reductions which remained significant were for theft of and from motor vehicles. Similarly mixed evidence of displacement and/or increases in some categories of recorded crime have been found in Ilford (Squires 1998d) and Brighton (Squires and Measor 1996). Moreover, as Phillips points out, the evaluations carried out by Squires in the towns of East Grinstead, Crawley and Burgess Hill (Squires 1998a,b,c) 'reported reductions, over and above those in control areas, only for criminal damage' (Phillips 1999: 134).

Other town centre studies have found CCTV to have no overall impact. In Birmingham (Brown 1995: 46), there was a 'failure of the camera systems to reduce directly overall crime levels'. The only offence type that showed a sustained but small reduction was theft of motor vehicles. Robbery and assault with wounding increased marginally, while theft from motor vehicles increased dramatically. Moreover, there was strong evidence of both functional and geographical displacement.

These negative findings were repeated in Glasgow (Ditton et al. 1999). When existing trends were taken into account total recorded crime actually rose by 9% after the cameras were installed. Again there was variation in offence type with increases for crimes of dishonesty (+23%) and indecency (+17%), whereas crimes involving serious violence (-22%), vandalism (-8%), and motoring offences (-12%) showed a decrease. And a similar story is found in Sutton (Sarno 1996), where crimes fell further and faster in the areas surrounding the CCTV system and the division as a whole, and there was evidence of tactical displacement.

If we now return to our original question, does CCTV reduce crime? we see that the criminological evidence is far from straightforward: the effects are neither universal or

consistent. There is evidence for CCTV having a sustained and dramatic reductive effect in some areas, while having a negligible impact in others. When looking at individual offences types the picture is also unclear; for instance in Burnley and Ilford crimes of violence decreased while in Birmingham and Brighton they increased. Similarly in Airdrie, crimes of dishonesty decreased, while in Glasgow they increased. Evidence of displacement was found in Doncaster and Burgess Hill, but not in Burnley or Brighton.

If we accept that the contradictory findings of these studies are not simply a result of methodological artifacts, and actually represent a 'real' measure of the incidence of criminal victimisations in the areas under study, research needs to be directed at answering the more complex question 'If CCTV did reduce crime in Burnley, why did it not reduce crime in Glasgow?' It is to be hope, that the major 4 year Home Office evaluation study of CCTV currently being undertaken by researchers at the university of Leicester, will be able help us untangle these issues. However, it should be noted that this Home Office evaluation has only been commissioned after the Government has committed \pounds 170 million of investment into CCTV and so must call into question the Governments rhetoric of 'Evidence Based Policy' (Tilley 2000)

CCTV and Public Support

One final concern of the administrative criminologists has been assessing the levels of public support for CCTV in Britain. As Ditton has noted, on the basis of surveys conducted by those unskilled in the art of social research, the claim of "90% in favour" has become the mantra of populist proponents of town centre CCTV' (Ditton 1998: 221). However, while professionally conducted surveys have tended to find lower levels of support, they have only been marginally lower. The earliest public attitude survey, published in 1992, found that in the three sites surveyed, between 85 and 92 per cent would welcome the installation of CCTV in their area. (Honess and Charman 1992). In Brighton and Sutton, 86 and 85 per cent of those surveyed respectively welcomed the presence of the cameras. (Squires and Measor 1997; Mahalingham 1996). In Cambridge, 64 per cent of those surveyed thought CCTV to be a 'good' or 'very good' idea (Bennett and Gelsthorpe 1996) and, in Glasgow in January 1994, Ditton found 69 per cent of people interviewed 'didn't mind' being watched by CCTV (Ditton 1998: 222).

2.5 Current issues and developments: CCTV in 2002 and beyond

We want to conclude this brief history of CCTV by briefly examining three issues which seem to be dominating the debate within the industry: The problem of monitoring costs, the problem of retrospective searching and the shift toward digitalisation.

Monitoring costs

As was pointed out earlier central government funding, which has fuelled the growth of CCTV, has only been available to finance the capital costs of installations. As a result the financial burden of running and monitoring the systems has fallen on local providers most often local authorities. These costs are not insubstantial. In 1996 Norris et al calculated that the average annual running costs of open street systems was £72,000 and the total cost of monitoring the 400 systems then in operation was in the region of ± 23 million per year. In 2002 these costs have increased substantially as the number of public systems has increased to around 800 and the effects of the minimum wage legislation have affected pay rates in a notoriously low wage industry. For instance, the four town, 47 camera system installed by Swale Borough Council has annual running costs of £300,000 per year, and a number of local authorities are 'dealing with operating budgets in excess of £500,000 per year' (Wade 2000: 28). Indeed some local authorities have been talking about a revenue crisis threatening to undermine existing systems and place a limit on expansion (CCTV Today, January 2001:5). One of the main solutions to this problem has been to advocate the centralisation of monitoring functions so that the costs of monitoring are shared between a number of systems that can then benefit from the resultant economies of scale.

For example, the West Yorkshire Passenger Transport Executive, has installed a 118 camera systems to surveille the main bus termini covering Bradford, Calderdale, Kirkless, Leeds and Wakefield council districts. The central control room in Leeds is manned for 24 hours and covers bus stations located in an area spanning 324 square kilometres (Drury 2001: 50-51). Similarly in Hertfordshire the cameras in Hitchin, Stevenage and Letchworth town centres and two retail parks are monitored from a centralised control room based in Stevenage. The control room operators are therefore responsible for monitoring five CCTV systems located in an area of over 100 square kilometres. (CCTV Today, July 1997). This is perhaps at its greatest in the South Eastern Railways Management Information Communications Centre, located in Central London which monitors and controls 1500 cameras covering stations from the south coast of England to the northern shores of East Anglia: from Brighton to Sheringham some 260 kilometres apart. (Hook 1997: 12).

While centralisation is increasingly seen as an answer to the problem of the costs associated with monitoring, it does however, also decrease the panoptic power of surveillance since the chance that the identity of those monitored is known is simultaneously decreased.

Problem of retrospective searching

With the introduction of CCTV surveillance, evidence based on witness testimony relying on human memory, can be substituted with images of the past that have been captured and stored by the CCTV system. Indeed, in 1995, Michael Howard, the then Conservative home secretary, declared

CCTV catches criminals. It spots crimes, identifies lawbreakers and helps convict the guilty. The spread of this technology means that more town centres, shopping precincts, business centres and car parks around the country will become no go areas for the criminal. ... CCTV is a wonderful technological supplement to the police...One police officer in Liverpool likened the 20-camera system as having 20 officers on duty 24 hours a day, constantly taking notes (CCTV Today, May 1995: 4)

However, the Home Secretary's belief that the presence of a multitude cameras, all recording their images on to tape to allow the possibility of retrospective searching, will simply solve the problem of identification is unfounded. One reason for this is that the archive of images held on the tapes comprises only a fraction of the original video signal. In order to cope with the huge quantity of frames generated by say a 25 camera system, rather than having 25 video recorders taping the images from each camera, most systems have opted to only have the primary monitor recorded in 'real time' at 25 frames per second. The images from all the other cameras are multiplexed, with only one frame per second being recorded on a single video-tape. As we will see this makes the retrospective tracking and identification of suspects a very time consuming task. Indeed in some respects it may merely represent an alternative yet equally resource intensive tool as other investigative strategies. For example, when two men robbed 25 people on a single compartment of a mainline train in October 1996 it was disclosed at their trial that they had been:

Caught on CCTV from the moment they entered the rail system at Holloway Road to travel to Waterloo east. They were again filmed as they boarded the 2012 Charring Cross to Deptford by train by some of the 4000 cameras that cover the main line, Docklands Light Railway and London Underground network (Hook 1997: 12).

However to identify them and make a case that was evidentially strong enough to stand up in court required that the police searched through video tape from over 500 cameras as the two men travelled across the rail network. How long this took can only be guessed at but probably thousands of hours of detective time? This is confirmed from details of the arrest of the London Nail Bomber, David Copeland, who set off his first bomb in Brixton, south London, on 17 April 1999. He was eventually arrested for the offence 13 days after the first bomb was detonated but only after two other bombs had been set off, the last on the 30th of April in the Admiral Duncan public house in central London, killing three people and injuring 76 others. Despite video footage being available from the first bombing, in order to identify him the Metropolitan Police had to examine:

1097 videotapes containing an estimated 26,000 hours of recorded material, much of it multiplexed, often on a frame-by-frame basis. Some 4000-man hours of video analysis was involved. (Fassbender 2000: 34)

And it was not until the 29th of April that an image of sufficient quality to enable identification was released to the media. In effect the identification of the suspect took a team of fifty detectives over ten days work but as the Senior Officer leading the investigation noted 'the excellent detective work, that had carried on in parallel with that of the video identification team meant we would have tracked him down even if the CCTV lead had failed'. (CCTV Today, September 2001: 3)

The promise of the speedy identification of suspects from the retrospective search of tapes, despite some notably successes, has not yet become a routine feature of CCTV, systems.

However for this reason, amongst others, the next generation of CCTV systems in Britain will be digital and this has profound implications for the nature of surveillance. For when CCTV systems are digitised, then the images can be subject to automated storage, processing and retrieval by computers.

The prospect of digitalisation

'The future is digital' is certainly the message contained in a recent issue of the CCTV industry's trade magazine, CCTV Today (July 2001). Of the six main articles in the journal three dealt with different aspects of the coming digital technologies. Already according to Petrook there has been an 'explosion' in the Digital Recording market with the number of companies manufacturing Digital Video Recorders increasing from a handful five years ago to in excess of 80 today (Petrook 2001: 25). At the industry level a Digital Forum was created in May 2000 to set up a common digital recording standard for systems interfacing with the criminal justice agencies and the draft guidelines were published in September 2001 (Constant 2001: 25). According to Greene, a number of fully digital systems have been introduced to surveille British streets

and at a recent CCTV users group workshop half of the delegates reported that they were considering whether to switch to digital systems (Greene 2001: 16).

Similarly in traffic management applications the benefits of moving to digital systems are also being lauded. Traditionally intelligent traffic management systems have relied on sensor technology with video pictures merely being used to provide visual confirmation of events. With digital video detection systems the video picture itself becomes the information source and if this can be automatically extracted through computer vision software technologies it represents a significant multi-functional advance on the information generated from traffic sensors. As Abernethy has recently noted:

As every traffic engineer knows, the surveillance video image provides information on approximate speed, congestion, road conditions, debris in the road, status of road construction, weather, general visibility and impact on road conditions, verification of DMS messages, surveillance security for road side jurisdictional equipment and perhaps most important - verification of and incident and assessment of its seriousness. Because CCTV provides a significant amount of information, it is in demand with just about every stakeholder associated with ITS. (2001: 26)

Once images are digitised and capable of algorithmic processing, the potential of linkages with existing databases are dramatically enhanced. In the case of vehicle traffic this is already regularly achieved. In the City of London, which installed one of the first digital systems in the country, the cameras comprising the so-called 'Ring of Steel', are used to extract licence plate details from every vehicle that enters the square mile of the city of London. This information is then automatically checked against a number of databases containing the registration numbers of vehicles linked to suspected criminals and terrorists. In Northampton, the city council has upgraded its town centre system to include an automatic number plate recognition system as part of a Home Office Pilot scheme to evaluate the technologies effectiveness in contributing to the Government's Crime Reduction Programme. The scheme uses the existing CCTV camera network to perform high-volume ANPR, to detected wanted or stolen vehicles:

by comparing the number plates picked up on cameras with entries on the Police National Computer database. The system is also capable of checking against other databases, such as the DVLC's. A team of eight police officers in cars and on motorbikes has been formed to respond to ANPR 'hits'. In just one month of operation, the system has captured 250,000 number plates and led to 50 arrests. (CCTV Today, May 2001: 6)

The coupling of information extracted from CCTV images to database information containing identity exponentially increases its panoptic power. By being able to link a vehicle, and by association its occupants, to a database of named individuals, subjects no longer remain anonymous, moreover everyone who comes under this digitised surveillance gaze can be classified, as 'law breaker' - 'law abiding', 'suspected' -

'unsuspected', 'wanted' - 'not wanted' and so forth. Classification no longer relies on 'face-to-face' knowledge, it is inscribed in the database.

While number plate recognition systems have now been perfected and offer highly reliable identification rates even in adverse environmental conditions and when vehicles are travelling at high speeds, this is of little help in identifying most of the users of city centre space who are on foot. But a number of commercial systems now claim that they can accurately spot a face in a crowd, most notably the London Borough of Newham, has installed Visionics, Facelt, facial recognition system linked to a police database of known and suspected offenders. However, it appears that the success of this system has been less to do with its technological capacity but in the perception, encouraged by the police that the system is far more effective than it really is - by encouraging all offenders to believe that they are being automatically monitored on the streets. Given, that the database only contains the faces of 100 or so suspects and the system has not resulted in a single arrest in three years of operation, it seems likely that its abilities in tracking and identifying have been significantly over estimated (Rosen 2001).

But what are the prospects for facial recognition technology? Norris et al. wrote in 1996 after reviewing the technical problems associated with face recognition systems, 'the prospect of being able to match a face from a city centre surveillance scene with one held on a computerised data base is advancing but still a long way off' (1996: 17).

In the intervening five years, there has been considerable technological progress. Software engineers have developed new and more sophisticated algorithms and by early 2000 there were at least identified 24 commercial companies selling video based facial recognition products in the US (Blackburn et al. 2000:2). However, in the main, these systems have been perfected for access control applications, which rely on the consent and compliance of the subject. In this context the image capture conditions can largely be standardised, allowing the lighting conditions, head position, head orientation and focal distance between the lens and the subject's face to be held constant. Equally as important the comparison picture in the database needs to be kept up to date (see Blackburn et al 2000, for a description of the Facial Recognition Vendors Test, FRVT, evaluation). Under these conditions systems have been shown to perform reasonably well, at least well enough for one US company to be selling systems to the US prison authorities for the purposes of access control (Visionics 2001).

However the ability to routinely match a face in a crowd is still difficult. First, given that the person walking the street is not necessarily going to be a co-operating or consenting subject, the chances of getting a full frontal facial image is greatly reduced. Second, the system has to automatically locate the head and face in a sequence of video frames and because of differences in orientation, expression, and focal distance between the image on a database and the target image this is technically very difficult to achieve at an acceptable level of reliability (Norris et al. 1998: 266). Moreover in a crowd scene there is a strong possibility the face will be partially obscured by other pedestrians. Third, in street scenes lighting conditions vary enormously between times of the day and at different times of the year. Finally, on the evidence of the FRVT evaluations unless the database picture is relatively recent and taken under the same lighting conditions as the suspect image, the chances of recognition are significantly decreased.

With these limitations in mind commercial companies have concentrated on developing systems in relatively controlled environments such as banks, immigration desks, shop-floors, and access points, which enable the crucial variables of lighting, distance and face position to be held constant. However it seems likely that over the next decade software will be developed that will be increasing used to perform automated monitoring and identification in a who host of settings.

3 The current debate

As Thompson et al. (2000: 410) have pointed out, today most people 'spend more time in "mass-mediated" interaction than in actual human interaction'. Increasingly therefore the information individuals use to construct a sense of reality comes not from personal experience but from the mass media. Thompson et al. suggest that 'this is especially true of beliefs and attitudes related to crime and criminal justice because most individuals have limited personal contact and experience with crime' (2000: 411). If the majority of people have no direct experience of such issues, it is the mass media that provides them with perceptions and social constructions about crime. This discussion aims to illuminate how the images of the latest weapon in the 'war on crime' – CCTV surveillance systems – are socially constructed. By examining these images, we hope to identify some of the key rhetorical devices through which the news shapes the ideological meaning of CCTV in public discourse.

It has been suggested that British people are among the most avid newspaper readers in the world. In the UK there are about 15 daily and 17 Sunday national newspapers, about 84 regional daily papers, and several hundred local newspapers that are published weekly or twice weekly (Whitaker's Almanack 2001: 688). In recent years there has been a slight 'shift to the local', with regional press readership increasing by 1.4% (907,000 readers), and national press readership falling by 3% (1.6 million readers). Figures for September 2001 show that almost seven out of ten (68%) people read one of the national newspapers, while more than eight out of ten (84% or 40 million people) read a regional newspaper (Newspaper Society 2001). Thus in the UK newspapers play a particularly important role in providing the public with information about social issues such as crime and criminal justice.

Our data were derived from articles found in four English newspapers, two national and two regional newspapers. The two nationals include the *Daily Telegraph*, a 'right' of centre newspaper with a readership of just over 1 million, and the *Guardian*, a 'left' of centre newspaper with a readership of 387,000. Both of these newspapers are published in broadsheet format rather than tabloid format. Generally speaking, newspapers published in broadsheet format provide detailed coverage of a wide range of public matters, while tabloids take a more popular, and at times scurrilous, approach. The two regional newspapers are the *Evening Standard* (a London daily newspaper) and the *Wandsworth Borough News*, a weekly newspaper published in a London borough.

We selected all articles that included the words CCTV and related keywords (see appendix) that appeared between 1 November 2000 and 1 November 2001. Our

keyword search produced a total of 668 stories. However, just over one-third (35%) of these were 'peripheral' CCTV stories. These included stories where CCTV or a related keyword was mentioned but was totally unrelated to the general theme of the article. Our analysis of the newspapers, therefore, is confined to the remaining 65 per cent (434) of 'CCTV stories'.

3.1 CCTV stories in four English newspapers

In their classic analysis of crime and the media, Stuart Hall et al. (1981) argued that the mass media not only 'define for the majority of the population *what* significant events are taking place', they also 'offer powerful interpretations of *how* to understand these events' (Hall et al. 1981: 340). This analysis invites us to question why certain topics come to be seen as a significant event and also how the media construct the understanding of these events. All news stories and events can be set in a wide range of discursive frameworks. The question is which discourse is prioritised and in whose interest does it operate? This immediately raises the issue of the relationship between the media and wider structures of power.

In the case of CCTV it is clear that there are a variety of discourses within which it can be set. For instance, CCTV could be discussed through discourses on 'crime control', 'effectiveness' and 'community safety' or those stressing 'civil liberties', 'exclusion' or 'privacy'. Which discourses are prioritised within a news story thus becomes central to understanding the 'preferred reading' of the text. As we shall see below, these priorities are not arbitrary but tend to reflect the interests and values of powerful groups. Hall et al. (1981) use the concept of 'primary definition' to explain how powerful groups in society enjoy privileged access to the media as news sources, providing the interpretative frameworks within which journalists then construct their story. This does not mean that journalists are necessarily biased towards the powerful or that they have no independence. Rather, it draws attention to 'the more routine structures of news production to see how the media come in fact, in the "last instance", to reproduce the definitions of the powerful, without being, in a simple sense, in their pay' (1981: 57). While drawing upon Hall et al's concept of 'primary definition', our discussion will also look at more recent literature which has argued for a less deterministic view of the media than the 'dominant ideology model' (Schlesinger and Tumber 1994).

To understand the ideological processes involved in the construction of news stories it is necessary to attend to three issues. First, the manner in which news is shaped by journalistic imperatives that determine 'newsworthiness'. Second, the organisational pressures of routine news production which structure the relationship with 'sources' which leads to ascendancy being given to the 'primary definers'. Thirdly, in addition to their choices of what to cover and which sources to rely on, newspapers and reporters also use a number of rhetorical tools that serve to define and shape perceptions of social issues. Thus, following our analysis of 'news values' and 'news sources', we will provide a microanalysis of the stories themselves in order to explore the main discursive strategies used in four English newspapers.

CCTV and news values

Over the last decade the rapid growth in the use of CCTV surveillance systems has provided the mass media with a seemingly never-ending supply of crime stories. For example, in 1993 the national daily newspaper Guardian had fifteen stories mentioning CCTV. This increased to 46 in 1994 and 50 in 1995 (Norris and Armstrong 1999: 71). By the year 2000, however, a keyword search on CCTV and related terms in the same newspaper produced a total of 275 stories. But what is it about CCTV that makes it such a good story? To answer this question we need to consider the selection criteria used by journalists to identify newsworthy items. A number of writers have identified some of these key 'professional imperatives'. These include stories which tend to prioritise the present over the past (immediacy), the unusual over the normal (novelty), the dramatic over the mundane (dramatisation), the simplistic over the complex (simplification), and personalities rather than structures (personalisation). (Chibnall 1977).

Many of the issues surrounding the introduction and use of visual surveillance systems fit very neatly with the professional and cultural assumptions that underlie a journalist's judgement about what is news and what is not. The introduction of CCTV systems automatically succeeds on the first two criteria of newsworthiness (immediacy and novelty). They are about the immediate present rather than the distant past. For example, one newspaper reported how 'A chief constable ... came under fire yesterday after disclosing that his own forces cameras were to be re-painted dark blue' (Daily Telegraph, 19 October 2001). Other stories stressed the imminent arrival of 'new' CCTV systems.

London buses to get spy cameras (Headline: Evening Standard, 15 December 2000).

New cameras focus on fuel bandits (Headline: Evening Standard, 2 January 2001).

Bus lane drivers face 700 hundred more cameras (Headline: Evening Standard, 27 March 2001).

Smart cameras will spot the guilty before they commit a crime (Headline: Guardian, July 2001).

Face recognition system to spot airport suspects (Headline: Guardian, 25 September 2001).

6,000 more speed cameras on the way (Headline: Daily Telegraph, 14 August 2001).

CCTV news stories also lend themselves to dramatisation. By placing them in the context of the 'battle against crime', certain aspects of CCTV's operation and effects can be highlighted for dramatic effect:

Policing London's war zone (Headline: Evening Standard, 16 January 2001).

West End war on 'Ibiza-style' yobs (Headline: Evening Standard, 8 March 2001).

Terror threat: Police launch CCTV campaign (Headline: Evening Standard, 18 March 2001).

People rejoice at war on yobs and thieves (Headline: Evening Standard, 23 May 2001).

More CCTV in crime war (Headline: Guardian).

Reportage on CCTV also has little difficulty in reducing complex issues to common sense simplicity such as 'spy cameras to catch vandals' (Evening Standard, 18 May 2001) or 'CCTV cuts crime on estate by 45%' (Daily Telegraph, 27 December 2000). The personalisation of the stories can also be achieved with minimum effort. At the beginning of the 1990's, for example, local newspapers used victim accounts ('Shopkeepers Camera Plea' after a spate of robberies at his shop) to call for the introduction of CCTV systems to prevent future victimisation (Norris and Armstrong 1999: 73). In our sample of national newspapers, however, the call for cameras was not such an important issue. In these newspapers the personalisation of stories was achieved by reporting accounts of victimisation where the suspect may have been caught on camera. For instance, 'WPC hit me with baton' (Evening Standard, 30 August 2001) or 'Hindu girl tells of school hall hammer attack' (Daily Telegraph, 18 October 2001). In this way, stories of 'everyday crime' which would probably warrant little news space are reshaped in the light of CCTV to give them news value.

The news value of a story is enhanced further if it can be presented as part of an ongoing 'newsworthy theme', enlist the views of elite groups, and have potential for 'conflict' (Bell 1991; Chibnall 1981; Hall et al. 1981; Norris and Armstrong 1999; van Dijk 1998). If a story can be presented as part of an ongoing 'newsworthy theme' it provides both easy copy to fill the pages of future editions and also facilitates reader commitment by presenting them with a narrative structure in instalments. For instance,

following a suspected terrorist bomb explosion in central London the Evening Standard released the following articles:

Bomb suspect caught on camera (Headline: Evening Standard, 6 August 2001).

Yard sifts CCTV calls over bomber (Headline: Evening Standard, 7 August 2001).

New plea in search for bomber (Headline: Evening Standard, 8 August 2001).

Ealing blast to be re-enacted (Headline: Evening Standard, 9 August 2001).

We will catch the bombers (Headline: Evening Standard, 9 August 2001).

In the local and regional press, CCTV stories readily lend themselves to reporting the views of local elite's. Any conflict among these local elite's provides extra good copy for the newspaper:

CCTV funding failure is yet another snub (Headline: Wandsworth Borough News, 6 April 2001).

CCTV snub condemned by Tory (Headline: WBN, 13 April 2001).

Widdecombe stresses need for cameras (Headline: WBN, 4 May 2001).

MP has 'let us down' (Headline: WBN, 18 May 2001).

Where indeed are the cameras? (Headline: WBN, 18 May 2001).

Straw's three snubs (Headline: WBN, 25 May 2001).

MP's refute 'yes men' claim over CCTV (Headline: WBN, 31 August 2001).

Other news values drawn upon to sustain the 'news-life' of CCTV include those that place an emphasis on 'violence'. In the reporting of violence, Steve Chibnall (1981) has identified five informal rules of relevancy. These guide journalists' treatment of violence by asserting the relevance of:

- 1. Visible and spectacular acts.
- 2. Sexual and political connotations.
- 3. Graphic presentations.
- 4. Individual pathology.
- 5. Deterrence and repression.

(Chibnall 1981 cited in Kidd-Hewitt 1995: 15).

Take newspaper coverage of the Ealing terrorist bomb, for example.

Ealing bomb suspect is captured on street video (Headline: Daily Telegraph, 7 August 2001).

Ealing bomber captured on video (Headline: Guardian, 7 August 2001).

Cameras catch moment car bomb blew up (Headline: Guardian).

Poor response to Ealing blast video (Headline: Daily Telegraph, 8 August 2001).

The stories above contain all five of Chibnall's rules of 'relevance'. The Ealing bomb story is quite clearly about a visible and spectacular act and has political connotations. It is also capable of literally graphic presentations through the use of images captured by the CCTV system. The stories also contained CCTV footage of the suspect shortly before the car bomb exploded. In this respect the stories also appeal to elements of both deterrence (if you do wrong you'll be caught on camera like this man) and repression (with your help we can identify, catch and punish those responsible).

The sources

As a number of studies of local newspapers have shown, CCTV stories tend to be dominated by 'primary definers' who use the local press to emphasise the positive aspects of CCTV (Norris and Armstrong 1999; McCahill 2002). The importance of getting the media on board in local campaigns for CCTV was made explicit in the Home Office document, *CCTV: Looking Out For You* (1994). In this instruction manual those wanting to set up a city centre CCTV system are advised to 'form a multi-agency working party comprising of all interested parties'. This includes the police, relevant local authorities, crime prevention panels, representatives of retailers, car parking operators, Town Centre Manager's, Chamber of Commerce and 'a representative of the media, for example the editor of a local newspaper' (1994: 12).

These local networks of entrepreneurs played a crucial role in media-led campaigns for city centre CCTV systems. Thus in their analysis of three local newspapers, Norris and Armstrong (1999) found that 86 per cent of voices cited in sixty CCTV stories belonged to those who were involved in a partnership set up to promote the CCTV system (i.e. local councillors, police, council officials and business leaders). Similarly, in his study of CCTV reportage in a recession-hit northern town, McCahill (2002) found that 71 per cent of voices cited in 186 CCTV stories belonged to those who were promoting the system (i.e. members of the Chamber of Trade, police and councillors).

As Table 4 shows, in this study there was a much greater range of voices heard in CCTV stories when compared with the studies of local newspapers. For instance, whereas

business leaders, police and councillors were the dominant voices heard in local newspapers, the same groups together accounted for only one-third (33%) of the voices in our sample of four newspapers. The police are still well represented providing one-fifth (21%) of the 427 voices, but councillors and business leaders accounted for only seven per cent and five per cent of the voices respectively.

Voices	All	Evening Standard	Daily Telegraph	Guardian	WBN
Police	21%	36%	18%	17%	10%
Citizens	18%	12%	25%	21%	7%
Politicians	16%	8%	16%	19%	26%
Authorial	10%	8%	15%	8%	7%
Motor Organisations	9%	7%	13%	12%	0%
Councillors	7%	3%	3%	1%	36%
Business/Managers	5%	12%	2%	3%	7%
Private security	5%	6%	5%	5%	2%
Legal pro's	2%	3%	1%	1%	3%
Academics	2%	0%	1%	6%	0%
Workers	1%	3%	0%	0%	3%
Trade Unions	1%	1%	0.6%	1%	0%
Privacy Org	1%	0%	0.6%	4%	0%
Immigration Official	0%	1%	0%	0%	0%
TV Presenter	0%	0%	0%	1%	0%
N=	427	110	157	99	61

Table 4: Quoted sources in CCTV stories

There are a number of reasons for these differences. To begin with our sample of newspapers includes two national papers and a London daily newspaper. In these newspapers the campaign for local CCTV schemes is not a particularly 'newsworthy' story. As we shall see shortly, these papers were more interested in the role played by CCTV in some of the highly publicised crime stories and the introduction of 'speed cameras', rather than the somewhat parochial issue of the introduction of local CCTV schemes. In these stories therefore journalists are less reliant on local elite's for information on CCTV. Consequently the 'primary definers' tend to be senior police officers and politicians (i.e. elected MP's) who together accounted for over one-third (37%) of the voices in CCTV stories. However, in the regional weekly newspaper (the Wandsworth Borough News), where the introduction of local CCTV schemes is still a newsworthy item, local councillors made up over one-third (36%) of the quoted sources

in CCTV stories. The importance given by three of the newspapers to the introduction of speed cameras is also reflected in Table 4 which shows that almost one in ten (9%) of quoted sources in all newspapers were representatives of motor organisations.

Studies of local newspapers have also found that the vast majority of voices cited in stories were supportive of the use of CCTV (Norris and Armstrong 1999: 76). One study, for example, found that only two (out of a total of 272) 'voices' were critical of the introduction of CCTV (McCahill 2002). In the present study, the majority of stories did not include quoted sources. However, in those stories that did contain quoted sources there was a significant number of articles (particularly those on speed cameras) in which critical voices could be heard.

Orientation of voices	All papers	Evening Standard	Daily Telegraph	Guardian	WBN
Supportive	42%	50%	25%	44%	78%
Critical	42%	34%	59%	39%	8%
Neutral	16%	16%	16%	17%	14%
N=	297	70	119	71	37

Table 5: Orientation of 'voices' in CCTV stories

As Table 5 shows, in the CCTV stories that contained quoted sources there were exactly the same number of 'critical' voices (42%) as there were 'supportive' voices (42%). If we look at each newspaper individually the picture becomes a little more complex. In the Wandsworth Borough News, for example, almost eight out of ten (78%) quoted sources were 'supportive' of CCTV. In the Evening Standard half (50%) of the quoted sources were 'supportive', while in the Guardian slightly less than half (44%) of voices were 'supportive'. Perhaps most surprising are the figures for the Daily Telegraph which show that almost six out of ten (59%) quoted sources were critical of the introduction of CCTV. How can we account for these findings? Have newspapers in the UK suddenly become critical of CCTV? To answer this question we need to look in more detail at the stories themselves.

In search of a debate

The debate over the introduction of CCTV surveillance systems into public spaces in the UK took place over a decade ago. As Norris and Armstrong (1999) have shown in their analysis of the regional press, the dominant discourses in news reporting in the early 1990's were 'emphasising effectiveness', 'downplaying displacement', and 'your liberties are safe with us' (1999: 79). These writers report that almost every single one of the

sixty stories in their study made some reference to the efficacy of CCTV and only three stories included negative comments. How does the debate in our current sample of newspapers compare with this earlier research?

News stories	All papers (top five)	Evening Standard	Daily Telegraph	Guardian	WBN
Caught on camera	24%	29%	12%	30%	12%
Speed cameras	22%	10%	62%	20%	0%
Fighting crime	8%	15%	5%	3%	7%
Searching tapes	8%	13%	0%	7%	7%
Sept 11 th	6%	7%	8%	5%	0%
Crowd control		9%	0%	4%	0%
Cameras are coming		4%	3%	5%	14%
Bobbies not cameras		3%	1%	0.7%	5%
Traffic management		3%	0%	0.7%	0%
CCTV doesn´t work		2%	1%	1%	5%
Civil liberties		1%	6%	7%	5%
Resistance		1%	0%	3%	0%
Protectional		1%	0%	3%	0%
Watching execution		0%	1%	4%	0%
Security risk (no CCTV)		0%	0%	4%	2%
Call for cameras		0%	0%	0%	21%
Conflict/Funding		0%	0%	0%	14%
Voyeurism		0%	1%	0%	2%
Investigative journalism		0%	0%	1%	0%
Job description		0%	0%	1%	0%
Fear of crime		0%	0%	0%	5%
Safe shopping		1%	0%	0%	0%
Customer service		0.6%	0%	0%	0%
N=	434	164	86	142	42

Table 6:

CCTV stories in four English newspapers (1 November 2000 – 1 November 2001)

To begin with the 'selling' of open-street CCTV systems by local coalitions no longer appears to be such an important issue. There are probably two reasons for this. First, today the UK is the most surveilled country in the world which means that convincing the public about the efficacy of open-street CCTV is not as important as it was a decade ago. CCTV has, in other words, become an accepted part of the landscape. Secondly, our sample includes two national newspapers which, as we have already stated, are unlikely to focus on parochial issues such as the debate over the introduction of local CCTV schemes. In the Wandsworth Borough News, on the other hand, things are very different. In this regional weekly newspaper the main concerns are still local campaigns for city centre CCTV and conflict among (Conservative and Labour) politicians over the issue of how these systems should be funded. This is supported by the figures in Table 6 which show that 'Cameras are Coming' and a 'Call for Cameras' account for over one-third (35%) of the stories in this newspaper, while 'Conflict over Funding' makes up 14% of CCTV stories.

However, as Table 6 also shows, the dominant five 'news themes' in our current sample of newspapers are 'caught on camera', 'speed cameras', 'fighting crime', 'searching tapes', and 'September 11th'. With the exception of speed camera stories, which we shall examine in detail shortly, there was very little critical commentary in these five news themes. The dominant news theme was 'caught on camera' which made up almost a quarter (24%) of CCTV stories. There were two types of 'caught on camera' story. First, there were stories focusing on how suspects had been caught in the act:

PC raped night-club woman over back of car, jury told (Headline: Daily Telegraph, 24 July 2001).

WPC hit me with baton (Headline: Evening Standard, 30 August 2001).

Ealing bomb suspect is captured on street video (Headline: Daily Telegraph, 7 August 2001).

Face of an 'arsonist' targeting Jews (Headline: Evening Standard, 5 July 2001).

Ealing bomber captured on video (Headline: Guardian, 7 August 2001).

Wanted for thuggery at Lords (Headline: Evening Standard, 5 July 2001).

Secondly, there were a number of stories tracing the final movements of potential victims of crime:

Witness saw boy minutes before death (Headline: Guardian, 2 December 2000).

Caught on camera: The last journey of Damilola Taylor (Headline: Guardian, 15 December 2000).

Dando verdict: Lost clues that led police to the killer (Headline: Guardian, 3 July 2001).

The 'fighting crime' news theme portrayed CCTV as a 'silver bullet' which could provide utopian solutions to complex social problems surrounding crime and disorder (Marx 1992). In these stories CCTV had either 'cracked crime' (Headline: 'CCTV cuts crime on estate by 45%', Daily Telegraph, 27 December 200), or was about to 'crack crime' (Headline: 'New cameras focus on fuel bandits', Evening Standard, 2 January 2001). The 'searching tapes' news theme described how CCTV was used as an investigative tool in some of the widely publicised crime stories that appeared in the newspapers. For instance, following the Ealing bomb explosion in August 2001 the Evening Standard reported that 'Anti-terrorist squad detectives are today scouring through hundreds of hours of CCTV film taken from businesses in the Ealing area in a bid to find the face of the bomber' (Evening Standard, 6 August 2001). Other examples of the 'searching tapes' news theme were found in the following articles:

Brixton police examine film (Headline: Observer, 22 July 2001).

CCTV footage may hold key (Headline: Wandsworth Borough News, 26 January 2001).

New plea over hit and run (Headline: Evening Standard, 29 August 2001).

CCTV plea for missing girl (Headline: Evening Standard, 23 May 2001).

As Table 7 shows, the terrorist attacks carried out in New York and Washington on September 11 had a major impact on some of the newspapers' coverage of surveillance and security. The regional newspaper in our sample (Wandsworth Borough News) did not contain a single (CCTV) story focusing on the issues raised by September 11. However, between 11 September 2001 and 1 November 2001, over one-third of the CCTV stories in the Daily Telegraph (37%), almost half of those in Evening Standard (49%), and seven out of ten (70%) of those in the Guardian included stories on September 11 and CCTV surveillance.

News themes	Evening Standard	Daily Telegraph	Guardian	Wands News
Sept 11	49%	37%	70%	0%
Other	51%	63%	30%	100%
N=	23	19	10	6

Table 7: CCTV stories in four English newspapers (11 September – 1 November 2001)

These stories focused on three issues in particular. First, the general introduction of new security measures including CCTV following the attacks:

Attack on America: Terror controls tightened as cities fear assault (Headline: The Guardian, 13 September 2001: 10).

Virgin wants bulletproof doors (Headline: Evening Standard, 15 October 2001).

Moves to protect possible targets (Headline: Evening Standard, 10 October 2001).

Secondly, there were stories reporting how some of the suspected terrorists had been caught on camera shortly before the attacks:

Hijackers caught on airport tape (Headline: Evening Standard, 20 September 2001).

Revealed: hijackers last movements (Headline: Evening Standard, 5 October 2001).

Hijack terrorists caught on security camera (Headline: Guardian, 21 September 2001).

Thirdly, in several stories CCTV appeared as a sub-theme in articles that focused on the issue of 'security versus civil liberties':

We must not give up the very freedoms we are fighting for (Headline: Daily Telegraph, 11 October 2001).

We fight to stay free, so what's this about ID cards? (Headline: Daily Telegraph, 20 September 2001).

Fields of contestation

As we have already seen, the stories described above contained very little critical commentary on the issue of CCTV surveillance systems. In fact out of a total of 434 news stories on visual surveillance, almost seven out of ten (68%) contained no critical voices in the main text. However, in the remaining thirty-two per cent of news stories, a number of 'critical' voices were identified. Some of these voices were found in stories focusing on issues such as 'Bobbies not cameras', 'civil liberties', 'CCTV doesn't work', and 'conflict over funding'. However, the vast majority of critical voices were found in stories on 'speed cameras'.

Orientation of voices	All papers	Evening Standard	Daily Telegraph	Guardian	WBN
Supportive	28%	25%	22%	47%	0%
Critical	54%	58%	58%	42%	0%
Neutral	17%	17%	20%	4%	0%
N=	156	24	96	36	0

As Table 8 shows, if we calculate figures for the orientation of voices in speed camera stories only, critical voices become the majority (54%) in all newspapers. If we look at each individual newspaper, we can see that the issue of speed cameras does not figure at all in the Wandsworth Borough News. As we have already seen, in this regional weekly newspaper the main concerns were local campaigns for city centre CCTV and conflict

among local and national politicians over the issue of how these systems should be funded. In the Guardian (a left-of-centre national newspaper) almost half (47%) of the quoted sources were supportive of the introduction of speed cameras, and there was a significant amount of support for the use of these systems in editorials and leading articles:

SAVING LIVES ON THE ROADS: IT IS SIMPLE AND DOESN'T COST MUCH MONEY (Headline in Leading Article: The Guardian, 14 August 2001: 15). The government is absolutely right to extend the coverage of speed cameras as they have a proven record of reducing road accidents where they have been installed.

DRIVEN TO DEATH: IF MOTORISTS REDUCE THEIR SPEED, LIVES ARE SAVED. WILL POLITICIANS HAVE THE NERVE TO STAND UP TO THE ROAD LOBBYISTS AND INSTALL MORE CAMERAS? (Headline: Comment & Analysis: The Guardian, 30 August 2001: 17).

In the Evening Standard and Daily Telegraph, on the other hand, only one-quarter (25%) and just over one-fifth (22%) of quoted sources respectively were supportive of speed cameras. In both of these newspapers almost six out of ten (58%) of the quoted sources were critical of the introduction of speed cameras. These findings raise a number of important issues in relation to our earlier discussion of news sources. As Schlesinger and Tumber (1994) have argued, there are occasions when the media 'themselves take the initiative in the definitional process by challenging the so-called primary definers and forcing them to respond' (ibid. 19). This was clearly the case in our current analysis where the Daily Telegraph in particular threw down the gauntlet to politicians and the police over the issue of speed cameras:

Are speed cameras really intended to improve road safety? (Headline: Daily Telegraph, 15 August 2001).

Speed cameras are defrauding motorists (Headline: Daily Telegraph, 18 August 2001).

Can speed cameras kill? (Headline: Daily Telegraph, 8 September 2001).

Cameras sometimes lie (Headline: Daily Telegraph, 14 August 2001).

Moreover, according to Schlesinger and Tumber, the 'primary definition' model 'does not take account of contention between official sources in trying to influence the construction of a story'. Who are the 'primary definers', these writers ask, when members of the same government or organisation are in dispute over key questions? As the article below illustrate, the introduction of speed cameras generated conflict among the 'primary definers' themselves:

YARD REVOLT ON SPEED CAMERAS (Headline: Evening Standard, 20 August 2001). London's police chief has launched a strong attack on controversial plans for a huge increase in speed cameras. Met Commissioner Sir John Stevens claims the scheme to use cash from speeding fines to fund the increase threatens to undermine the independence of the police. His remarks ... put him on a collision course with transport ministers who repeated their support for the project last week.

Good cameras and bad cameras

As van Dijk (1998) has argued, ideological strategies in news reporting are developed 'in order to sustain, legitimate or manage group conflicts, as well as relationships of power and dominance' (1998: 24). The structure of ideologies, van Dijk goes on to point out, will very often involve 'positive self-presentation and negative other-presentation' (ibid. 61). In other words, ideological discourse is often polarised - We are Good, They are Bad. This is especially the case, according to van Dijk, when conflicting interests are involved (ibid.: 25).

In the context of our current analysis of CCTV reporting, we found that generally speaking cameras that monitor Them (e.g. thieves, robbers, muggers, etc.) are good, while cameras that monitor Us (e.g. motorists, workers etc.) are bad. For instance, this strategy of ideological polarisation was found in most of the stories that contained 'fields of contestation'. The majority of stories guided by a 'civil liberties' discourse, for example, were critical of the use of cameras that monitor Us (i.e. workers). Meanwhile, in the 'CCTV doesn't Work' news frame, several stories were critical of surveillance cameras because they had failed to prevent crimes committed by Them. As one newspaper reported, 'Brixton's muggers and dealers may be getting away with offences because the area's ageing street lamps do not give enough light for decent CCTV footage' (Evening Standard, 15 October 2001). Similarly, in the same news frame, stories focusing on the issue of displacement described how picturesque villages (inhabited by Us) were being invaded by Them ('thieves and yobs who desecrate England's garden') (Evening Standard, 23 May 2001). What we want to do now is explore this strategy of ideological polarisation in more detail by examining newspaper reporting on the issue of speed cameras. These stories revolved around the following twelve themes.

1. Speed cameras are about revenue not safety

Speed cameras were introduced to the UK in 1992. It is estimated that there are around 5,000 cameras in operation and that approximately half a million fixed penalty notices are issued each year. In 2000, a new hypothecation system was introduced which allowed the police and local authorities to use the money raised by speeding fines to pay for and maintain speed cameras. It was the introduction of this hypothecation system that dominated newspaper reporting on speed cameras between 1 November 2000 and

1 November 2001. This dominant theme is summed up by the headline: 'Speed cameras are more about money than safety' (Daily Telegraph, 8 February 2001). In the Evening Standard (13 August 2001) it was reported that this scheme 'could send the number of speeding tickets issued spiralling to 10 million a year, generating around ± 600 million in fines'. The following extracts are fairly typical of newspaper reporting on this issue:

Our argument is not that speed cameras are always and everywhere bad. Rather, it is that their use is disproportionate and represents a misdeployment of police resources. This is especially true of the latest scheme, which would allow part of the revenue from fines to be used to install more cameras. There is, admittedly, a requirement on the police to justify new sites on safety grounds. But such hypothecation none the less violates what ought to be a central legal principle, namely that offences should be prosecuted on the grounds of justice, not of financial incentive (Daily Telegraph, 14 August 2001).

Roving round-the-clock speed cameras are to be used across London in a fresh onslaught on drivers. It is expected that there will be a 250% rise in the number of prosecutions – to around 3.5 million – generating £200 million a year in fines, when the scheme is extended to other parts of the country. The mobile quick-response units, operated by specially trained police officers, are the next "weapon" against drivers who persist in flouting the law (Evening Standard, 19 October 2001).

ENOUGH. Truly, enough. The Government is about to unleash a plague of speed cameras. Our roads will be safer, it claims, even though trial schemes - highlighted in last week's cover story - saw no significant reduction in casualties ... My guess is that casualties would have fallen had the number of visible police patrols been increased. But more police patrols cost more money, whereas more cameras will bring the Exchequer an estimated ± 120 million more from motorists annually (Daily Telegraph, 'Road Rage').

The first example is typical of many of the stories on speed cameras that begin with a disclaimer ('Of course speed cameras are a good thing, but...') and then go on to argue the case against their introduction. As van Dijk points out, 'in this way, the first clause emphasises the tolerance of the speaker, whereas the rest of the ... text following the *but* may be very negative' (1998: 39). The next two examples use a number of negative lexical items to describe the use of speed cameras that we would not find in descriptions of open-street CCTV systems. Thus, unlike CCTV systems operating in public space which are portrayed in the newspapers as new 'crime-busting' initiatives, speed cameras are described as a 'the next weapon against drivers', or as a 'plague' that has been unleashed by the government on the poor unsuspecting motorist. By describing speed cameras as a 'weapon', these stories portray the speeding motorist as a 'victim' rather than an offender. The police and local authorities, on the other hand, are described as responsible agents, who are consciously, intentionally and cynically aware of what they are doing – using speed cameras 'in a blatant "revenue-raising" exercise' (Evening Standard, 19 October 2001).

2. Deterrence before entrapment

The second news theme that we identified called for speed cameras to be made more visible so that they would deter speeding motorists rather entrap them:

Police will have to inform motorists through local newspapers and radio stations of areas in which they are using mobile speed cameras. Fifteen forces have also been advised by the Department of Transport to post details on the internet ... Edmund King, the RAC's executive director, said: 'It is only right that the public should be informed of the whereabouts of mobile cameras. Only then will these devices act as a deterrent and save lives. As well as being the most effective way to reduce speeding, this may be a sign that the government is recognising that it has gone too far with the use of speed cameras and is consequently in danger of alienating large swathes of the population' (Daily Telegraph, 29 October 2001).

This news theme implies that those who break the law by speeding are not completely responsible for their actions because the government has used the cameras in a covert way to entrap the unsuspecting motorist. The logic of this argument is that cameras should be made more visible to allow speeding motorists to slow down when they see a speed camera before reverting to their normal speed which presumably will be above the legal limit!

3. Speed cameras have no film in them

A police force that recently demanded more 'openness' on the location of speed cameras today went a step further - admitting that none of its 'spy' devices had been loaded with film for eight months (Evening Standard, 10 August 200).

As most motorists have already worked out, most speed cameras do not have any camera film in them most of the time. You can cruise past at 85mph, you may even get flashed, but there is no film in the speed camera to record your naughtiness (Daily Telegraph, 22 March 2001, p. 9).

In the first category of speed camera stories ('Speed cameras are about revenue not safety') it was suggested that speed cameras 'could send the number of speeding tickets issued spiralling to 10 million a year, generating around \pounds 600 million in fines'. However, the two examples above suggest that most speed cameras don't work because they have no film in them. Meanwhile, while research has suggested that excessive speed contributes to a third of Britain's annual 3,400 road deaths (Evening Standard, 20 August 2001), the second article describes speeding at 85 mph as 'naughtiness', discursively shifting it from a criminal act to trivial deviance.

4. Speed cameras are not economically viable

Once again, this theme appears to contradict the central theme of most of the stories which is that speed cameras are 'goldmines' designed to bring in tens of thousands of pounds a week for the police and local authorities. The stories in this category, for example, stated that 'Speed cameras drive council into the red' (Headline: Daily Telegraph, 16 March 2001), and that 'Council races into financial disaster with high-tech digital speed cameras' (Headline: Daily Telegraph, 21 April 2001). The introduction of speed cameras in Nottingham, for example, was said to have:

Slowed traffic so much that the six cameras together are only 'harvesting' a total of nine speeding drivers per day. This is worth just £360 in fines. When the six camera units were installed ... it was predicted that they would catch 60 speeding drivers a day who would pay £2,400 in fixed fines into council coffers. Brian Parbutt, the council's deputy leader, admitted yesterday: 'They haven't turned out to be the money-spinner we expected' (Daily Telegraph, 16 March 2001).

Thus rather than emphasising the obvious effectiveness of these systems in reducing speeding, it is the negative that is highlighted.

5. Resistance to speed cameras

While the theme of resistance is a very rare occurrence in news reporting on open-street CCTV surveillance systems, there were several stories that focused on this issue in relation to speed cameras:

HOW TO BEAT THE SPEED CAMERAS (Headline: Evening Standard, 4 September 2001). Drivers are dodging controversial speed cameras by using a revolutionary device that alerts them in advance. In response to motoring campaigners, who have accused police forces of deliberately hiding the speed cameras in a bid to make money from unsuspecting drivers, a Kent-based company has come up with Geodesy - a unique system that gives the driver plenty of warning before they approach a camera. The makers say the device gives the driver ample time to slow down gradually rather than slamming on the brakes at the last minute and risking an accident

SPOT THE SPEED CAMERA (Headline: Daily Telegraph, 12 May 2001). 'A device which warns drivers of the locations of speed cameras has been launched – and, because it is not a radar detector, it is entirely legal.

In the first two examples speeding motorists are offered advice on how to beat the speed cameras by deploying camera detectors. In the first story ('How to beat the speed cameras') speed cameras are described as 'controversial' while detectors, which allow motorists to break the law, are described as 'revolutionary'. This article also seems to imply that the use of detectors is legitimate for two reasons. First, because the police are using the cameras in a covert way to raise revenue, and secondly, because detectors prevent accidents by allowing those who flout the law to slow down gradually rather than slamming on the breaks. But if motorists did not speed in the first place there would, of course, be no need to slam on the breaks.

Other forms of resistance to speed cameras were reported including those below:

FAST AND FURIOUS (Headline: Daily Telegraph, August 20, 2001). Four speed cameras have been wrecked on a 15-mile stretch of the A40. Detectives say they suspect Motorists Against Speed Cameras. That hardly narrows it down, since almost all motorists are against speed cameras. But they should not smash them, and we deprecate such criminal behaviour. The inventor of the Gatso speed camera used it in the 1950s to help him drive faster. It took four decades for a British government to become shameless enough to use the device to grab money unfairly from a fraction of drivers. No surprise that some fight back.

NET TELLS DRIVERS HOW TO BEAT FINES (Headline: Evening Standard, 22 November 2000). Law-breaking motorists are being offered free advice over the internet on how to avoid serious charges, in a move attacked as 'shocking' and 'insulting' by safety campaigners.

WE IS DOING OUR BIT FOR SOCIETY, BRUV (Evening Standard, August 2001). While we British are predictably supine in reacting to the pernicious menace of speed cameras, the Italians are said to take a more active approach. In parts of the south especially, young men have taken to driving past them at huge speed, apparently, and blowing them away with shotguns.

The first article begins by condemning the reported acts of vandalism but goes on to suggest that this behaviour is justified because of the government's 'shameless' use of speed cameras to grab money from motorists. The second article focuses on the launch of a new website by City Internet firm Resident Lawyer. This website, the newspaper reports, provides motorists with detailed information on how they can escape prosecution or fixed penalty notices. The story appears to be critical of this practice but goes on to provide the website address at the end of the article. The final article provides a 'humorous' approach to the resistance of speed cameras. Reporting on how young men in Italy have apparently used shotguns to blow away speed cameras, the author wonders whether it could be possible to persuade 'Yardie crack dealers' in the UK to do the same thing:

There is a solution. Not a day passes at the moment without more news of the alarming gun culture growing in London, of the rising numbers of victims as well as the increasing power of weapons. How sad all this is, and what a criminal waste to use a weapon like the AR-15 military rifle found recently in the possession of a 17-year-old boy to shoot a rival crack dealer from two feet when it is accurate to 600 yards. With that range you could stand next to Eros in Piccadilly Circus and take out a speed camera outside The Ritz ... Persuading Yardie hit men to be more public-spirited may be difficult, but if only the inside of the cameras could be filled with bags of crack cocaine, this could be marketed as a harmless bit of fairground fun (Evening Standard, August 2001).

6. The camera never lies, but speed cameras do

In our sample of 434 CCTV stories, we failed to find a single story reporting how openstreet city centre CCTV systems had 'got it wrong' by, for example, wrongly identifying a particular suspect. However, as the articles below illustrate, speed cameras often get it wrong and this is described in great detail by the newspapers:

'FARCE' AS TRACTOR CLOCKED AT 87mph (Evening Standard, 1 November 2000). The owner of a vintage tractor has received a speeding ticket for driving his old vehicle on a motorway at 87mph - 72mph more than it's capable of travelling at. Garry Porter, whose tractor has a top speed of 15mph, received an apology from Northamptonshire police for the 'mistake'. The ticket was issued after speed cameras caught a Mercedes, believed to have the same numberplate as the tractor, travelling at 87mph near junction 15 of the M1.

DON'T SMILE YOU'RE ON CAMERA (Headline: Daily Telegraph, 30 June 2001, p. 9). Speed cameras are in the news. Earlier this month, the AA said thousands of motorists had been wrongly accused of speeding because of glitches in the controversial digital speed camera system that first appeared on our roads in April last year ... many innocent motorists pay up because they receive their ticket through the post some time later, cannot remember what their speed was (or sometimes whether they were even on that stretch of road) and assume the authorities have got it right. In many cases, they have not. Paul Watters, head of roads and transport policy at the AA, says: 'This flood of faulty notices is bringing the entire system into serious disrepute'. Some drivers have been accused of breaking a 30-mph limit even though they were on holiday abroad when the offence was said to have been committed ... A vicar was accused of speeding in London while giving a sermon in Wales. A dairyman in Scotland has received numerous tickets for "speeding" in his milk float'.

These articles provide further examples of ideological polarisation whereby negative opinions about cameras that monitor *Them* (thieves, robbers, drug dealers, violent criminals etc.) tend to receive very little attention, while negative opinions about cameras that target *Us* (motorists) tend to be detailed, repeated and illustrated with concrete examples. Moreover, the significance of these incidents of speed cameras getting it wrong is completely blown out of all proportion. Thus according to these stories, these isolated incidents are 'bringing the entire system into disrepute'. Meanwhile, the second article fails to tell us exactly how many technical glitches make up the 'flood of faulty notices'.

7. Speed cameras can cause crime/accidents

In this category a number of articles in the Daily Telegraph suggest that speed cameras far from reducing law-breaking or accidents, can actually be seen as a cause of crime and accidents:

PENALTY POINTS FOR SALE (Headline: Daily Telegraph, 8 September 2001).

MOTORISTS VENT FURY ON SPEED CAMERAS (Headline: Daily Telegraph, 20 August 2001). Four speed cameras on the same stretch of road are bearing the brunt of public resentment at the nationwide crackdown on speeding ... The attacks on the four cameras ... are the latest in a string of incidents in which drivers have vented their fury at the proliferation of 'big brother' technology on the road side.

CAN SPEED CAMERAS KILL? (Headline: Daily Telegraph, 8 September 2001).

In the first article, a representative of The Association of British Drivers condemns the illegal trade in penalty points, but goes on to argue that this practice 'is the inevitable result of misguided government policy'. He says, 'More and more safe motorists (i.e. speeding motorists) are in danger of losing their licence because of unreasonable speed limits and the senseless proliferation of speed cameras'. While most articles on open-street CCTV systems contain no civil liberties discourse, the second article describes speed cameras as 'big brother' technology. Finally, in the last example it is argued that speed cameras are forcing motorists to break suddenly which is resulting in road accidents.

8. Some people are getting away with it

In this group of stories it is argued that speed cameras are unfair because some people are getting away with it. As one person put it in a letter written to the Daily Telegraph, 'What annoys me is that motorcyclists get away with it because they have no number plate at the front to be photographed' (Daily Telegraph, 1 November 2001). Similarly, one article in the Evening Standard reported that:

In a country in which a senior police officer, his car caught by one of his own speed cameras, escapes a fine because 'he can't remember' who was driving, while poor, tortured Michael Barrymore is persecuted over cannabis, it isn't always easy to be a cheerleader for the boys in blue (Evening Standard, 30 August 2001).

9. Speed cameras erode civil liberties

While blanket coverage of public spaces with open-street CCTV surveillance systems is justified as part of the 'war on crime', the introduction of speed cameras is said to erode civil liberties. The Daily Telegraph was so concerned about this issue that it launched 'Our Free Country' campaign which was:

Founded on the principle that there should be a presumption against coercion. There may be occasions when it's legitimate to limit someone's liberty, but the onus should always be on those who want to do the limiting. The Government's plan for a huge expansion in the number of speed cameras will drag our law still further away from this principle (Daily Telegraph, 14 August 2001).

10. We need 'Bobbies' not cameras

Another 'field of contestation' in our sample of newspapers is summed up by an article in one newspaper which claimed that 'the boys in blue will always be more effective than Big Brother' (Daily Telegraph, 22 August 2001). This theme also cropped up in speed camera stories as illustrated in the article below:

'CRIMINALS GAIN FROM POLICE CUTS' (Evening Standard, 22 January 2001). Violent criminals are escaping detection because traditional police traffic patrols have been dramatically scaled down, it was claimed today. New Home Office research shows motorists who commit serious traffic offences are frequently also involved in major crime ... The study ... shows a high proportion of drivers stopped for motoring offences are involved in crimes including violence, burglary, robbery, theft, drug offences and criminal damage. Now that an increasing number of drivers are instead caught on camera and processed automatically, however, their involvement with serious crime, is often being missed.

In this article the shift from 'traditional policing' to a reliance on speed cameras is seen as a bad move because it means that They ('real criminals') are getting away with it while We (speeding motorists) are being targeted.

11. Speed does not kill

As we saw earlier, negative opinions about cameras that monitor *Us* are described in great detail. In contrast, positive opinions about cameras that monitor *Us* are forestalled by counter-arguments against such opinions (van Dijk 1998). For instance, one of the main arguments in favour of speed cameras is, of course, that by deterring drivers from speeding they will save lives. However, to counter this argument one newspaper pointed to a Transport Research Laboratory Report which stated that 'excessive speed was a definite causal factor in only 6% of accidents' (Daily Telegraph, 24 February 2001: 2). Other articles made the same point:

MOTOR MOUTH; SPEED CAMERAS ARE DEFRAUDING MOTORISTS, SAYS MIKE RUTHERFORD. WHAT'S MORE, NO ONE KNOWS IF THEY WORK (Headline: Daily Telegraph, 18 August 2001). Whether the cameras can, on their own, bring about a net reduction in road accident casualties is highly questionable ... On Thursday, the DoT assured me that a speed camera report will be published in October. That document must, at the very least, say what percentage of cameras are directly responsible for preventing death and injury ... But if the report does not make valid comparisons or fails to offer evidence that cameras are doing the job they're supposed to, it won't be worth the paper it's written on.

The article above questions whether speed cameras can reduce road accident casualties, and demands that the impending Department of Transport report states what percentage of cameras are directly responsible for preventing death and injury. However, the same newspaper requires less convincing when it comes to the effectiveness of open-street CCTV surveillance systems. In one article, for example, it reported that 'CCTV cuts crime on estate by 45 per cent' (Daily Telegraph, 27 December 2000). The same goes for open-street CCTV systems in general which, as Norris and Armstrong (1999: 63) have pointed out, were introduced throughout the country before any systematic evaluation of its effectiveness had been carried out.

12. Speed cameras don't target 'real' criminals.

In the final group of speed camera stories it is argued that CCTV cameras should not be targeting Us (speeding motorists), rather they should be targeting Them ('real criminals'). This theme cropped up over and over again in speed camera stories:

Scotland Yard has ordered a freeze on the number of speed cameras in the capital saying that the war on violent crime and burglary should take greater priority than stopping speeding motorists (Evening Standard, 10 July 2001).

The multiplication of safety cameras will widen still further the gulf between what the public want the police to do, and what the police themselves want to do. Most people would like the police to concentrate on catching dangerous criminals. Unsurprisingly, many officers see prosecuting motorists – especially if it can be done from behind a desk – as a better use of their time than chasing muggers. This attitude can only alienate the police from what ought to be a supportive constituency. Thus, order, as well as liberty, is undermined (Daily Telegraph, 14 August 2001).

The ideological polarisation between *Us* ('law-abiding motorists') and *Them* ('dangerous criminals') is perhaps most clearly illustrated in the examples above. This became the central discursive strategy in news reporting on speed cameras.

3.2 Conclusion

The findings of this paper were based on data derived from 668 articles on closed-circuit television found in four English newspapers, two national and two regional newspapers. Just over one-third (35%) of these articles were 'peripheral' CCTV stories. Our analysis of the newspapers, therefore, was confined to the remaining 65 per cent (434) of 'CCTV stories'. In these CCTV stories the dominant five 'news themes' were 'caught on camera', 'speed cameras', 'fighting crime', 'searching tapes', and 'September 11th'. While the majority of these stories contained very little critical commentary a number of 'fields of contestation' were identified in stories focusing on issues such as 'Bobbies not cameras', 'civil liberties', 'CCTV doesn't work', and 'conflict over funding'. However, the vast majority of critical voices were found in stories on 'speed cameras'.

When we calculated the figures for the orientation of voices in speed camera stories only, critical voices became the majority (54%) in all newspapers. In the Wandsworth

Borough News (a regional weekly newspaper) speed camera stories did not figure at all. The main concerns in this newspaper were local campaigns for city centre CCTV and conflict among local and national politicians over the issue of how these systems should be funded. In the Guardian (a left-of-centre national newspaper) almost half (47%) of the quoted sources were supportive of the introduction of speed cameras. However, in the Evening Standard and Daily Telegraph only one-quarter (25%) and just over one-fifth (22%) of quoted sources respectively were supportive of speed cameras. In both of these newspapers almost six out of ten (58%) of the quoted sources were critical of the introduction of speed cameras.

In our microanalysis of the stories themselves we found that the main discursive strategy was what van Dijk (1998) has described as 'positive self-presentation and negative otherpresentation' (1998: 61). In other words, ideological discourse is often polarised - We are Good They are Bad. In the context of our current analysis of CCTV reporting, we found that generally speaking cameras that monitor Them (e.g. thieves, robbers, muggers, etc.) are good, while cameras that monitor Us (e.g. motorists, workers etc.) are bad. This became the central discursive strategy in news reporting on speed cameras. So to return to our earlier question: have newspapers in the UK suddenly become critical of CCTV? The answer in short is yes and no depending upon whether newspapers are reporting on cameras that monitor Us or cameras that monitor Them. Because while cameras that target Us (i.e. motorists) can be described as 'Big Brother tactics' (Daily Telegraph, 16 June 2001), cameras that target Them can still be presented as a 'West End war on 'Ibiza-style yobs' (Headline: Evening Standard, 8 March 2001).

4 The legal framework

4.1 The development of CCTV in the context of a lack of legal regulation

One of the most important points to note about the growth of CCTV in Britain is that it occurred in the absence of legal regulation. The European observer might have expected that either Data Protection legislation or privacy legislation would have impinged on the setting up and operation of CCTV systems, but in Britain this was not the case.

The 1984 Data Protection Act had been introduced to protect against the misuse of personal data in the context of automated processing. As various commentators have noted although at first sight the Act appeared to be a powerful piece of legislation, it was in fact minimalist in approach, requiring little more than registration (Bainbridge and Pearce 2000: 2), and as Maguire noted:

The drafters of the Act did not view privacy as a fundamental right, but as one that had to be balanced against other interests. Many exemptions are allowed, and there are many ambiguities and loopholes in the wording that can be exploited by companies or agencies wishing to avoid the controls. (1998: 232)

Furthermore because the Act was primarily concerned with the 'automated processing' of data held on computer, the provisions of the Act did not strictly apply to CCTV systems. As the manual searching by an operator using a fast forward or rewind function did not constitute 'automatic processing', as defined by the Act, in general, the filming and recording of peoples images was considered exempt from the provision of the 1984 Act. (Ellis 2000:14)

Even where processing was carried out automatically, for instance, by reference to a date or time-code on the tape, because of the ambiguities, loopholes and exemptions in the law, many CCTV operators were unaware of their need to comply with the Act. Many others believed themselves to be exempt on the grounds that they were using the system for law enforcement purposes.

Thus, unlike many other European countries where video surveillance was regulated by statute, and involved the registration and licensing of surveillance systems, including legally enforceable rules on how the products could be used, in Britain there were no such requirements (Maguire 1998).

The lack of specific regulation of CCTV through data protection legislation was compounded by the lack of a legally enforceable right to privacy. Although both the Younger Report in 1972 and the Law Commission in 1981 had examined the issue of privacy rights they both rejected the creation of a general, legally enforceable, right to privacy.

In the absence of a general right to privacy in British law prior to the incorporation of the Human Rights Act 1998, those seeking to challenge the right of a local authority or police to photograph them on the grounds of infringement to privacy would have to do so on the basis of trespass and nuisance, defamation, breach of confidence or breach of copyright. According to Sharpe (1989: Chapter 5) none of these would succeed in relation to a CCTV system operating in public space. And she went on to note:

The right to privacy is therefore unlikely to exist in relation to those random public surveillance activities which cause the greatest outcry on the basis that personal liberties are being infringed. (Sharpe 1989: 82)

As the High Court ruled as late as 1997, even where a local council released video footage to the media of a man who had been filmed after attempting to commit suicide, in the absence of a privacy law, the court was unable to hold that the council was wrong in law or acting irrationally, in releasing the film to BBC1's 'Crime Beat' and other programmes (Guardian, 26 November 1997: 8).

4.2 Contemporary regulation of CCTV

The dearth of legislative oversight has, since 1998, been remedied and in the last four years three major pieces of legislation have brought the operation of CCTV under statutory control. These include: The Human Rights Act 1998, The Regulation of Investigatory Powers Act 2000 and The Data Protection Act 1998.

The Human Rights Act

In October 2000 the European Convention on Human Rights was fully incorporated into British law under the 1998 Human Rights Act. In the context of CCTV two provisions stand out: Article 6, the right to a fair trial and Article 8, the right to respect for family and private life. In the context of the right to a fair trial it has been held that covert CCTV footage in the case of an investigation of drug dealing was relevant, admissible, probative and fair. (R v Wright and McGregor, 14th June 2001) In an investigation by an insurance company that involved covert filming of a woman involved in a personal injury claim (to rebuff her assertions that she could no longer perform certain actions, like lifting up her child) it was ruled that while material filmed in the claimants home and her child's nursery could not be shown (as this would breach her privacy rights) 20 minutes of other footage would be proportionate and not prejudice a fair trial (Rall v Hume, 19th March 2001. For more details of these cases see Herbage 2001: 20). In the context of Article 8 as Colvin argued, shortly before the introduction of the Human Rights Act in Britain, that CCTV monitoring it can give rise to privacy issues in two ways first 'through its surveillance role and second through its information gathering role' (Colvin 1997: 4). Where CCTV surveillance is primarily concerned with deterrence and crime prevention, the issue a stake will be the extent to which CCTV surveillance in public spaces is considered lawful; that the interference in privacy rights is justified by reference to the specific exemptions, and that it is proportionate. It is possible that CCTV systems may be vulnerable to challenge on the basis of 'implied consent'. Secondly Colvin argues that in the context of CCTV's role in information gathering processing, for instance, through advanced facial recognition systems that 'data protection law ... may be unable to provide sufficient 'Article 8 safeguards' to cover the more advanced technologies that can be used in combination with CCTV' (Colvin 1997: 4).

The Regulation of Investigatory Powers Act 2000

The passing of the Regulation of Investigatory Powers Act (RIPA) was driven largely by the need to provide a statutory framework for the covert investigative surveillance techniques of state agencies such as the police and the security services. Prior to the Act there was little, if any, legal bases regulating the use of informants, surveillance devices and covert operations in general. To be compliant with the European Convention these activities had to be placed on a statutory footing. In particular this means that where the police or other agencies such as local authorities use covert CCTV surveillance they will have to demonstrate proportionality, legality, accountability, necessity and subsidurarity As Herbage has noted to be compliant with the Act:

It is of paramount importance that records are kept to be able to demonstrate at a later date that the provisions of the RIPA have been complied with. This includes records of the appropriate authorisation, and renewals or cancellations and other forms in relation to the progress of the operation. Local Authorities relying on the Act should check that authorisation is being given by a sufficiently senior officer. That officers need to review the operation, to ensure the purposes for using covert surveillance is being achieved. Before granting authorisation, the officer should start to think about whether using covert surveillance is proportionate and reasonable' (Harbage 2001: 20)

The Data Protection Act 1998

In response to the EU Data Protection Directive (1998) that required EU member states to afford basic privacy rights when processing personal data, the Data Protection Act 1984 has been completely revised. The European Directive required member states to have introduced its provisions into their local law by 28th October 1998 and although the 1998 Act (DPA 98) had received royal assent by that time it did not in fact become law until 1 March 2000. The Act also allowed for two transitionary periods which, in effect, meant that for pre-existing CCTV systems they were not required to comply with the Act until 24 October 2001. Even so for the first time, CCTV was brought fully under the scope of the Act, and as Holmes and Davenport note.

The Act currently applies to all systems irrespective of size or purpose of use. There is no minimum limit to the number of cameras in a system One camera to one video recorder or indeed camcorder if used for crime prevention and detection or the promotion of public safety falls within the scope of the Act so the owner needs to notify the commissioner. (2000: 2)

Furthermore, to conduct public space surveillance there must now be an explicit legal basis for the operation of a CCTV system. Unless system operators can point to the precise legal basis of operation and subsequent actions regarding the processing of data they have obtained they will be acting in contravention of the Act. In some case the legal bases will be founding the Data Protection Act itself as the Home Office has recently advised:

Schemes that monitor spaces to which the public have access such as town centres, may be able to rely on paragraph 5 (d) of Schedule 2 of DPA 98 as they are exercising a public function of a nature which is conducted in the public interest. These purposes include the prevention and detection of crime apprehension and prosecuting of offenders or public/employee safety (sec 29 DPA 98). (Home Office 2002: 2)

In other cases it will be found in subsidiary legislation such as the Crime and Disorder Act 1994, which gave local authorities the general power to provide CCTV monitoring and recording of events on their property, or section 3 of the Criminal Law Act 1967, which grants small retailers the right to use CCTV as a reasonable means to prevent crime (Home Office 2002: 2).

In July 2000 the Information Commissioner published the CCTV Codes of Practice which sought to provide detailed advice and guidance as to how the eight data protection principles would affect the operation of CCTV Systems. The code contains 62 legally enforceable standards and contains a further thirty points covering good practice. A brief summary of the principles and how they with affect CCTV is given below:

 Personal data shall be processed fairly and lawfully and, shall not be processed unless (a) at least one of the conditions in schedule 2 is met and (b) in the case of sensitive personal data at least one of the conditions in schedule three is also met. The conditions in schedules 2 and 3 seek to limit the processing of personal data to those areas that have been deemed as legitimate by the Act. Central to this is the granting of consent by the data subject, particularly if the processing involves sensitive data such as a person's racial origins or political beliefs. However in the case of CCTV systems operating in publicly accessible space the issue of consent has been substituted by 'implied consent'. But, for system to be fair and lawful people must be still be made aware that they are being monitored by CCTV and this should be through appropriate signage. The only exception being where a system must be covert to fulfil its purpose.

As part of the fair processing requirement individuals should also be able to ascertain the identity and contact details of the Data Controller responsible for a particular system, and be alerted, again through signage, as to the purpose(s) the system is used for. Processing will be deemed unfair if individuals are deceived or misled as to the purposes for which the data is being processed. Part of the fair processing requirement requires that all systems provide details about the identity of the data controller and stated purpose(s) of the scheme must be notified to the Data Protection Commissioners to be included on the public register of systems.

- 2. Personal Data shall be obtained only for one or more specified and lawful purposes, and shall not be further processed in a manner incompatible with that purpose. Thus, for instance, if a CCTV system's stated purpose was to detect and prevent crime, and it filmed a local government employee absenting themselves from work to have a quick cigarette break, this data could not be processed and used to discipline the employee.
- 3. Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed. In the case of CCTV this requirement means that a system used to monitor the security perimeter of a car park should not also be capable of monitoring the back gardens of private residence in the area as this could be considered both excessive and not relevant.
- 4. Personal data shall be accurate and where necessary, kept up to date. This requirement means that system managers will be in breach of the Act if they fail to keep accurate and up-to-date records of various aspects of the data process activities of the system, for instance who has had access to the tapes.
- 5. Personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes. What constitutes necessity will depend on the circumstances but the codes indicate, for instance, that in the case of a nightclub, retention for 7 days would be sufficient, presumably if a fight had occurred it would have been reported within seven days. In the case of a bank which uses the system to monitor an ATM machine, three months might be considered

necessary, as three months is the average length of time people receive bank statements and query any transactions.

- 6. Personal data shall be processed in accordance with the rights of data subjects under this Act. This is perhaps one of the most far-reaching aspects of the new legislative regime. Data subjects now have the right to a copy of any information held about them that falls under the scope of the Act. In the case of CCTV this means they have a right a permanent copy of that part of the tape where they feature. And information as to any third parties that have been in receipt of their data. The Act sets out the manner that requests for subject access must be dealt with including, time limits, the rights of third parties to be anonymised, and the circumstances in which a request can be refused.
- 7. Appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to personal data. One of the most important aspects here is that the principle is breached if operatives and system managers are not fully conversant with the law and can recognise the procedures and safeguards that need to be followed. In particular it stipulates that all those involved in the operation of a CCTV system must be fully aware of subject access rights.
- 8. Personal data shall not be transferred to a country or territory outside the European Economic Area unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects in relation to the processing of personal data.

The impact of this raft of new legislation is as yet too early to be determined. In the case of the Data Protection Act, it would appear that while many public street systems run by local authorities and the police have sought to comply, especially with regard to signage, registration and training, many private sector companies, particularly small retail businesses, are unaware or unconcerned with the need for compliance. Given the limited resources of the data protection registrar, and the lack of general auditing powers in the absence of a specific complaint it seems probable that this situation will continue.

In the case of the Human Rights Act, much will depend on how, over the coming years the British courts develop the legal concept of privacy and the extent to which it extends to publicly accessible space. Similarly, with the Regulation of Investigatory Powers Act, much will depend on how the courts respond to the issues of proportionality, legality, accountability, necessity and subsidurarity raised by covert surveillance operations.

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6 Appendix

Table 9: Keyword search

CCTV	Surveillance and CCTV
Spy cameras	Closed-circuit television
Security cameras	Police and CCTV
Police and cameras	Speed cameras
Covert cameras	Hidden cameras
Civil liberties and CCTV	Human rights and CCTV
Face recognition	Data protection and CCTV
Biometrics	

Table 10: Types of text

Types of text	All papers	Evening Standard	Daily Telegraph	Guardian	WBN
Informing	86%	98%	64%	88%	76%
Opinion	14%	2%	36%	12%	24%
N=	434	164	86	142	42

Orientation of opinion texts

With this category we have coded the orientation in all 'voices' in texts rather than just 'opinion texts', because there are lots of clear (pro and anti) statements in general news stories. Thus, we have coded for: Critical, Supportive, Neutral, Not Applicable

The not applicable category includes 'voices' that appeared in CCTV stories but were talking about issues completely unrelated to the surveillance system in question.

Context

a) Intentions

Where the intentions are not clearly stated in the stories we have taken the 'implied' intentions and coded accordingly. For example, when the police are reviewing the tapes of a CCTV system that captured a suspected terrorist bomb explosion, we have assumed that the system is being used to deal with terrorism. Also, we have divided the law enforcement category into law enforcement (crime) and law enforcement (order). The latter refers to the use of CCTV for crowd control purposes and protests. We have also coded the speed camera stories under 'criminal law enforcement', rather than 'traffic management' which we have reserved for CCTV systems designed to improve traffic flow or monitor parking violations.

Intention	All papers (top five)	Evening Standard	Daily Telegraph	Guardian	WBN
Law enforcement (crime)	36%	45%	9%	31%	76%
Law enforcement (speed)	24%	12%	63%	20%	0%
Terrorism	10%	12%	10%	9%	0%
Order	7%	11%	1%	7%	0%
Traffic management	4%	6%	1%	4%	5%
Protectional		5%	1%	6%	2%
Consumerism		2%	0%	0%	2%
Management tool		1%	1%	3%	2%
Social control		0%	5%	5%	0%
Intentions not stated		5%	5%	10%	10%
Other		0%	3%	6%	2%
N=	434	164	86	142	42

Table 11: Context of reported video surveillance I: Intentions

b) Locations

We have coded 'speed cameras' under 'public transport infrastructure', rather than public streets and places. Also, if the location is not stated we have coded it under 'location not stated', rather than attempt to guess the location.

Locations	All papers	Evening Standard	Daily Telegraph	Guardian	WBN
Public transport infrastructure	34%	30%	67%	25%	7%
Public streets and places	26%	30%	10%	19%	67%
Retail/Service	7%	8%	1%	5%	12%
Mass private property	6%	5%	1%	11%	0%
Social infrastructure	3%	2%	3%	2%	2%
Police/Prison cells	3%	1%	1%	6%	0%
Workplace	2%	1%	1%	4%	0%
Residential areas	1%	2%	0%	0%	0%
Government buildings	0.4%	0%	0%	1%	0%
Location not stated	20%	18%	14%	27%	12%
N=	434	164	86	142	42

Table 12: Context of reported video surveillance II: Locations

c) Named social groups

There are a couple of issues here. First, if there is no named group then we have coded it as such. Secondly, some stories suggest that CCTV is going to tackle drug dealers, graffiti, muggers, vandals etc. When a story mentions more than one social group we have coded for all the groups mentioned in the story rather than develop a 'multi-code' category. This category is also producing a wide and diverse range of social groups that we collapsed into smaller groups.

Social group	All papers	Evening Standard	Daily Telegraph	Guardian	WBN
Suspects (crime)	44%	55%	24%	39%	54%
Traffic offenders	27%	18%	64%	24%	6%
Suspects (order)	8%	12%	2%	6%	12%
Victims	6%	6%	2%	9%	2%
Workers	3%	2%	2%	4%	2%
No named group	9%	6%	3%	12%	21%
Other	4%	2%	2%	6%	4%
N=	140	28	61	38	13

Table 13: Context of reported video surveillance III: social group

7) Quoted sources

We came up with a couple of loose 'coding rules' on this one: First, if the keyword search (e.g. CCTV) was in the title of the article or in the first paragraph, we would count all the voices in the story. Second, if CCTV was only a sub-theme in the story we counted only those voices that were talking directly about CCTV. This seemed to make sense also when coding for orientation in the stories. For instance, we only coded for 'supportive' or 'neutral' voices if the 'news actor' was actually talking about CCTV.

We also coded for an 'authorial' voice. These included both editorials and articles written by journalists that were clearly 'opinion texts'. For instance, there is a regular feature in one of the newspapers written by a journalist called 'Motor Mouth' who is clearly very anti-speed cameras.

Fields of contestation

Table 14: Fields of contestation in four English newspapers

Field of contestation	All papers	Evening Standard	Daily Telegraph	Guardian	WBN
No conflict	68%	83%	29%	73%	69%
Conflict	32%	17%	71%	27%	31%
N=	434	164	86	142	42

Table 15: Fields of contestation by news theme

Field of contestation	All papers	Evening Standard	Daily Telegraph	Guardian	WBN
Speed cameras	56%	39%	79%	50%	0%
Civil liberties	16%	11%	11%	32%	0%
CCTV doesn´t work	10%	14%	5%	11%	23%
Conflict over funding	6%	0%	0%	0%	69%
Bobbies not cameras	5%	18%	2%	0%	8%
Traffic management	5%	14%	2%	5%	0%
Competitive shopping	1%	4%	0%	0%	0%
Voyeurism	1%	0%	2%	0%	0%
Resistance	1%	0%	0%	3%	0%
N=	140	28	61	38	13