Abstract

This article considers an early example of technologically-mediated visual surveillance: the use of cine cameras by the British police in 1935 in the English town of Chesterfield in an operation to crack down on illegal street betting. The paper argues that the operation and its consequences in the judicial system illustrate a number of issues: unreliable policing on the ground; the enthusiasm for technological approaches to crime; and the limits of those approaches in producing usable evidence. The paper concludes that the Chesterfield case should prompt us to take another look at the impact of technology on interwar British policing, and its relationship to surveillance. This article accompanies the original 1935 film.

Introduction

In 1935, the people of the English town of Chesterfield were among the first to be captured by police cine film surveillance. The targets of this operation were groups of working-class men engaging in a widespread but illegal practice: off-course cash betting. This event is significant in itself, but its denouement also illustrates a number of the issues raised by visual surveillance and its interaction with the legal system. It needs to be understood in relation to two broader issues.

The first is the unreliability of many rank-and-file constables in the policing of street gambling (Emsley 1992, 246). The desire to gamble was universal in modern Britain, but the Street Betting Act of 1906 limited cash betting to race courses. The middle classes could bet on credit: the working classes could not. Thus, in every town and city, networks of unlicensed bookies taking bets for cash sprang up. This crime was so ubiquitous that police had little hope of eradicating it, so popular that they were loath to tackle it for fear of alienating many otherwise law-abiding punters, and lucrative enough that bookies could bribe police officers to look the other way (Clapson 1992, 65-6). A standard pattern of collusion emerged; police, under pressure to make an arrest, could be bribed to tip off a bookmaker that he would be targeted, giving him the chance to find a substitute with a clean record to take his place. Arrested and charged for a first offence, the substitute's fine would be paid by the bookie, and business as usual would be resumed for six months until the next 'raid' (Davies 1991, 91). Even if the police were not willing to collude, collecting evidence against a bookie, who would be alive to the possibility of arrest and thus careful in public to rely on look-outs and hard-to-raid locations, was often very difficult (Derbyshire Times 1935b).
The second issue is the widespread enthusiasm for technology in interwar policing (Tarry 1933, 212; Critchley 1967, 209-213; *Times* 1935a). A number of broad social and economic changes were rendering obsolete the traditional nineteenth-century model of policing, which was based around foot patrol. Chief among these were the growth of the motor-car and of the suburb. Police felt threatened by ‘motor bandits’, but were simultaneously having to intensively supervise the middle classes, in their capacity as drivers, for the first time (Emsley 1993). On the ‘supply side’, the First World War had produced a supply of trained men with a commitment to technical solutions (Bunker 1988, 161-169). An emerging group of technocratic police and civil servants were keen to use science to bolster policing’s claims as an autonomous discipline (Popkess 1935; Berliere 1991). The Chief Constable of Chesterfield Borough Police, Thomas Wells, was one of many senior officers who was keen for his force to use technology, and in October 1935 he successfully proposed to his Watch Committee that it subscribe to a joint police forensic science laboratory being set up by another booster of technology, Nottingham’s Chief Constable Anthestan Popkess (Borough of Chesterfield 1935, 805).

In 1935 Wells turned to the 16mm cine camera to help his force, and one outcome of his experiments was at least 20 minutes of film, shot clandestinely by a police constable (PC Saunders) through a 6-inch lens at a range of around 70 yards, on four occasions over a period of eight days, of men taking bets in the town’s Market Place (Wells 1936). Surveillance was carried out from four different locations around the square, one at street level and the others from upper-floor windows (Chesterfield Police 1935a; 1935b). Following this surveillance operation, a mass police raid (itself filmed) arrested 39 men in or near the square (*Derbyshire Times* 1935a). Further filming took place straight after the arrest when the accused left court after being charged. A version of the footage was shown in Chesterfield Magistrates’ Court on May 15th 1935, and helped to convict 14 of those arrested of offences related to gambling (*Derbyshire Times* 1935b). At the hearing, Wells asked the court to see this ‘not as an experiment, but as a practical endeavour to place before you a faithful representation of the facts...’ This case was an example of the pioneering practical use of the cine camera, and the 20 minutes that survive of this footage appear to be the earliest surviving film of this type.

**Reactions**

Despite some superficial similarities, this episode was not the precursor of today's panoptical society, as embodied in ubiquitous open-street CCTV systems. The experiment was in fact closer to another pioneering use of technology: the secret stake-out. In the 1960s, police considered CCTV for open-street surveillance, which could perhaps deter crime, and would also enable police to better control an area (Williams 2003). Another alternative use, which received equal attention at that time, was the use of concealed cameras to obtain evidence, and to investigate specific expected crimes (Metropolitan Police 1966). The former was seen as an extension of the role of the police officer as a visible preventative presence, the latter as a mechanisation of the detective’s secret surveillance. Like the detective’s work, though, it was also presented as embodying deterrence. The camera was covert only until the court cases: after them, Wells hoped that that the prospect of secret surveillance would act as a deterrent. The Met in the 1960s thought the same way about some of their early experimental camera installations.

For the scientific press, the case was a clear-cut example of the benefits of technology, which was being put at the service of the forces of order and progress:

> In certain types of crime it is impossible to obtain evidence beyond the testimony of the police. Accordingly, the Chief Constable of Chesterfield decided to use the ciné camera and to project the film in court... There is no doubt that the use of the ciné camera must increase, although caution must be employed in this new development because, with inexperienced handling, the time factor and perspective can be changed so greatly in photography and projection that erroneous deductions can be made. If once the ciné camera came to be discredited in court at this early stage, it would prove difficult to rehabilitate it. (Nickolls 1936, 6).
The legal press took a more nuanced view, but it too structured its reporting around a narrative of the inevitable advance of technology. In May 1935 the journal *Justice of the Peace* (the weekly semi-official bulletin for magistrates) reported the Chesterfield case, and favourably compared the use of cine film to that of still photographs, which could often be ambiguous or misleading. The contemporary practice was to call the photographer as a witness to justify the composition of the photograph (*Justice of the Peace* 1935). Cine film would not have this drawback. Thus here the anonymous writer re-iterated a powerful theme in the interwar discourse about policing and technology, which continues in slightly more muted form to this day: removing the human element in law enforcement is an advantage (Popkess c.1950, 106-107). The more cybernetic that law enforcement could become the better. Despite noting the practical limitations of the technology, the writer hoped that ‘the cinematograph was likely to be more convincing still’, and then moved on to discuss the potential role that sound recordings could play in court. The article ended with an unprompted prediction that recorded audio was likely to be used more often in court in the future, and singled out blackmail cases as one example of how this could make judgements easier to arrive at. The writer referred to stills, cine film and audio in concluding that:

These inventions help the prosecution, undoubtedly. But they may be of equal assistance to the defence, who may, and often do, challenge the recollection or honesty of witnesses for the prosecution. Repetition of events and conversations by camera and sound reproduction will eliminate most of this difficulty.

Here, cine film was clearly located in a dominant discourse of technology that had certain key factors. Firstly, it saw technology as overall helpful rather than as problematising, secondly, this help was expressed in terms of the mechanisation of tasks previously carried out manually, and thirdly, the arrival of some technologies was linked to that of others in an inevitable progression: the solution to the problems of interpretation posed by technology was to be more and better technology.

**Outcomes**

As has often been the case reality did not match up to the claims of this master narrative of technology on the march (Edgerton 2006). Of 37 arrested in the dramatic police raid that ended the surveillance operation (one of whom, alleged bookmaker Albert Brookes, was carrying a pair of field glasses, and was caught on film briefly pointing them towards the camera), and two more picked nearby soon afterwards, 25 were discharged by the magistrates: the other 14 received fines or bind-over orders for loitering and/or frequenting the Market Place (Chesterfield Police 1935a). At this hearing, three lawyers (two from Sheffield and the other from Chesterfield) represented 10 of the defendants, and raised doubts about the nature of the film evidence. One was reported in the local newspaper as arguing thus:

Mr Bradley presented his case, and said reference had been made to something being passed among the men, but it could not be definitely be said what it was they were passing to each other. There was no evidence before the court that could, in fact, be associated with anything at all. "We are concerned with direct evidence and this film, although it may be a good idea, is not satisfactory from the point of view that it cannot prove that they were betting transactions. I do suggest that it is a very dangerous precedent that this film should be placed before you, and I submit that there is no case to answer. (Derbyshire Times 1935b).

Later, the defects of the film as a piece of identification evidence would be the focus of debate, but at the May 15th hearing the lawyers apparently concentrated on whether it was detailed enough to provide any evidence regarding matters of fact: it was being questioned as to its usefulness in showing what was going on, rather than its ability to accurately portray who was doing it. Passing sentence, Alderman H. Varley, the Mayor (and thus *ex officio* chief magistrate) provided graphic evidence of the lack of legitimacy surrounding the laws against street betting. He proclaimed his readiness to enforce the law, but also
pointed out the hypocrisy inherent in the law against street betting by declaring that this law "is an ass" (*Derbyshire Times* 1935b).

Nine of the cases were quickly appealed (and despite the defendants being denied legal aid, they had engaged solicitors all of whom instructed barristers) to Quarter Sessions, the court of appeal for decisions in the magistrates' court (*Derbyshire Times* 1935c), which upheld six, convicted two of loitering only, and acquitted one (*Times* 1935c; *Derbyshire Times* 1935e). The Chair of the sessions (H. Raikes, a KC, as was the practice at the time when considering appeals) was at pains to point out that they had no problems with film as evidence *per se*: but in these particular cases, it did not contribute towards making a positive identification, because 'Members of the Court were not familiar with the appearance of the men rapidly shown moving and they were incapable of checking the officer's identification of them'. He decided to discount the evidence of the film and base the amended verdicts entirely on other evidence from police officers; some of which was just the officers' subjective description of the suspects as known bookmakers, look-outs or runners. (*Derbyshire Times* 1935e). Film had failed to add credibility to the existing police case: the appeals were settled on the basis that several of the men failed to come forward to dispute the criminal occupations that the police had imputed to them, and others had failed to account for their movements (*Derbyshire Times* 1935e). After the appeals process had been exhausted, of the initial 39 arrests, 13 men were punished; five by bind-over orders, and eight by fines which varied from £2 to £20 in total.

The case thus showed up the limits, rather than the power, of recorded visual surveillance. It gives further credence to the 'Social Construction of Technology' model, which (in brief) notes that mechanical technologies are not adopted in ways determined by their physical capabilities, but in a manner which must fit in with existing institutional demands (Constant 1987). Chief Constable Wells repeated the surveillance exercise later in 1935 (*Derbyshire Times* 1935d), and claimed that it had succeeded when he tried it again in 1936. In September 1935 the Watch Committee endorsed his recommendation that they commend the cameraman, PC Saunders, and another constable, for their part in the recent cases: he was obviously keen to make capital of it (*Borough of Chesterfield* 1935, 805). Wells, though, also falsely claimed in an article written for the *Metropolitan Police College Journal* that none of the 1935 appeals were successful (Wells 1936, 173). Despite Wells' endorsement, the practical upshot was that cine film in court did not catch on. Indeed, present-day anecdotal evidence suggests that the showing of CCTV surveillance footage in court is relatively rare even today. The standard course of action is to show the footage to the defendant in the expectation that this will provoke a plea of guilty. Wells' use of cine technology appears to have been based exclusively around the showing of film in court, and thus the doubts surrounding the validity of this as evidence ensured that the experiment was a failure. Secreting an officer with a camera to observe suspicious activity was more expensive and complex than using an officer alone, yet, according to the courts, no more credible. Despite the potential for the use of film in court, in the Chesterfield cases the considerable expense and inconvenience did not materially add to the case for the prosecution. In the spring of 1936, a Liverpool police officer wrote an article extolling the virtues of film for police training, but on the topic of its admissibility as evidence in court, he correctly concluded that 'such a question involves certain legal arguments which remain to be settled' (Borrows 1936, 74).

**Identification evidence**

At this stage it is worth examining the relationship between the process of identification and the English legal system. The Court of Criminal Appeal decided in the 1970s to set a series of definitions of the process of identification, which are worth rehearsing here as an aid to analysis of the Chesterfield case. (R. vs. Turnbull 1977; Keane 2005, 250). *Observation* is a process, which is affected by the *circumstances*, (visibility, and length of observation but also by whether or not the observer knows the putative target). If known, then an identification might be claimed, which may or may not be a correct recognition. Identification has a *quality* (which can be *good* or *poor*) which is influenced by the length and visibility of the observation and the extent to which the target is known. If the quality of the
identification evidence is poor, other evidence is needed to obtain a conviction. In reality, of course the quality does not in itself determine whether the witness was correct or not, and there is no necessary correlation between the degree of certainty expressed by the observer, and the fact that they are correct in their opinion.

One of the great bugbears of the ongoing debates over fair identification evidence is the issue of the 'Dock identification', when a witness is invited to consider whether or not the defendant really was the perpetrator. Given the adversarial nature of English court proceedings, this has been increasingly discredited in the twentieth century as an example of a leading question – a question through which the witness is led into one specific answer (Committee on Identification 1976, 100). Clearly, the use of film in the Chesterfield case looked a lot like a 'dock identification'. And the Chair of the Bench was explicit in his doubts about whether or not it constituted evidence:

During the exhibition of the film in Court, the Chairman asked Mr Winning [the barrister representing the police] how he suggested it was going to help the Court. What had been happening was that the figures had been identified by a constable who said "that is so-and-so." The fact that he identified figures on the screen was not evidence.

"In Court," added the Chairman, a photograph is produced of a man who called himself "so-and-so." The photograph is compared with the person whom it is supposed to represent." If the Court were satisfied that it was the same, it was evidence against the man. There they saw figures moving across the screen, and somebody gave their names. It was the same evidence that the constable had given in the box. What help was that to the Court? The figures might or might not be those of the men whose names were given. That was what he thought.

Mr Winning: He actually saw them there. When he gives evidence in the witness box it is what he thinks.

The Chairman: I confess I don't think that this is a form of evidence in the way that it is being given. You can go on, if you wish. (Derbyshire Times 1935e)

Identification evidence does not fit very well with the English adversarial model, since any uncorroborated claim of recognition cannot be tested by cross-examination. Usually, admissible evidence was limited to that which the witness had directly experienced, which could be cross-examined, and the trustworthiness and demeanor of the witness assessed. Some technological and scientific innovations in court established themselves through the production of a credentialed expert whose expertise itself could be questioned and hence established (Cole 2001, 199; Watson 2004, 169-170). The results of fingerprint or toxicological analysis could not be questioned, but the expert who obtained them could. This process, whereby the result was linked to an individual, of course went against the dream of the 1930s, noted above, that technology could eliminate the human factor. Cross-examination was at the heart of the adversarial process, and thus led to the exclusion of hearsay evidence which could not be so tested. Police officers in the 1930s saw identification as one of the few categories (others were expertise, handwriting, and character) of evidence in which 'opinion or belief' was legally admissible, even though it could not be conventionally tested (Moriarty 1935, 59-60).

Thus evidence of identification was often central, but not amenable to consideration in the court. This problem was a perennial point of reference in the reform of British law: in the 1970s a series of miscarriages of justice resulting from mistaken identification led to a Committee of Inquiry, many of whose recommendations have been subsequently adopted by the judiciary (Committee on Identification 1976; R vs. Turnbull 1977).

**Significance**

Courts are theatres for the reviewing and processing of information, of course, and from the point of view of the bench, being in a position to have access to less filtered views of reality – rather than making a
decision structured around a processed case presented by a police officer – could well have seemed attractive. But such a view – unlike most of the evidence available to the court – is unfiltered. **Information** need not be differentiated: it is offered to the court in the guise of evidence. **Knowledge**, though is akin to a verdict, or at least a summing-up. Knowledge implies that information has not only been sorted and collated, but has been linked to wider networks of understanding. The 16mm footage shown in court took the form of knowledge in the mind of the magistrates who initially considered it, but the one who viewed it on appeal saw it as information.

This clearly differentiated it from the traditional way that street betting cases were processed. Then, a police officer arrived into the courtroom with a ready-made identification of the suspect: a piece of knowledge rather than one of information. A technologisation of this process changed its nature as evidence: the scientific and legal commentators quoted above, who expressed concern about the way that film ought to be introduced as evidence, were right to be concerned. The way that innovative technological evidence was packaged clearly had an impact on its ability to support a successful prosecution. The issue of the status of fingerprints as evidence in court exhibited a similar dynamic, but in this case, as Simon Cole has shown, the outcome was different: in court, fingerprint evidence was defined as **knowledge**; as data that was structured into a framework of understanding, a 'black box' technology which did not need exposition: a state which he refers to as 'closed' evidence (Cole 1998, 689; Cole 2001, 210). As far as the first experiment with film went, it replaced a situation where the lower courts were exposed to (and generally accepted) unequivocal personal evidence of identification from police offers. Technology allowed the judiciary to assess identification themselves and thus transferred the moment of official identification into the courtroom. Rather than process a piece of closed evidence, which was defined as knowledge, the court was invited to assess a piece of open evidence, which was defined as information. Mediating identification through technology, therefore, was not a magic bullet.

The case of cine film also illustrates the importance of early test cases in establishing outcomes for the admissibility of evidence. The example of fingerprints has already been noted, as has toxicology, which played a key role in establishing the credentials of the expert witness in nineteenth-century British law. X-Ray evidence went through a similar process whereby it was assigned a particular legal status, despite not being especially amenable to lay understanding (Golan 2004). In the United States, the Olmstead case (which reached the Supreme Court in the 1920s) asserted the precedent that wiretapping was not intrusive and thus did not need a warrant (Mason 1969, 2056-7).

The Chesterfield case draws our attention to the often disproportionate impact of events at the beginning of processes – it also prompts us to take another look at the impact of science and technology on the practice and doctrine of interwar British policing, and its relationship to the development of a wide variety of practices of surveillance.

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