The surveillant assemblage

ABSTRACT

George Orwell's 'Big Brother' and Michel Foucault's 'panopticon' have dominated discussion of contemporary developments in surveillance. While such metaphors draw our attention to important attributes of surveillance, they also miss some recent dynamics in its operation. The work of Gilles Deleuze and Félix Guattari is used to analyse the convergence of once discrete surveillance systems. The resultant 'surveillant assemblage' operates by abstracting human bodies from their territorial settings, and separating them into a series of discrete flows. These flows are then reassembled in different locations as discrete and virtual 'data doubles'. The surveillant assemblage transforms the purposes of surveillance and the hierarchies of surveillance, as well as the institution of privacy.

KEYWORDS: Surveillance; assemblage; Deleuze; panopticon; social theory

INTRODUCTION

One of the most recognizable figures in cultural theory is the flâneur as analysed by Walter Benjamin (1983). A creature of nineteenth-century Paris, the flâneur absorbs himself in strolling through the metropolis where he is engaged in a form of urban detective work. Concealed in the invisibility of the crowd, he follows his fancies to investigate the streets and arcades, carving out meaning from the urban landscape. Possessing a 'sovereignty based in anonymity and observation' (Tester 1994: 5), the flâneur characterizes the urban environment and the experience of modernity.

There has been an exponential multiplication of visibility on our city streets. Where the flâneur was involved in an individualistic scrutiny of the city's significations, the population itself is now increasingly transformed into signifiers for a multitude of organized surveillance systems. Benjamin

recognized the importance of even the earliest prototypes of such technologies, observing how the development of photography helped undermine the anonymity which was central to the flâneur by giving each face a single name and hence a single meaning (Benjamin 1983: 48).

Surveillance has become a salient topic for theoretical reflection, and this interest coincides with the quantitative increase in surveillance in western societies. However, this paper does not propose to provide a comprehensive overview of these systems of observation. A number of other authors have documented developments in this rapidly changing area (Staples 1997; Bogard 1996; Dandecker 1990; Lyon 1994; Gandy 1993). Instead, we view surveillance as one of the main institutional components of late modernity (Giddens 1990). Our aim is to reconsider some of the more familiar theoretical preoccupations about this topic. We do so by drawing from the works of Gilles Deleuze and Félix Guattari to suggest that we are witnessing a convergence of what were once discrete surveillance systems to the point that we can now speak of an emerging 'surveillant assemblage'. This assemblage operates by abstracting human bodies from their territorial settings and separating them into a series of discrete flows. These flows are then reassembled into distinct 'data doubles' which can be scrutinized and targeted for intervention. In the process, we are witnessing a rhizomatic leveling of the hierarchy of surveillance, such that groups which were previously exempt from routine surveillance are now increasingly being monitored.

THEORIZING SURVEILLANCE: ORWELL AND FOUCAULT

Writing well in advance of the contemporary intensification of surveillance technologies, Orwell (1949) presented a prescient vision. In his futuristic nation of Oceana, citizens are monitored in their homes by a telescreen, a device which both projects images and records behaviour in its field of vision. The 'thought police' co-ordinate this extensive monitoring effort, operating as agents of a centralized totalitarian state which uses surveillance primarily as a means to maintain social order and conformity. Not all citizens, however, are singled out for such scrutiny. The upper and middle classes are intensely monitored, while the vast majority of the population, the underclass 'proles', are simply left to their own devices.

The fact that we continue to hear frequent cautions about '1984' or 'Big Brother' speaks to the continued salience of Orwell's cautionary tale. In the intervening decades, however, the abilities of surveillance technologies have surpassed even his dystopic vision. Writing at the cusp of the development of computing machines, he could not have envisioned the remarkable marriage of computers and optics which we see today. Furthermore, his emphasis on the state as the agent of surveillance now appears too restricted in a society where both state and non-state institutions are

involved in massive efforts to monitor different populations. Finally, Orwell's prediction that the 'proles' would largely be exempt from surveillance seems simply wrong in light of the extension and intensification of surveillance across all sectors of society.

Michel Foucault's (1977) analysis of the panopticon provides the other dominant metaphor for understanding contemporary surveillance. In part, Foucault extends Orwell's fears, but his analysis also marks a significant departure, as it situates surveillance in the context of a distinctive theory of power. The panopticon was a proposed prison design by eighteenth-century reformer Jeremy Bentham (1995). What distinguished this structure was an architecture designed to maximize the visibility of inmates who were to be isolated in individual cells such that they were unaware moment-to-moment whether they were being observed by guards in a central tower. More than a simple device for observation, the panopticon worked in conjunction with explicitly articulated behavioural norms as established by the emerging social sciences, in efforts to transform the prisoner's relation to him or her self. This disciplinary aspect of panoptic observation involves a productive soul training which encourages inmates to reflect upon the minutia of their own behaviour in subtle and ongoing efforts to transform their selves. Foucault proposed that the panopticon served as a diagram for a new model of power which extended beyond the prison to take hold in the other disciplinary institutions characteristic of this era, such as the factory, hospital, military, and school.

Foucault's analysis improves on Orwell's by reminding us of the degree to which the proles have long been the subject of intense scrutiny. In fact, Foucault accentuates how it was precisely this population – which was seen to lack the self-discipline required by the emerging factory system – that was singled out for a disproportionate level of disciplinary surveillance. Foucault also encourages us to acknowledge the role surveillance can play beyond mere repression; how it can contribute to the productive development of modern selves. Unfortunately, Foucault fails to directly engage contemporary developments in surveillance technology, focusing instead on transformations to eighteenth and nineteenth century total institutions. This is a curious silence, as it is these technologies which give his analysis particular currency among contemporary commentators on surveillance. Even authors predisposed to embrace many of Foucault's insights believe that rapid technological developments, particularly the rise of computerized databases, require us to rethink the panoptic metaphor. For example, Mark Poster (1990: 93) believes that we must now speak of a 'superpanopticon' w Diana Gordon (1987) suggests the term 'electronic panopticon' better captures the nature of the contemporary situation. But even these authors are in line with a general tendency in the literature to offer more and more examples of total or creeping surveillance, while providing little that is theoretically novel. For our purposes, rather than try and stretch Foucault's or Orwell's concepts beyond recognition so that they might better fit current developments, we draw from a

different set of analytical tools to explore aspects of contemporary surveillance.

THE SURVEILLANT ASSEMBLAGE

The philosopher Gilles Deleuze only occasionally wrote directly on the topic of surveillance, usually in the context of his commentaries on Foucault's work (Deleuze 1986; 1992). In conjunction with his colleague Félix Guattari, however, he has provided us with a set of conceptual tools that allow us to re-think the operation of the emergent surveillance system, a system we call the 'surveillant assemblage'.

While Deleuze and Guattari were prolific inventors of concepts, we embrace only a few of their ideas. Undoubtedly, this means that we are not fully representing their thought. However, our approach is entirely in keeping with their philosophy which animates one to 'think otherwise': to approach theory not as something to genuflect before, but as a tool kit from which to draw selectively in light of the analytical task at hand (Deleuze and Foucault 1977: 208).

Deleuze and Guattari introduce a radical notion of multiplicity into phenomena which we traditionally approach as being discretely bounded, structured and stable. 'Assemblages' consist of a 'multiplicity of heterogeneous objects, whose unity comes solely from the fact that these items function together, that they "work" together as a functional entity' (Patton 1994: 158). They comprise discrete flows of an essentially limitless range of other phenomena such as people, signs, chemicals, knowledge and institutions. To dig beneath the surface stability of any entity is to encounter a host of different phenomena and processes working in concert. The radical nature of this vision becomes more apparent when one realizes how any particular assemblage is itself composed of different discrete assemblages which are themselves multiple.

Assemblages, for Deleuze and Guattari, are part of the state form. However, this notion of the state form should not be confused with those traditional apparatuses of governmental rule studied by political scientists. Instead, the state form is distinguished by virtue of its own characteristic set of operations; the tendency to create bounded physical and cognitive spaces, and introduce processes designed to capture flows. The state seeks to 'striate the space over which it reigns' (Deleuze and Guattari 1987: 385), a process which involves introducing breaks and divisions into otherwise free-flowing phenomena. To do so requires the creation of both spaces of comparison where flows can be rendered alike and centres of appropriation where these flows can be captured.

Flows exist prior to any particular assemblage, and are fixed temporarily and spatially by the assemblage. In this distinction between flows and assemblages, Deleuze and Guattari also articulate a distinction between forces and power. Forces consist of more primary and fluid phenomena,

and it is from such phenomena that power derives as it captures and striates such flows. These processes coalesce into systems of domination when otherwise fluid and mobile states become fixed into more or less stable and asymmetrical arrangements which allow for some to direct or govern the actions of others (Patton 1994: 161).

It is desire which secures these flows and gives them their permanence as an assemblage. For psychoanalysts, desire is typically approached as a form of lack, as a yearning that we strive to satisfy. In contrast, Deleuze and Guattari approach desire as an active, positive force that exists only in determinate systems. Desire is a field of immanence, and is a force 'without which no social system could ever come into being' (May 1993: 4). As such, desire is the inner will of all processes and events; what Nietzsche refers to as the 'will to power'. As we demonstrate below, a range of desires now energize and serve to coalesce the surveillant assemblage, including the desires for control, governance, security, profit and entertainment.

The remainder of this paper documents attributes of the surveillant assemblage. Some caution is needed, however, at this point. To speak of the surveillant assemblage risks fostering the impression that we are concerned with a stable entity with its own fixed boundaries. In contrast, to the extent that the surveillant assemblage exists, it does so as a potentiality, one that resides at the intersections of various media that can be connected for diverse purposes. Such linkages can themselves be differentiated according to the degree to which they are *ad hoc* or institutionalized. By accentuating the emergent and unstable characteristic of the surveillant assemblage we also draw attention to the limitations of traditional political strategies that seek to confront the quantitative increase in surveillance. As it is multiple, unstable and lacks discernible boundaries or responsible governmental departments, the surveillant assemblage cannot be dismantled by prohibiting a particularly unpalatable technology. Nor can it be attacked by focusing criticism on a single bureaucracy or institution. In the face of multiple connections across myriad technologies and practices, struggles against particular manifestations of surveillance, as important as they might be, are akin to efforts to keep the ocean's tide back with a broom – a frantic focus on a particular unpalatable technology or practice while the general tide of surveillance washes over us all.

Perhaps we risk having something still more monumental swept away in the tide. Recall Foucault's (1970: 387) controversial (and frequently misunderstood) musings at the end of *The Order of Things*. In this conclusion to his archaeology of how the understanding of Man has been transformed in different epochs as humanity came into contact with different forces, Foucault suggests that

If those arrangements were to disappear as they appeared, if some event of which we can at the moment do no more than sense the possibility... were to cause them to crumble, as the ground of classical thought did, at the end of the eighteenth century, then one can certainly wager that

man would be erased, like a face drawn in sand at the edge of the sea. (Foucault 1970: 387)

Among the proliferation of late-modern forces which are candidates for contributing to such a radical transformation we can include the intensification of technologized forms of observation.

COMPONENT PARTS

The analysis of surveillance tends to focus on the capabilities of a number of discrete technologies or social practices. Analysts typically highlight the proliferation of such phenomena and emphasize how they cumulatively pose a threat to civil liberties. We are only now beginning to appreciate that surveillance is driven by the desire to bring systems together, to combine practices and technologies and integrate them into a larger whole. It is this tendency which allows us to speak of surveillance as an assemblage, with such combinations providing for exponential increases in the degree of surveillance capacity. Rather than exemplifying Orwell's totalitarian state-centred Oceana, this assemblage operates across both state and extra-state institutions.

Something as apparently discrete as the electronic monitoring of offenders increasingly integrates a host of different surveillance capabilities to the point that

no one is quite sure any longer what [Electronic Monitoring] is. Voice, radio, programmed contact, remote alcohol testing, and automated reporting station ('kiosk') technologies proliferate and are used both singly and in a dizzying array of combinations. (Renzeman 1998: 5)

The police are continually looking for ways to integrate their different computer systems and databases, as exemplified by ongoing efforts by the FBI forensics section to link together databases for fingerprints, ballistics and DNA (Philipkoski 1998). Still another example of such combinations is the regional police computer system in Central Scotland

Phone conversations, reports, tip-offs, hunches, consumer and social security databases, crime data, phone bugging, audio, video and pictures, and data communications are inputted into a seamless GIS [geographic information system], allowing a relational simulation of the time-space choreography of the area to be used in investigation and monitoring by the whole force. The Chief Constable states: 'what do we class as intelligence in my new system in the force? Everything! The whole vast range of information that comes into the possession of a police force during a twenty four hour period will go on to my corporate database. Everything that every person and vehicle is associated with'. (Norris and Armstrong (1997) quoted in Graham 1998: 492)

In situations where it is not yet practicable to technologically link

surveillance systems, human contact can serve to align and coalesce discrete systems. For example, various 'multi-agency' approaches to policing are institutionalized. Originally, such efforts were wedded to a welfarist ideology of service delivery, but in recent years social service agencies have been drawn into the harder edge of social control (O'Malley and Palmer 1996; Ericson and Haggerty 1999). The coming together (face-to-face, or through electronic mediation) of social workers, health professionals, police and educators to contemplate the status of an 'at risk' individual combines the cumulative knowledge derived from the risk profiling surveillance systems particular to each of these institutions.

THE BODY

A great deal of surveillance is directed toward the human body. The observed body is of a distinctively hybrid composition. First it is broken down by being abstracted from its territorial setting. It is then reassembled in different settings through a series of data flows. The result is a decorporealized body, a 'data double' of pure virtuality.

The monitored body is increasingly a cyborg; a flesh-technology-information amalgam (Haraway 1991). Surveillance now involves an interface of technology and corporeality and is comprised of those 'surfaces of contact or interfaces between organic and non-organic orders, between life forms and webs of information, or between organs/body parts and entry/projection systems (e.g., keyboards, screens)' (Bogard 1996: 33). These hybrids can involve something as direct as tagging the human body so that its movements through space can be recorded, to the more refined reconstruction of a person's habits, preferences, and lifestyle from the trails of information which have become the detritus of contemporary life. The surveillant assemblage is a visualizing device that brings into the visual register a host of heretofore opaque flows of auditory, scent, chemical, visual, ultraviolet and informational stimuli. Much of the visualization pertains to the human body, and exists beyond our normal range of perception.

Rousseau opens *The Social Contract* with his famous proclamation that 'Man was born free, and he is everywhere in chains'. To be more in keeping with the human/machine realities of the twenty-first century, his sentiment would better read: 'Humans are born free, and are immediately electronically monitored'. If such a slogan seems unduly despairing, one might consider the new electronic ankle bracelet for infants, trademarked HUGS, which is being marketed to hospitals as

a fully supervised and tamper-resistant protection system that automatically activates once secured around an infant's ankle or wrist. Staff [are] immediately alerted at a computer console of the newly activated tag, and can enter pertinent information such as names and medical

conditions. Password authorization is needed to move infants out of the designated protection area and – if an infant is not readmitted within a predetermined time limit – an alarm will sound. An alarm also sounds if an infant with a Hugs tag is brought near an open door at the perimeter of the protected area without a password being entered. The display console will then show the identification of the infant and the exit door on a facility map. Alternatively, doors may also be fitted with magnetic locks that are automatically activated. As well, Hugs can be configured to monitor the progress and direction of the abduction within the hospital. Weighing just 1/3 of an ounce, each ergonomically designed infant tag offers a number of other innovative features, including low-battery warning, the ability to easily interface with other devices such as CCTV cameras and paging systems and time and date stamping. (Canadian Security 1998)

Professor Kevin Warwick of Reading University is the self-proclaimed 'first cyborg,' having implanted a silicon chip transponder in his forearm (Bevan 1999). The surveillance potential of this technology has been rapidly embraced to monitor pets. A microchip in a pet's skin can be read with an electronic device which connects a unique identifying number on the microchip to details of the pet's history, ownership and medical record. Warwick has proposed that implanted microchips could be used to scrutinize the movement of employees, and to monitor money transfers, medical records and passport details. He also suggests that

anyone who wanted access to a gun could do so only if they had one of these implants . . . Then if they actually try and enter a school or building that doesn't want them in there, the school computer would sound alarms and warn people inside or even prevent them having access. (Associated Press 1998)

These examples indicate that the surveillant assemblage relies on machines to make and record discrete observations. As such, it can be contrasted with the early forms of disciplinary panopticism analysed by Foucault, which were largely accomplished by practitioners of the emergent social sciences in the eighteenth and nineteenth centuries. On a machine/human continuum, surveillance at that time leaned more toward human observation. Today, surveillance is more in keeping with the technological future hinted at by Orwell, but augmented by technologies he could not have even had nightmares about.

The surveillant assemblage does not approach the body in the first instance as a single entity to be molded, punished, or controlled. First it must be known, and to do so it is broken down into a series of discrete signifying flows. Surveillance commences with the creation of a space of comparison and the introduction of breaks in the flows that emanate from, or circulate within, the human body. For example, drug testing striates flows of chemicals, photography captures flows of reflected lightwaves, and lie

detectors align and compare assorted flows of respiration, pulse and electricity. The body is itself, then, an assemblage comprised of myriad component parts and processes which are broken-down for purposes of observation. Patton (1994: 158) suggests that the concept of assemblage 'may be regarded as no more than an abstract conception of bodies of all kinds, one which does not discriminate between animate and inanimate bodies, individual or collective bodies, biological or social bodies'.

It has become a commonplace among cultural theorists to acknowledge the increasing fragmentation of the human body. Such an appreciation is evidenced in Grosz's (1995: 108) schematic suggestion that we need to think about the relationship between cities and bodies as

collections of parts, capable of crossing the thresholds between substances to form linkages, machines, provisional and often temporary sub- or micro-groupings . . . their interrelations involve a fundamentally disunified series of systems, a series of disparate flows, energies, events, or entities, bringing together or drawing apart their more or less temporary alignments.

Likewise, the surveillant assemblage standardizes the capture of flesh/information flows of the human body. It is not so much immediately concerned with the direct physical relocation of the human body (although this may be an ultimate consequence), but with transforming the body into pure information, such that it can be rendered more mobile and comparable.

Such processes are put into operation from a host of scattered centres of calculation (Latour 1987) where ruptures are co-ordinated and toward which the subsequent information is directed. Such centres of calculation can include forensic laboratories, statistical institutions, police stations, financial institutions, and corporate and military headquarters. In these sites the information derived from flows of the surveillant assemblage are reassembled and scrutinized in the hope of developing strategies of governance, commerce and control.

In the figure of a body assembled from the parts of different corpses, Mary Shelly's *Frankenstein* spoke to early-modern anxieties about the potential consequences of unrestrained science and technology. Contemporary fears about the implications of mass public surveillance continue to emphasize the dark side of science. Today, however, we are witnessing the formation and coalescence of a new type of body, a form of becoming which transcends human corporeality and reduces flesh to pure information. Culled from the tentacles of the surveillant assemblage, this new body is our 'data double', a double which involves 'the multiplication of the individual, the constitution of an additional self' (Poster 1990: 97). Data doubles circulate in a host of different centres of calculation and serve as markers for access to resources, services and power in ways which are often unknown to its referent. They are also increasingly the objects toward which governmental and marketing practices are directed (Turow

1997). And while such doubles ostensibly refer back to particular individuals, they transcend a purely representational idiom. Rather than being accurate or inaccurate portrayals of real individuals, they are a form of pragmatics: differentiated according to how useful they are in allowing institutions to make discriminations among populations. Hence, while the surveillant assemblage is directed toward a particular cyborg flesh/technology amalgamation, it is productive of a new type of individual, one comprised of pure information.

RHIZOMATIC SURVEILLANCE

Deleuze and Guattari (1987) outline how 'rhizomes' are plants which grow in surface extensions through interconnected vertical root systems. The rhizome is contrasted with arborescent systems which are those plants with a deep root structure and which grow along branchings from the trunk. The rhizome metaphor accentuates two attributes of the surveillant assemblage: its phenomenal growth through expanding uses, and its leveling effect on hierarchies.

Rhizomatic Expansion

Rhizomes grow across a series of interconnected roots which throw up shoots in different locations. They 'grow like weeds' precisely because this is often what they are. A rhizome 'may be broken, shattered at a given spot, but it will start up again on one of its old lines, or on new lines' (Deleuze and Guattari 1987: 9). Surveillance has comparable expansive and regenerative qualities. It is now estimated that there are 500,000 surveillance cameras operating in Britain (Freeman 1999), where a city dweller can now expect to be caught on film every five minutes (Duffy 1999). Paul Virilio argues that this growth in observation has transformed the experience of entering the city: 'Where once one necessarily entered the city by means of a physical gateway, now one passes through an audiovisual protocol in which the methods of audience and surveillance have transformed even the forms of public greeting and daily reception' (Virilio 1997: 383). Resounding echoes of his point can be heard in the effusive boastings of an operation's director for a British surveillance firm who recounts how 'The minute you arrive in England, from the ferry port to the train station to the city centres, you're being CCTV'd' (Freeman 1999). The study by Norris and Armstrong (1999) of British CCTV also demonstrates how this ostensibly unitary technology is in fact an assemblage that aligns computers, cameras, people and telecommunications in order to survey the public streets

Deleuze and Guattari emphasize how 'the rhizome operates by variation, expansion, conquest, capture, offshoots' (1987: 21). No single technological development has ushered in the contemporary era of surveillance.

Rather, its expansion has been aided by subtle variations and intensifications in technological capabilities, and connections with other monitoring and computing devices. Some of the rhizomatic offshoots of the surveillant assemblage derive from efforts to seek out new target populations that ostensibly require a greater degree of monitoring. The list of such populations is limited only by imagination, and currently includes, for example, the young, caregivers, commuters, employees, the elderly, international travelers, parolees, the privileged and the infirm. Much of this expansion is driven by the financial imperative to find new markets for surveillance technologies which were originally designed for military purposes (Haggerty and Ericson 1999).

For Orwell, surveillance was a means to maintain a form of hierarchical social control. Foucault proposed that panoptic surveillance targeted the soul, disciplining the masses into a form of self-monitoring that was in harmony with the requirements of the developing factory system. However, Bauman (1992: 51) argues that panopticism in contemporary society has been reduced in importance as a mechanism of social integration. Instead of being subject to disciplinary surveillance or simple repression, the population is increasingly constituted as consumers and seduced into the market economy. While surveillance is used to construct and monitor consumption patterns, such efforts usually lack the normalized soul training which is so characteristic of panopticism. Instead, monitoring for market consumption is more concerned with attempts to limit access to places and information, or to allow for the production of consumer profiles through the *ex post facto* reconstructions of a person's behaviour, habits and actions. In those situations where individuals monitor their behaviour in light of the thresholds established by such surveillance systems, they are often involved in efforts to maintain or augment various social perks such as preferential credit ratings, computer services, or rapid movement through customs.

Foucault's larger body of work displays an appreciation for the multiple uses and targets of surveillance. Most discussions of surveillance fixate on his analysis of the panopticon, with its individualized disciplinary form of bodily scrutiny. However, Foucault also analysed aggregate forms of surveillance. Institutions are involved in the production and distribution of knowledge about diverse populations for the purpose of managing their behaviour from a distance (Foucault 1991). In this way, surveillance also serves as a vital component of positive population management strategies.

The concept of 'surplus value' has traditionally been associated with Marxism. For Marx, it designated how the owners of the means of production profit from workers' excess labour power for which they are not financially compensated. Surveillance plays an important role in this process, as it allows managers to establish and monitor production norms at previously unheard of levels. Today, however, surplus value has escaped from a purely labour-oriented discourse and can now also be located in the language of cybernetics. Increasingly important to modern capitalism is the value that

is culled from a range of different transaction and interaction points between individuals and institutions. Each of these transactions is monitored and recorded, producing a surplus of information. The monetary value of this surplus derives from how it can be used to construct data doubles which are then used to create consumer profiles, refine service delivery and target specific markets. There is a growing trade in the corporate sale of such information. Governments are also keen to profit from the sale of information stored in scattered official databases. Millions of dollars are already being made through the sale of data from license bureaus, personal income data and employment records (Kanaley 1999). In a cybernetic world, surplus value increasingly refers to the profit that can be derived from the surplus information that different populations trail behind them in their daily lives.

The public is slowly awakening to the profits that are being made from the sale of their data doubles. One consequence of this recognition has been the further commodification of the self. Parallel to how the emergence of the wage economy necessitated the fixing of monetary prices to labour power, citizens and economists are now contemplating what, if any, compensation individuals should receive for the sale of their personal information. Dennis (1999) reports on a recent study which found that 70 per cent of Britons were happy to have companies use their personal data, on the condition that they receive something in return, such as more personal service or rewards. Privacy is now less a line in the sand beyond which transgression is not permitted, than a shifting space of negotiation where privacy is traded for products, better services or special deals.

In addition to a desire for order, control, discipline and profit, surveillance has voyeuristic entertainment value. Clips from CCTV's are now a staple of daytime talk shows while programmes such as *America's Dumbest Criminals* have helped soften the authoritarian overtones of mass public surveillance (Doyle 1998). The proliferation of hand-held video cameras has also given rise to *America's Funniest Home Videos*, as well as the more morbid *Faces of Death* videos which portray a procession of accidental fatalities which have been captured on film.

As the surveillant assemblage transcends institutional boundaries, systems intended to serve one purpose find other uses. In his early analysis of paper-based records, Stanton Wheeler (1969) pointed out that it is a characteristic of such records that they can be combined to serve new purposes. The computerization of record-keeping has greatly expanded this ability. For example, police organizations have secured routine, and often informal, access to a host of non-police databases, such as those from insurance companies and financial institutions. Research by Northrop, Kramer and King (1995) indicates that the police have become the primary users of many systems originally established for other governmental purposes, and Gordon (1990) reports on proposals to link the US federal NCIC police database to computers from Social Security, Internal Revenue, Passport, Securities and Exchange and the State Department. Davis (1998:

381) recounts how in some Southern California communities the police now have direct computerized access to school records.

In surveying the informational horizon for ever more potentially useful sources, police organizations have recently recognized the surveillance and investigative potential of corporate databases. Files from telephone and utilities companies can be used to document an individual's lifestyle and physical location (Ericson and Haggerty 1997), and marketing firms have developed consumer profiling techniques that contain precise information on a person's age, gender, political inclinations, religious preferences, reading habits, ethnicity, family size, income, and so on (Gandy 1993; Turow 1997). When these sources are combined through computerized data matching, they allow for exponential increases in the amount of information the police have at their disposal. Burnham (1997: 164–7) relates that the FBI has employed commercial databases for undisclosed investigative purposes, and that the US Drug Enforcement Agency has developed its own in-house registry with information culled from mailing and telephone listings, direct marketers, voters records, and assorted commercial sources. Although cloaked in secrecy, this registry was expected to contain 135,000,000 records as of its inception in 1991 and would subsequently receive regular updates of corporate and residential data.

Ostensibly non-criminal justice institutions are being called upon to augment the surveillance capacities of the criminal justice surveillance system. In Canada, for example, in an effort to deter money laundering, financial institutions are compelled to monitor and report 'suspicious' transactions. More recently, regulations have been introduced to require American banks to compare the financial holdings of their clients against an electronic list of parents who owe child support. Educators and medical practitioners are already legally compelled to report suspected instances of child abuse, and the police have started to request or confiscate media tapes of public disturbances in efforts to identify lawbreakers.

Rhizome and Hierarchy

For both Orwell and Foucault, surveillance is part of a regime where comparatively few powerful individuals or groups watch the many, in a form of top-down scrutiny. Contemporary studies of surveillance continue to emphasize this hierarchical aspect of observation. For example, Fiske cludes his insightful analysis of the surveillance of American Blacks (particularly Black men), by proclaiming that 'although surveillance is penetrating deeply throughout our society, its penetration is differential. The lives of the white mainstream are still comparatively untouched by it' (Fiske 1998: 85). And while the targeting of surveillance is indeed differential, we take exception to the idea that the mainstream is 'untouched' by surveillance. Surveillance has become rhizomatic, it has transformed hierarchies of observation, and allows for the scrutiny of the powerful by both institutions and the general population.

All contemporary institutions subject their members to forms of bureaucratic surveillance. Individuals with different financial practices, education and lifestyle will come into contact with different institutions and hence be subject to unique combinations of surveillance. The classifications and profiles that are entered into these disparate systems correspond with, and reinforce, differential levels of access, treatment and mobility. Hence, while poor individuals may be in regular contact with the surveillance systems associated with social assistance or criminal justice, the middle and upper classes are increasingly subject to their own forms of routine observation, documentation and analysis. The more institutions they are in contact with, the greater the level of scrutiny to which they are subjected. In the case of the powerful, this can include the regular monitoring of consumption habits, health profile, occupational performance, financial transactions, communication patterns, Internet use, credit history, transportation patterns, and physical access controls.

It is not exclusively powerful social groups and institutions which observe the powerful. Mathiesen (1997) accentuates the tendency toward 'bottomup' forms of observation in his claim that a process of synopticism is now at work which parallels Foucault's panopticism. Synopticism essentially means that a large number of individuals are able to focus on something in common. New media, particularly television, allow the general public to scrutinize their leaders as never before (Meyrowitz 1985). We need only consider the media circus which surrounds Britain's royal family to acknowledge this point. Furthermore, the monitoring of the powerful has been eased by the proliferation of relatively inexpensive video cameras. These allow the general public to tape instances of police brutality, and have given rise to inner-city citizen response teams which monitor police radios and arrive at the scene camera-in-hand to record police behaviour. Such monitoring culminates in those surreal situations of labour unrest where picketing workers film the police while the police film the strikers. While not a complete democratic leveling of the hierarchy of surveillance, these developments cumulatively highlight a fractured rhizomatic crisscrossing of the gaze such that no major population groups stand irrefutably above or outside of the surveillant assemblage.

A further distinction is needed, however, if we are to fully appreciate the distinctive form that the observation of the powerful now assumes. Such surveillance is often a mile wide but only an inch deep. The depth, or intensity, of the surveillance directed at the powerful generally exists as a potentiality of connections of different technologies and institutions. It is activated, or intensified, when there is some perceived *ex post facto* or prospective need to profile their movements, consumption patterns, reading preferences, tastes in erotica, personal contacts, such that they coalesce into a remarkably detailed data double. The O. J. Simpson case provides a telling example of the intensity that this potentiality can assume when put into motion. Included among the reams of information that the L. A.P. D. were able to collect about O. J. Simpson were details about which

pornographic movie he watched in his hotel a few days prior to the murders. The police also approached a private company which sells satellite surveillance photographs to try and discern whether Simpson's now (in)famous white Bronco was in the driveway of Nicole Brown Simpson's home on the night of the murders (Fiske 1998).

CONCLUSION: THE DISAPPEARANCE OF DISAPPEARANCE

Premodern living arrangements typically consisted of individuals residing in rural villages where they knew and were known by their neighbours. The mass movements of individuals into cities ruptured these long-standing neighbourly and familial bonds. Individuals in cities became surrounded by streams of unknown strangers. Sociologists have drawn a wide range of implications from this social transformation. Anonymity allowed for new possibilities in self-creation: the freedom to partake in experiments with identities and life projects. Simmel believed that the metropolis 'grants to the individual a kind and an amount of personal freedom which has no analogy whatsoever under other conditions' (1950: 416). Others have accentuated the darker side of these possibilities for self-creation, cautioning how this new found 'freedom' could also be experienced as a daunting obligation, as modern individuals are now compelled to be free, to establish identities and life projects in the face of radical uncertainty about correct courses of action. Bauman (1997: 20–1) observes that modernity transformed 'identity from the matter of ascription into the achievement [sic] – thus making it an individual task and the individual's responsibility,' and these 'individual life-projects find no stable ground in which to lodge an anchor'.

From the beginning, however, this general narrative of anonymity and invisibility contained a subplot, one which involved countervailing efforts by institutions. The rise in credentials and surveillance systems was a way to create institutional reputations and provide for ways to differentiate among unknown strangers (Nock 1993). These new forms of reputation lack the deep subjective nuances which characterized familial and neighbourly relations in the idealized premodern rural village. Instead, knowledge of the population is now manifest in discrete bits of information which break the individual down into flows for purposes of management, profit and entertainment. While such efforts were originally a footnote to the historical rise of urban anonymity, they now constitute an important force in their own right.

The coalescence of such practices into the surveillant assemblage marks the progressive 'disappearance of disappearance' – a process whereby it is increasingly difficult for individuals to maintain their anonymity, or to escape the monitoring of social institutions. Efforts to evade the gaze of different systems involves an attendant trade-off in social rights and benefits. Privacy advocates bring this point home in their facetious advice that

individuals who are intent on staying anonymous should not use credit, work, vote, or use the Internet. Two quite different historical examples accentuate the extent to which the possibilities for disappearance have narrowed.

A recent biography of a female activist recounted how she was followed in the 1950s by secret service agents. Unbeknownst to her, at one point she managed to evade her pursuers by simply taking an ocean cruise which rendered her beyond the reach of their abilities to track her movements. Clearly, this would not be the case today. Even on the ocean a person's whereabouts could still be discerned through the monitoring of credit card transactions, computer connections, travel arrangements and telephone calls.

Our second example also concerns ship travel, but this time it involves the greatest naval armada ever assembled – the allied invasion of Normandy in 1944. At that time the Germans were reasonably certain that an invasion of France was imminent, but it was not until the fog lifted on the morning of June 6th to reveal a fleet of over 5,000 ships off the coast that they knew the invasion had truly begun. Again, the contrast between yesterday and today is telling. With advanced military sensing devices that now include globe-scanning satellites and submarines equipped with sensors that can detect the propeller of a ship traveling on the opposite side of the ocean, the surprise appearance of such a massive military grouping is simply inconceivable.

The invisible armada and elusive activist have faded into historical memories. From now on, such matters will be readily captured by a surveillant assemblage devoted to the disappearance of disappearance.

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