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Parents have always been concerned about what their children might be up to, of course, but ours is the first generation that has deliberately sought techniques used by the military or the police in order to monitor their activities. Surveillance is not merely something exercised on us as workers, citizens or travellers, it is a set of processes in which we are all involved, both as watched and as watchers. Indeed, one of the most striking areas of growth for systematically keeping an eye on ordinary people is that of consumption. Throughout the twentieth century, techniques originating in market research were honed to try to second-guess what customers would want, but by the end of that century database marketing and its offshoots had become a billion dollar business.

Loyalty cards in the supermarket, for example, are a key means of tracking purchases in a way that connects back to the individual, but numerous other means are also used to profile and classify consumers. This can produce targeted marketing, once the budget, preferences and shopping times of the customer are known. Shoppers may appreciate knowing about special offers that are actually specific to them, but they may also find that they are simply not informed about other available merchandise. Conversely, some even fear that government health regulations may oblige supermarkets to prevent certain customers purchasing a product – say, people with tendencies to obesity buying doughnuts – when profiles are accessed that combine medical with purchasing data (cited in Lace 2005b: 208). Once we are identified as particular kinds of customers, it can sometimes be difficult for us to make purchases outside our box.

Defining surveillance

Before going any further, I should make clear what is meant by surveillance. Although the word 'surveillance' often has connotations of surreptitious cloak-and-dagger or undercover investigations into individual activities, it also has some fairly straightforward meanings that refer to routine and everyday activity. Rooted in the French verb *surveiller*, literally to 'watch over', surveillance refers to processes in which special note is taken of certain human behaviours that go well beyond idle curiosity. You can 'watch over' (or, more clumsily, 'surveill') others because you are concerned for their safety; lifeguards at the edge of the swimming pool might be an example. Or you can watch over those whose activities are in some way dubious or suspect; police officers watching someone loitering in a parking lot would be an example of this kind of surveillance.

Surveillance always has some ambiguity, and that is one of the things that make it both intriguing and highly sensitive. For example, parental concern and care for children may lead to the adoption of some surveillance technologies in order to express this. But at what point does this become an unacceptable form of control? Does the answer depend on whether or not the offspring in question are aware that they are being tracked, or is the practice itself unethical by some standards? At the same time, putting the question this way assumes that people in general are wary, if not positively spooked, when they learn that others may be noting their movements, listening to their conversations or profiling their purchase patterns. But this assumption is not always sound. Many seem content to be surveilled, for example by street cameras, and some appear so to relish being watched that they will put on a display for the overhead lenses, or disclose the most intimate details about themselves in blogs or on webcams.

So what is surveillance? For the sake of argument, we may start by saying that it is the focused, systematic and routine attention to personal details for purposes of influence, management, protection or direction. Surveillance directs its attention in the end to individuals (even though aggregate data, such as those available in the public domain, may be used to build up a background picture). It is focused. By systematic, I mean that this attention to personal details is not random, occasional or spontaneous; it is deliberate and depends on certain protocols and techniques. Beyond this, surveillance is routine; it occurs as a 'normal' part of everyday life in all societies that depend on bureaucratic administration and some kinds of information technology. Everyday surveillance is endemic to modern societies. It is one of those major social processes that actually constitute modernity as such (Giddens 1985).

Having said that, there are exceptions. Anyone who tries to present an 'overview' has to admit that particular circumstances make a difference. The big picture may seem over-simplified but, equally, the tiny details can easily lose a sense of significance. For example, not all surveillance is necessarily focused. Some police surveillance, for instance, may be quite general – a 'dragnet' – in an attempt somehow to narrow down a search for some likely suspects. And by the same token, such surveillance may be fairly random. Again, surveillance may occur in relation to non-human phenomena that have only a secondary relevance to 'personal details'. Satellite images may be used to seek signs of mass graves where genocide is suspected or birds may be tagged to discover how avian flu is spread. Such exceptions are important, and add nuance to our understanding of the big picture. By looking at various sites of surveillance, and exploring surveillance in both 'top-down' and 'bottom-up' ways, I hope to illustrate how such variations make a difference to how surveillance is understood in different contexts.

The above definition makes reference to 'information technology', but digital devices only increase the capacities of surveillance or, sometimes, help to foster particular kinds of surveillance or help to alter its character. Surveillance also occurs in down-to-earth, face-to-face ways. Such human surveillance draws on time-honoured practices of direct supervision, or of looking out for unusual people or behaviours, which might be seen in the factory overseer or in neighbourhood watch schemes. Indeed, to accompany the most high-tech systems invented, the US Department of Homeland Security still conscripts ordinary people to be the 'eyes and ears' of government, and some non-professional citizen-observers in Durban, South Africa have been described by a security manager (without irony) as 'living cameras' (Hentschel 2006).

But to return to the definition: it is crucial to remember that surveillance is always hinged to some specific purposes. The marketer wishes to influence the consumer, the high school seeks efficient ways of managing diverse students and the security company wishes to insert certain control mechanisms – such as PIN (personal identification number) entry into buildings or sectors. So each will garner and manipulate data for those purposes. At the same time, it should not be imagined that the influence, management or control is necessarily malign or unsocial, despite the frequently negative connotations of the word 'surveillance'. It may involve incentives or reminders about legal requirements; the management may exist to ensure that certain entitlements – to benefits or services – are correctly honoured and the control may limit harmful occurrences.

On the one hand, then, surveillance is a set of practices, while, on the other, it connects with purposes. It usually involves relations of power in which watchers are privileged. But surveillance often involves participation in which the watched play a role. It is about vision, but not one-sidedly so; surveillance is also about visibility. Contexts and cultures are important, too. For instance, infra-red technologies that reveal what is otherwise shrouded in darkness help to alter power relations. But the willing self-exposure of blog-writers also helps to change the contours of visibility. To use infra-red devices to see into blog-writers' rooms at night would infringe personal rights and invade private spaces. But for blog-writers to describe their nocturnal activities online may be seen as an unexceptional right to free expression.

Caught by coordinates

At first glance, as it were, surveillance seems to be about watching. One person watches others in order to check for inappropriate or abnormal behaviour. The pole-mounted camera in the street keeps watch for potential deviance, from criminal acts to 'undesirable' activities. But surveillance may also be about listening, from eavesdropping to phone-tapping. What is heard may in certain circumstances be used as evidence, and in the context of global fears about terrorism fairly flimsy references to violent action may count for something. Already these examples include some technological mediation, whether closed-circuit television (CCTV), wiretaps or whatever. But once we consider the range of possible mediations, the surveillance picture enlarges significantly.

Coordinates are key. Anyone who can pinpoint the time and place of some event or activity already has a handle on the situation. Those data reveal a lot. As we shall discover, the quest for personal data by large organizations has grown hugely over the past two decades. It has given rise to a new word, dataveillance, to describe this kind of 'watching' using not sight, exactly, but the amassing of details to create profiles that in a sense resemble those thus 'seen'. Dataveillance, says Roger Clarke, monitors or investigates people's activities or communications using personal data systems (Clarke 1997 [2006]). Being much cheaper than direct physical or electronic surveillance it enables the watching of more people or populations, because economic constraints to surveillance are reduced. Dataveillance also automates surveillance. Classically, government bureaucracies have been most interested in gathering such data, although employers have increasingly sought to keep accurate tabs on their workers as well.

But in recent decades organizations dedicated to 'getting to know' customers have challenged the primacy of government surveillance. In the 1980s database marketers developed new means of obtaining geo-demographic data as a means of building a picture of what sorts of people live where (hence, 'geo-demographic') so that direct mail shots could be much more accurately aimed than previously. In the 1990s, as the possibilities for online marketing grew, internet surfing was monitored to produce more data. And in the first decade of the twenty-first century several systems have appeared that have the capacity to capture 'locational' data. Tracing where you are at a given moment can be achieved using cell-phones, RFID (radio frequency identification) and other wireless devices (Lyon 2006b). An employer can check just how long his or her drivers take to reach their destinations, how long their breaks are and even what speeds they reach on the highway. Alongside this, geographic and geo-demographic information systems (GIS and GDIS) are also implicated in translating captured data into the means of sorting cities in ways that favour the already privileged (Burrows and Ellison 2004; Graham 2005).

Such coordinates are of interest to others than marketers, of course. If marketers can orchestrate mobile consumers and purchasing opportunities, the same kinds of systems can help police to track suspects on the move, airports to check the progress of travellers – whether 'trusted' or not – from check-in to gates, and even schools to monitor where students are. For example, near Houston, Texas, children wear RFID tags to alert school authorities and police when they get on and off the school bus, and a school in Buffalo, New York uses RFID to automate attendance registration (Richtel 2004). Such systems are at an early stage of development and it is not clear that they will be reliable enough for routine use, but interest in (as well as opposition to) them is widespread.

After 9/11, public interest in surveillance – such as it is – shifted back to law enforcement, as public opinion was sought on whether or not measures such as national ID cards or biometric measures in airports were acceptable in the 'war on terror' (and often, because of the way the questions were worded, a large measure of approval was found in Europe and North America[1]). But within surveillance studies, all kinds of coordinates are of interest, not least because another trend is towards data collected for one purpose being used for others. Those consumer data, for example, may be of considerable interest to law enforcement, just as drug companies are interested in medical data and insurance companies in police records.

The 'coordinates', as I have been calling them, may include all kinds of data, not just the time and place of events or activities. Personal data may be drawn from the body itself, usually with, but sometimes without, the consent of the subject, in the form of DNA traces or some biometric such as fingerprints or iris scans. Or it could be an image, such as that caught by a camera in the shopping mall or in a transit system. It may be a bureaucratic or financial item such as an identification number or salary amount. Or personal data could be part of a message that is sent or spoken – by email or telephone – or transmitted as part of a transaction. So the personal data in question have to do with time and space, bodies, information and communication.

The categories sought by surveillance can be very precise, but at their most general they include groups that touch ordinary people in several different roles. Surveillance data are not gathered about everyone in the same way, or with the same intensity. Surveillance relates to roles played in different aspects of modern life. Most obviously, workers are surveilled by capitalist corporations and government organizations in order to check that they are doing what they are paid to do. Consumers are tracked and profiled by marketers in order to offer clearer targets for purchases and promotions. Citizens have tabs on them from birth, to ensure efficient administration, especially touching matters such as taxation, health, workers' insurance, and so on. Travellers must carry passports, drivers' licences and other forms of identification linked with databases, to verify their identities and to facilitate movement. Children are increasingly observed in schools and on the street, and parents as well as educational and policing bodies engage in such 'safety-oriented' surveillance (see, e.g., Lewis 2006). Offenders and suspects may also expect a high degree of monitoring and supervision, both within institutions and, especially with the advent of remote devices such as electronic tagging, in the community. Other categories exist, but the above are the most common general ones. This is explored further in the next chapter.

Why surveillance studies?

Surveillance studies is necessarily a multi-disciplinary enterprise, although sociology seems to be deeply involved at every level. This is

somewhat ironic in view of the fact that sociologists have been seen both as suitable *practitioners* of surveillance and as appropriate *targets* for surveillance. Early in the twentieth century, for example, the Ford Motor Company set up a 'Sociology' Department in their Dearborn, Michigan plant, the purpose of which was to oversee the systematic monitoring of workers. In the mid-twentieth century, however, sociologists themselves were apparently prime suspects of subversion, such that American academics in the discipline were placed under observation by the FBI at the instigation of J. Edgar Hoover (Keen 2004).

It is the case, of course, that some sociological practices may be construed as surveillance (the systematic attention to personal details for specific purposes), and the work of any good sociologist who probes below the surface of society is bound to be seen as subversive by some. We return to these issues and explore them further in this book, but it is important to acknowledge the problem from the outset. The social sciences themselves are engaged in activities that may at some levels be construed as surveillant. That is part of the reason why I subtitled this book, ironically, 'an overview'. When we study surveillance practices, we cannot exclude those practices in which sociologists, anthropologists and others of their ilk also engage.

Surveillance studies involves a number of disciplines, among which sociology offers some distinctive perspectives. What sociology offers is both some cross-cutting theories of surveillance and the empirical grounding that keeps it in touch with the real world. The work of Karl Marx on surveillance in the capitalist workplace and Max Weber on how files and officials keep tabs in bureaucracies, not to mention Michels, Mosca, Pareto or Sorel on how geo-political struggles between states stimulate the growth of surveillance, does not make the theoretical background exclusively 'sociological', of course. The work of such classical theorists is drawn on throughout the social sciences. These thinkers remind us that modern forms of surveillance are distinctive just because they grow out of central processes of modernity: capitalist production, bureaucratic organization and the increasingly globalized struggles between states.

At the same time, social science disciplines also insist on grasping the significance of the small-scale, the everyday, for their sustaining of and giving ongoing life to the larger processes that inform and shape social life. While Michel Foucault's work refers to the large-scale transformations of modernity, his work on surveillance also draws