The Electronic Eye

The Rise of Surveillance Society

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excedingly rapid *quantitative* expansion of surveillance, which simultaneously raises questions of a *qualitative* shift. The former will be illustrated in subsequent chapters by means of case-studies and by reference to a growing body of empirical social research.[44] The latter becomes visible as older concepts and theories of surveillance reveal their frayed and threadbare state. New ways of understanding surveillance are required in an era of information technology, which take account of the historical development of surveillance systems and also accomodate the new configurations and combinations that constitute the challenge of surveillance today.

But if there *is* a new surveillance, as I am arguing, does this necessarily mean that there is tighter social control, or that what Gary T. Marx calls the 'maximum security society' is around the corner? This question is addressed more fully in the following chapter, while the operation of the 'new surveillance' in different social spheres is analysed in more detail in Part Two of this book. We shall be in a better position to revisit this question after that ground is covered.

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From Big Brother to the Electronic Panopticon

The Police State and the Prison

When I tell people that I am studying surveillance, and in particular investigating the ways that our personal details are stored in computer databases, the most common reaction is to invoke George Orwell; 'This must be the study of 'Big Brother'. A perfectly understandable response, given that *Nineteen Eighty-Four* is about a state that uses a huge bureaucratic apparatus, 'thought police', and the figure of 'Big Brother' on the ever-present telescreen to intervene in the smallest details of its citizens' daily lives.

Back in the early 1970s, computer enthusiasts James Martin and Adrian Norman noted that 'a surprising amount of what George Orwell imagined now looks plausible'.[1] Such sentiments were repeated routinely by both the complacent and the concerned. Political scientist Theodore Lowi warned that 'a *Nineteen Eighty-Four* type of scenario will be the most likely outcome if things are let go at the present rate and no attention is paid to the information revolution'.[2] As we have already seen, in the 1990s Judge Love worries about the 'Orwellian' aspects of his electronic tags for offenders.

Within sociological analysis proper, James Rule's work on surveillance also takes its cues from Orwell. Starting from a 'total surveillance society', he argues that the only limits to the present day realization of the Orwellian, nightmare lie in the level of available 'surveillance capacities'. As we saw in Chapter Three, those capacities are massively augmented by information technology. Some qualitative differences to surveillance come in the train of new technology. Does this bring *Nineteen Eighty-Four* closer?

Apart from the obvious – but banal – rejoinder that 1984 is now well past, others have begun to question how relevant is the image of Big Brother for the analysis of contemporary electronic surveillance. For instance, in the previous chapter we saw how Roger Clarke's work indicates that 'dataveillance is technically and economically superior' to the ubiquitous two-way television of *Nineteen Eighty-Four*. Total control in Oceania was also made possible by centralization. Now, it is true that the governmental and commercial 'centres' of contemporary states still have access to files on major populations, but extensive computer networking also decentralizes operations. Indeed, the old dichotomy between decentralization and centralization is itself now questionable. Today's surveillance society certainly needs nothing as cumbersome as the administrative machinery of *Nineteen Eighty-Four*.

In this chapter I argue that, while *Nineteen Eighty-Four* has in many ways been superseded technologically, limited but important aspects of its account of a surveillance society still remain relevant today. At the same time, Orwell never imagined how rapidly surveillance would extend its global reach, nor did he conceive of a situation where anything but the state would be its chief perpetrator. Today, surveillance is both a globalizing phenomenon and one that has as much to do with consumers as with citizens.

But now another model, another image, is gaining ground in the analysis of surveillance; Bentham's Panopticon prison plan. Much impetus for this comes from the fashionable flurry of Foucault studies that began in the 1980s, but now sufficient empirical work has been done to show the relevance of at least some aspects of the Panopticon to electronic surveillance.[3] The remainder of the chapter is thus taken up with the question of how far the Panopticon provides a useful model for understanding electronic surveillance. I shall suggest that while it is undeniably illuminating, analysis based upon the Panopticon image also retains some serious disadvantages.

It is worth paying considerable attention to both the Orwellian and the Panoptic model, in order to understand contemporary surveillance and to seek better or alternative models. I want to make it very clear that that both models are firmly rooted in normative and critical stances. Ironically the Panopticon, now the main alternative to Big Brother, started life as a utopian scheme for social reform, and a long time before Orwell. Indeed, Orwell wrote *Nineteen Eighty-Four* partly as a *dystopian* critique of such enterprises.[4] Analysis of what is happening in today's society is inextricably and inevitably bound up with questions of the desirability of what is happening.

Orwell's Dystopia

George Orwell wrote *Nineteen Eighty-Four* as a dystopia, that is, an account whose intent is the opposite of utopia; a literary depiction of an undesirable, avoidable but conceivable future state of society. Winston Smith, who attempts to think for himself, is eventually crushed into conformity by the surveillance state. Electronic media – limited of course to what Orwell knew about in 1948 – are the chief tool for manipulating the masses through unremitting propaganda. But forms of electronic surveillance also allow the Though Police to maintain constant vigilance over the intimate lives and relationships of each citizen.

The figure of Big Brother, who would appear on the telescreens in buildings public and private, claimed to monitor everything. Hence 'Big Brother is watching you!' which is now one of the most readily recognized catch-phrases in the English language. Here is Orwell's description:

> The telescreen received and transmitted simultaneously. Any sound that Winston made, above the level of a very low whisper, would be picked up by it; moreover so long as he remained within the field of vision which the metal plaque commanded, he could be seen as well as heard. There was of course no way of knowing whether you were being watched at any given moment.[5]

Nineteen Eighty-Four is often taken to be about the power of technology for social control and about the loss of privacy resulting from living in such a transparent society. So it is not surprising that his work has been so readily translatable into the language of microelectronics and information technology, with their supposed threats.

Orwell was astoundingly prescient, which is of course the reason why his work has not only survived but maintained its interest. He noticed the growing centrality of information in the operations of the nation-state. In Oceania there was even a 'Ministry of Truth' ('Minitrue') to deal with such matters as the creation and destruction of information. Today, computer technology facilitates the construction of new categories of data, a process that is encouraged by the penchant for statistical analysis within organizations. Moreover, the same technologies make possible the electronic erasure of data, either without trace, or traceable only by experts. Both processes are significant to the 'surveillance society'.

For one thing, the malleability of data may render Weberian confidence in the reliability of the record somewhat naïve. The electronic trail may be

eradicated without trace, which leads to big questions about how far 'data' may be trusted. For another, sauce for the goose is sauce for the gander, and the malleability of data may also be seen in the phenomenon of 'fraudulent IDs'.[6] With the twentieth-century rise of credentialism and the constant demand for identification, the temptation to invent or enhance personal documentary details has for some been too hard to resist. Obtaining goods, services, benefits or employment may all be facilitated by a variety of ways of distorting identity or biographical details. Technology is not simply a tool of dominant social groups.

The focus on novel techniques for handling information also rings bells in the context of computing and administration. As we have seen, it is information *technology* that is especially significant for surveillance. The national databank, for instance, is exactly what one would expect to find in an Orwellian surveillance society. Recognizing this, American officials denied during the 1970s that such a databank would be created. Big Brother would be kept at bay.[7] Yet all American federal government employees are now listed in a single database that is used for matching.

Another significant feature of Orwell's 'Big Brother' surveillance is that it was imperceptible. Those under surveillance were unsure whether there was any time when they could relax. Like the Panopticon – and indeed as in other literary treatments of the surveillance theme, such as Franz Kafka's *The Castle* or Margaret Atwood's *The Handmaid's Tale* – this model of undetected surveillance keeps those watched subordinate by means of uncertainty. You simply comply, because you never know when 'they' might be watching. Information technology enables surveillance to be carried out in ways even less visible than those available in Orwell's, let alone Kafka's, day.[8]

Two further points, to do with dignity and division, may be made that underscore Orwell's relevance for contemporary surveillance. I mentioned above that *Nineteen Eighty-Four* has been used to connect transparency of behaviour with the theme of privacy. Yet there is a sense in which Orwell's focus was less narrow than that. For him, privacy was an aspect of human dignity. Winston Smith finally caves in, betraying his girlfriend Julia and declaring his love for Big Brother, not when his privacy is invaded but when deprived of his dignity by a confrontation with rats.[9] From that moment his identity merged with Big Brother's. His very personhood was impugned. The challenge of electronic surveillance is missed if it is reduced to a concern merely with privacy.

As for division, Orwell shows clearly how power is maintained at a broader level through the divisive character of surveillance. In his *Visions of Social Control*, Stanley Cohen stresses this facet of Orwell's work.[10] The middle-class and Party members needed careful thought-control and

surveillance. Inclusionary controls reign here. But the proles, who formed 85% of the population, could safely be left in their ghettoes, 'working, breeding and dying'.[11] Their lot is exclusion. The important point here is the role of surveillance in different modes of social control, rather than the details of Orwell's analysis.

Things have changed since Orwell's time, and consumption, for the masses, has emerged as the new inclusionary reality. Only the minority, the so-called underclass,[12] whose position prevents them from participating so freely in consumption, now experience the hard edge of exclusionary and punitive surveillance. Anyone wishing to grasp the nature of contemporary surveillance must reckon with this fact. Whereas the major threat, for Orwell, came from the state, today consumer surveillance poses a series of novel questions which have yet to find adequate analytical and political answers. A perfectly plausible view is that in contemporary conditions consumerism acts in its own right as a significant means of maintaining social order, leaving older froms of surveillance and control to cope with the non-consuming residue.[13]

Having said that, however, some further qualification is called for. While consumerism may correctly be viewed as a means of social control, it differs from other types of such control. Those targeted for direct mail and other forms of personalized advertising are objects of an attempted channelling of behaviour. Companies wish to include rather than exclude them. The important distinction between exclusionary and perhaps punitive forms of control, which may be coercive, and more subtle ones, which rely on creating desired behavioural conduits, should be borne in mind as we proceed.[14]

This in turn also ties in with a more general theme in the history of social control; the progressive uncoupling of violent and non-violent methods. Orwell tended to keep the links. Both jackboots and Big Brother have their place in Oceania. But as Gary T. Marx, among others, observes, more subtle, less coercive means have become increasingly prominent in the advanced societies since the Second World War.[15] The use of electronic means for less conspicuous surveillance he takes to be an important instance of this shift.

Orwell's own experience and observations, after all, were of the Spanish Civil War, Stalin's Soviet Union and Mussolini's Italy. Many have imagined that he had only these obviously totalitarian regimes in mind in writing *Nineteen Eighty-Four*. However, it is more than likely that he intended its application to be broader. As a democratic and libertarian socialist, he was quite aware of certain authoritarian tendencies within capitalist societies. What he may not have foreseen was that new technologies might eventually permit surveillance tending towards

totalitarianism with democratic processes still neatly in place. As Gary T. Marx notes, the velvet glove may hide the iron fist.[16]

Sociological analysis of surveillance that begins with Big Brother produces some useful insights. The fact that electronic technologies have been augmented considerably since Orwell's day does mean that his account needs some updating, but it does not render it irrelevant. Much of what Orwell wrote still stands, and deserves attention, but we should also explore the specific ways in which we must go beyond Orwell. At this point, then, we may turn to the Panopticon and ask whether as a model it can compensate for the shortcomings of Orwell's dystopia.

The Panopticon from Bentham to Foucault

The Panopticon has been used for analysing surveillance in a number of different settings; the workplace, government administration, and consumer contexts. We shall examined some of these below. It should be remembered that the Panopticon does not come to us directly from Bentham but recently mediated through the work of Michel Foucault and critics who have debated it.[17] Though many historians of ideas or of systems of punishment have recognized the importance of the Panopticon, it is really only since Foucault that interest in it has become widespread.

Foucault illuminates the connections between the Panopticon and modernity by showing that it forms the watershed between punitive and reforming disciplinary practices. Enlightenment reason, concerned with empirical observation and classification, and related to the rational reproducing of social order, is neatly expressed here. The theme of exploiting uncertainty as a means of of controlling subordinates reappears here as well, having obvious resonance with the unobtrusive monitoring of which new electronic technologies are capable. However, this in turn propels us into the debate over postmodernity. A hallmark of modern thought is the way individuals are placed centre-stage in history. But postmodern discourse pushes such actors into the wings, and this seems to echo what happens with electronic surveillance. If the supposedly 'personal' details of intimate everyday life circulate beyond our control within remote databases, where now is the human 'centred self?[18]

Jeremy Bentham, the British philosopher and social reformer, published his plan for the Panopticon penitentiary in 1791. Essentially, it was for a building on a semi-circular pattern with an 'inspection lodge' at the centre and cells around the perimeter. Prisoners, who in the original plan would be in individual cells, were open to the gaze of the guards, or 'inspectors',

but the same was not true of the view the other way. By a carefully contrived system of lighting and the use of wooden blinds, officials would be invisible to the inmates. Control was to be maintained by the constant sense that prisoners were watched by unseen eyes. There was nowhere to hide, nowhere to be private. Not knowing whether or not they were watched, but obliged to assume that they were, obedience was the prisoner's only rational option. Hence Bentham's Greek-based neologism; the Panopticon, or 'all-seeing place'.[19]

The Panopticon was to be a model prison, a new departure, a watershed in the control of deviance and a novel means of social discipline. Bentham invested more time and energy in this than any other project – and 'mourned its failure more passionately'.[20] He saw in it 'a great and new invented instrument of government' and believed the panoptic principle held promise of 'the only effective instrument of reformative management'. In a closing eulogy he made the famous claim, 'Morals reformed – health preserved – industry invigorated – instruction diffused – public burthens lightened – Economy seated, as it were, upon a rock – the Gordian knot of the Poor Laws not cut, but untied – all by a simple idea in Architecture!.[21]

Bentham's apparently utopian enthusiasm for the Panopticon had personal, political, and cultural origins. Personally, he hoped to reap financial benefit from an entrepreneurial stake in the project, and to to raise his status profile through being its first director. Indeed, when shown the plans, Edmund Burke saw straight through them; 'There's the spider in the web!' he exclaimed.[22] Politically, the Panopticon promised local, non-religious prison reform over against the Evangelical and transportation-to-Australia alternatives currently on offer. And culturally, the Panopticon epitomised the kind of 'social physics' so popular with the *philosophes* of his day. It neatly translated the clockwork image of being human seen in La Mettrie's *L'Homme Machine* into an architectural reality.[23]

Ironically, while it appears that no prison was ever built exactly along the lines Bentham had in mind, and he certainly failed to persuade the British government to invest in it, the principles embodied in the Panopticon were to have a widespread influence. The key principle was inspection, through inspection of a specific kind. Bentham's Panopticon represented a secular parody of divine omniscience, and the observerd was also, like God, invisible. Thus '. . . the more constantly the persons to be inspected are under the eyes of the persons who should inspect them, the more perfectly will the purpose of the establishment be attained.[24] And if such constant supervision proves impossible, prisoners should be given the *impression* that the gaze is unwavering.
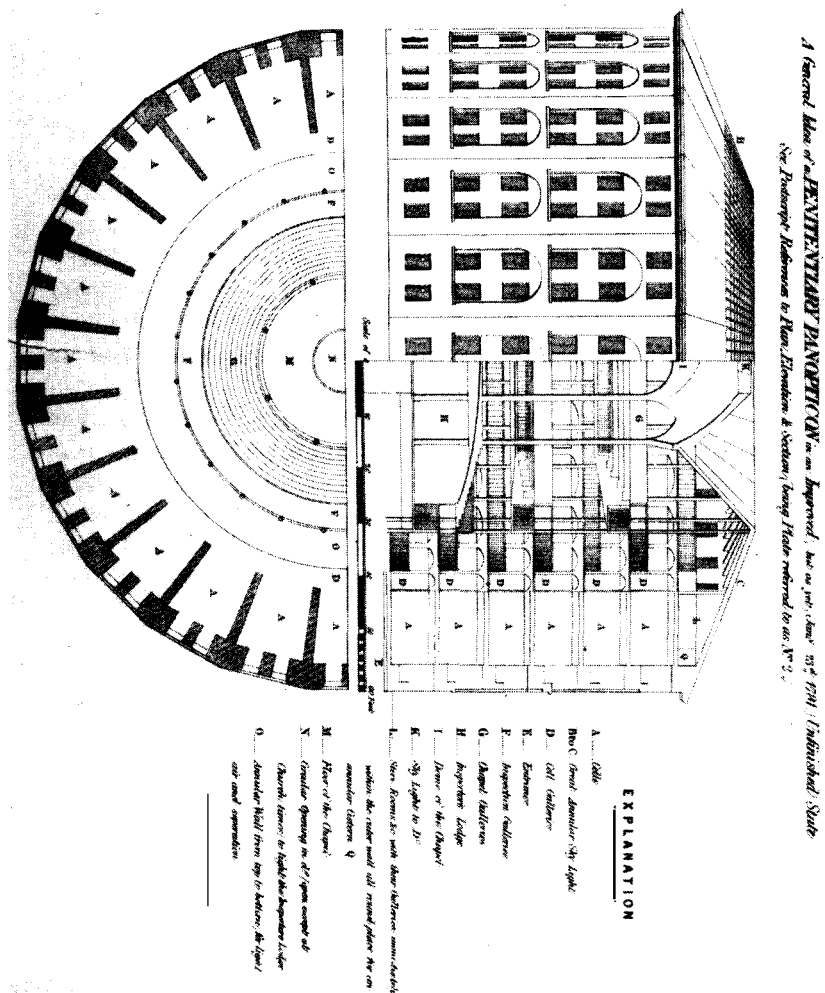
Bentham's innovation, then, was not just to inspect, or even to ensure that the gaze is asymmetrical, but to use uncertainty as a means of subordination. The asymmetrical gaze created uncertainty which in turn produced surrender. Asymmetrical surveillance became part of the whole modern project of destroying the certainties of alternative powers, the supposed hangovers from traditional societies, wherever they still lurked.[25] This is why the Panopticon *principles* were so significant.

The inspection principle suited other purposes than prisons, according to Bentham. Of courses they did! Indeed, he got the original idea of the Panopticon from his brother's workshop in Russia. And he advertised the virtues of the panoptic as being appropriate for any context in which supervision was required; for '. . . punishing the incorrigible, guarding the insane, reforming the vicious, confining the suspected, employing the idle, maintaining the helpless, curing the sick, instructing the willing in any branch of industry, or training the rising race in the path of education'.[26] Foucault argues that panoptic control has indeed become significant in many of these spheres.

Two other principles attached to the panoptic[27] in the specific context of the penitentiary. One was the 'solitude' or isolation of inmates, the other was to allow the prison to be run as a private enterprise by outside contractors. Solitude would extend even to having private toilets for prisoners, and to holding chapel services from a central position above the inspection lodge, without prisoners moving from their cells. Inmates were to be atomised, secluded. As for running the prison by contract, this would possible enable profit to be made and prison governors to be held in unaccustomed esteem.

Bentham cheerfully defended his Panopticon from any misplaced liberal attack. Might it be thought 'despotic', or might the result of 'this high-wrought contrivance . . . be constructing a set of *machines* under the similitude of *men*?[28] Let people think so if they wish. Such criticisms miss the point, namely, 'would happiness be most likely to be increased or decreased by this discipline?' Here is control, and clean control at that. Much better, he commented, than something like Addison's bizarre-sounding proposal to 'try virginity with lions'. There you saw blood and uncertainty: here you see certainty without blood'.[29] Of course, uncertainty still exists for those subjected to the Panopticon regime. Indeed, the 'machine' depends on it. Certainty resides in the system, and, one might add, with the inspector, the one 'in the know'.

This kind of certainty, sought by Bentham in the Panopticon, epitomises for Foucault the social disciplines of modernity. Whereas in earlier times the failure of social control would result in punishment that was public and brutal, modernity introduced clean and rational forms of social control and

A General Idea of a PENITENTIARY PANOPTICON in an Improved, but as yet (Jan[y] 23[d] 1791) Unfinished State. See Postscript References to Plan, Elevation & Section, being Plate referred to as, N[o] 2.

EXPLANATION

A — Cells
B — Cell Galleries
C — Great dormitor[y] Sky Light
D — Cell Galleries
E — Entrance
F — Inspectors Galleries
G — Chapel Galleries
H — Inspectors Lodge
I — Dome of the Chapel
K — Sky Light to D[o]
L — Store Rooms &c: with other Entrance communicates, within the order wall will round place the on annular Cisterns &c
M — Place of the Chapel
N — Circular Opening in d[o] open except at Chapel times; to light the Inspection Lodge
O — Annular Well from top to bottom; the light cast about everywhere.

punishment. The unruly crowd is rendered manageable; no plots of escape from prison, no danger of contagion if they are sick, no mutual violence if they are mad, no chatter if schoolchildren, and no disorders or coalitions if workers. The crowd is replaced by a 'collection of separated individualities'.[30] As Foucault says, Bentham made 'visibility a trap'.

In the following important quotation Foucault summarises his understanding of the major effect of the Panopticon:

> to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power. So to arrange things that the surveillance is permanent in its effects, even if it is discontinuous in its action; that the perfection of power should tend to render its actual exercise unnecessary; that this architectural apparatus should be a machine for creating and sustaining a power relation independent of the person who exercises it; in short, that the inmates should be caught up in a power situation of which they themselves are the bearers.[31]

In the Panopticon, discipline crossed what Foucault calls a 'disciplinary threshold' in which the 'formation of knowledge and the increased of power regularly reinforce each other in a circular process'.[32] Older, more costly, and more violent forms of power fell into disuse and were superseded by 'a subtle, calculated technology of subjection'.[33]

Recall for a moment our previous discussion of *Nineteen Eighty-Four*. Though the older forms of power are still present there, the later concern with power for power's sake and the 'subtle, calculated subjection' clearly predominates in Orwell's mind. On the other hand, Orwell places less emphasis on subjects being the bearers of their own surveillance and of the power relation connected with it.

Sociology is indebted to Foucault for his theory of surveillance, touching as it does on both aspects of its power; the accumulation of information, and the direct supervision of subordinates. The former is found in the detailed files held on each Panopticon inmate, the latter in the architectural potential of the building itself. Acknowledging Foucault's contribution, Giddens observes that in modern times 'disciplinary power' is characterised by 'new modes of regularizing activities in time-space'."[34] Observation is central to these modes, and thus the Panopticon epitomises such disciplinary power.

However, Foucault also insists that such power is typically present throughout the institutions of modernity, in all kinds of administrative contexts. 'Is it surprising', asks Foucault rhetorically, 'that the cellular prison, with its regular chronologies, forced labour, its authorities of surveillance and registration, its experts in normality ... should have become the modern instrument of penality?' But not only that; he goes on,

'Is it surprising that prisons resemble factories, schools, barracks, hospitals, which all resemble prisons?'[35] What for Bentham was an aspiration is for Foucault a social reality – the panoptic principle diffusing different institutions. This assumption, often questioned within the sociology of administrative power, must be re-addressed in the context of electronic surveillance.[36]

The perverse irony is that Foucault himself seems to have made no comments about the relevance of panoptic discipline to the ways that administrative power has been enlarged and enhanced by computers, especially since the 1960s. Yet surely we see here nothing less than the near-perfection of the principle of discipline by invisible inspection *via* information-gathering. Or do we? Today no shortage exists of social analysts prepared to complete Foucault by making the connections explicit. Thus we turn next to explore the extent of that link; may we think of electronic surveillance as panoptic power?

Electronic Surveillance: Panoptic Power?

In what ways, and in what contexts, might electronic surveillance display panoptic features? No consensus exists about either question. Different analysts focus on different aspects of panopticism that reappear or are reinforced by computers: the invisibility of the 'inspection', its automatic character, the involvement of subjects in their own surveillance, and so on. Equally, different analysts emphasize different spheres of operation of the putative panopticon: in workplace organization and especially, electronic monitoring, in criminal records and policing, in consumer behaviour and transactions, and in the myriad administrative activities of the state.

Giddens makes a distinction between two major axes of surveillance, which we shall use as an initial framework for our analysis. He proposes that sociology consider two levels. Firstly, surveillance is the accumulation of coded information, seen in what he calls the 'internal pacification' of nation-states. This is bound up with the growth of bureaucratic administration, defence, and policing. Secondly, surveillance refers to the direct monitoring of subordinates within the capitalistic workplace that has become the key to management in the twentieth century.[37]

Giddens admits that the two senses of surveillance belong quite closely together. Indeed, only when thought of together can the twin processes of surveillance illuminate the tying-up historically of the capitalistic labour contract with the state monopoly of violence. Still, he maintains that they should be analytically distinct. We shall begin by following this distinction, looking first at the treatment of criminality and deviance as a central aspect of state surveillance. Secondly, we shall examine the putative Panopticon

of capitalism, starting with the workplace. This obliges us to rethink Giddens' distinction, for two reasons. Capitalism in the late twentieth century focuses at least as much 'management' attention on the marketplace as the workplace; and, the application of information technologies may be encouraging a convergence between different surveillance activities.

The persistence of panoptic principles in contemporary society has been noted by those studying general trends in social control, such as Stanley Cohen, and by others examining specific practices involving new technology in policing. Cohen, for instance, investigates the later twentieth-century shift towards crime control 'in the community' that includes rather than excludes offenders. He notes the ways that panoptic ideas are present in methods of 'technological incapacitation'.[38] Radio telemetry, or electronic tagging, allow relatively minor offenders to live 'freely' at home, or even to go to work while wearing a computerized device on the ankle. This tag involuntarily obliges him or her to remain in touch with some central control. Cohen relates this to the panoptic in that the wearer is (potentially) constantly supervised and participates in the process, but cannot verify it.

Gary T. Marx's analysis of American undercover police work takes this much futher, noting numerous ways in which electronic technologies portend the 'new surveillance'. Particularly relevant here are these characteristics: they are invisible (or of low visibility), involuntary, capital rather than labour intensive, involve decentralized self-policing, introduce suspicion of whole categories of persons rather than targeting specific individuals, and are both more intensive and more extensive. He sees the state's traditional monopoly over the means of violence giving way to new controls: manipulation not coercion, computer chips not prison bars, remote and invisible tethers, not handcuffs or straitjackets. He cautions that these panoptic shifts may be 'diffusing into the society at large'.[39]

In another American study, Diana Gordon subjects the National Crime Information Center (NCIC) to analysis as a panoptic 'machinery of power'.[40] Her central concern is simply expressed; 'With the national computerized system, the entire function of crime-control, not just the prison, becomes a 'panoptic schema', with the record a surrogate for the inmate and all of law enforcement as warden'.[41] Gordon is at pains to argue that the presence of panoptic tendencies spells dangers often unperceived by those working closest to the NCIC. Certain structural social changes may be occurring, she suggests, and therefore it is mistaken to see the issue as merely one of infringing civil liberties. For instance, in many states at least a third of criminal record requests are for non-criminal purposes, mainly employment and driving licences. Like Gary T. Marx, Gordon believes that the effects are societal; 'and then we are all enclosed in an electronic Panopticon'.[42]

The distinctions between criminal record databases and more general computerized systems for government administration have become increasingly blurred over the past few decades, especially as computer-matching has become a more widespread practice. This refers to the linking of records from different databases to track offenders or to limit abuses such as tax evasion or welfare fraud. Employment records may be checked, for example, to prevent welfare claims being made by people receiving salaries.[43]

Oscar Gandy, who makes extensive use of the Panopticon model in his work on modern surveillance systems, suggests several other ways that new technologies extend its reach within a government context. Apart from the massive databases of the Department of Defense, the Central Intelligence Agency, the National Security Agency and the Federal Bureau of Investigation, the US Internal Revenue is a major collector of personal data, used to identify non-reporters and under-reporters. Political parties also seek to strengthen their position by using computerized surveillance methods to affect public opinion.[44]

Turning now to the second area, we find that the Panopticon has also been rediscovered in capitalism. The debate over whether or not the adoption of new technologies represents intensified workplace control within capitalism is complex and inconclusive. Shoshana Zuboff's ethnography, *In the Age of the Smart Machine*,[45] takes the view that computers in the workplace have a transformative capacity. Paralleling authority as the 'spiritual basis of power', she examines technique as the 'material basis of power'. The key to contemporary management technique, she argues, is panopticisim, enabled by the use of new technologies.

The extremely precise computer systems of today's organizations permit minute monitoring of events and performances within the workplace. At one of the workplaces investigated by Zuboff, a highly automated pulp mill, a small explosion occurred in the early hours of the morning. By scrutinizing the 'Overview System', a bird's-eye view of the whole operation which was constantly recorded at five-second intervals, management could determine the exact cause of the accident; equipment failure, poor decision-making, or a sleepy operator?[46] Workers at such sites are thus highly transparent to management even in the apparently small details of day-to-day routine. This heightened visibility – recall the prison blinds and lighting – also noted by researchers looking at computerization in much smaller contexts such as ordering in restaurants and taxi-calling systems,[47] – Zuboff connects with the panoptic.

Zuboff also discusses the allure of panopticism for management, which is the 'promise of certain knowledge'. Increased reliance upon the 'facts' produced by the computer systems generates new management styles, in

her account. Employee performance appears as 'objective' data, which often correlates with another panoptic feature, the certainty of punishment. Apparently, any dismisal process tends to be shortened from around a year from the start of the dispute to something much more immediate.[48]

Operators within the ubiquitous digital 'gaze' of such computer systems, and without the more familiar face-to-face relationships with superiors, may seek modes of resistance, but compliance appears more common. Information systems 'can transmit the presence of the omniscient observer and so induce compliance without the messy conflict-prone exertions of reciprocal relations'.[49] Zuboff comments that in workplaces where workers as well as management have access to the personal data collected on the systems, workers exhibit 'anticipatory conformity', showing that the standards of management are internalized by workers. This again seems to be a case of Foucault's 'normalizing discipline' of the panoptic.

Interestingly enough, Zuboff does not try to generalize her findings to a societal level. She sees no need to; for her, the transformations within the workplace are striking enough. Her modesty may be wise. Others, however, have argued that some of the kinds of management strategies made possible by the use of information technology are now being applied in the marketplace as well as in the workplace. In this way, it is suggested, the panoptic power of surveillance spills over into society at large, but now the vehicle is commercial organization, not government administration.

The link is made directly by Frank Webster and Kevin Robins, for instance, who argue that information technologies facilitate the massive extension of Taylorist principles of scientific management from the realm of production into the realm of consumption. As they say, '"teleshopping" global and targeted advertising, and electronic market research surveillance all combine to establish a more "efficient" network marketplace'.[50] In this case, surveillance is accomplished by means of gathering transactional information such as itemized telephone bills, credit card exchanges and bank withdrawals. The whole process of using transactional information to try to influence consumer behaviour is sometimes called 'social management'.[51] Oscar Gandy takes up the same themes, focusing particularly on ways that personal consumer data has become a vital 'information commodity' within contemporary capitalism.[52]

As with the electronic extension of criminal records systems mentioned above, social management is the springboard for considering society itself as panoptic. 'On the basis of the "information revolutior", assert Robins and Webster 'not just the prison or the factory, but the social totality comes to function as a hierarchical and disciplinary Panoptic machine'.[53] Gandy refers to this as the 'panoptic sort'. The so-called wired city renders

consumers visible to unverifiable observers by means of their purchases, preferences and credit ratings. Private, sequestered, decentralized activities, the mundane routines of everyday life, are as it were in view, continuously and automatically.

Following Foucault, Webster and Robins point to no single power source, although the capitalist system of discipline is what they see being panoptically augmented. There is, they say, 'no single omniscient inspective force'. Nonetheless, 'society as a whole comes to function as a giant panoptic mechanism' in which, to pursue the analogy, hapless consumers find themselves in atomized – designer? – cells at the periphery.

This picture is very similar to one painted, in richer Foucaldian colours, by Mark Poster. For him the world of consumer surveillance amounts to a 'Superpanopticon'[54] because the panoptic now has no technical limitations. The Panopticon was invented for a new industrial capitalist society. Today the 'population participates in its own self-constitution as subjects in the normalizing gaze of the Superpanopticon'.[55] Poster's analysis occurs in the context of a study of the 'mode of information' which, he explains, 'designates social relations mediated by electronic communications systems which constitute new patterns of language'.[56]

The technology of power in Poster's Superpanopticon does two things. It imposes a norm, disciplining its subjects to participate by filling in forms, giving social insurance numbers, or using credit cards. But it also helps to constitute complementary selves for those subjects, the sum, as it were, of their transactions. New individuals are created who bear the same names but who are digitally shorn of their human ambiguities and whose personalities are built artificially from matched data. Artificial they may be, but these computer 'selves' have a part to play in determining the life-chances of their human namesakes. Thus are subjects constituted and deviants defined within the Superpanopticon.

Evaluating Electronic Panopticism

The Panopticon offers a powerful and compelling metaphor for understanding electronic surveillance. The prison-like society, where invisible observers track our digital footprints, does indeed seem panoptic. Bentham would surely smile wryly if he saw us complying with institutional norms as we use barcoded library books or note telephone-callers' IDs before accepting a call. The familiar distinctions between public and private life dissolve as both government and corporation ignore old thresholds and garner personal data of the most mundane and intimate kinds.

Beyond the metaphor, a model of power also lies in the concept of the panoptic, and it takes us well beyond the Orwellian jackboots and torture, or even the rats. The normalizing discipline, the exaggerated visibility of the subject, the unverifiability of observation, the subject as bearer of surveillance, the quest for factual certainty – all are important aspects of the panoptic as model of power. The question is, to what extent are all these necessarily present in each context? Sociologically, is electronic surveillance panoptic power?

To answer this question satisfactorily, three others must be addressed. First, can the panoptic be generalized over different social spheres? Several analysts using the panoptic image think of electronic surveillance as a process that transgresses conventional social – and thus sociological – boundaries. Diana Gordon remarks that because diverse databases, found in government and commerical organizations, are enabled to 'talk' to each other, crime control affects all of us; hence her comment that we are all 'in an electronic Panopticon'. Robins and Webster, likewise, focus attention on ways that management styles developed in the workplace now encroach electronically on the daily domestic lives of consumers. For them, this is one crucial factor that makes the Panopticon an appropriate 'central figure for understanding the modalities of power in the 'information society'.[57]

Electronic technologies facilitate convergence of practices over different and once-distinct institutional areas. Zuboff notes that within the workplace alone older divisions are fading as information technology is applied. 'Continuous process' and 'discrete parts' manufacturing, which developed separately to address different problems of production, now find work-tasks and work-organization becoming more alike with the coming of computer integrated manufacturing.[58] Again, similar techniques are used for matching disparate data for targeting tax-evaders within government administration as for targeting potential consumers with income-and-lifestyle-specific direct mailing.[59] Incidentally, members of both groups are frequently unaware that they are under surveillance.

For Foucault, the Panopticon epitomises the disciplinary network of society seen not only in prisons but also in the capitalist enterprise, military organization, and a multitude of state-run institutions. It does not wait for offenders to act, but classifies and situates before any 'event', producing not 'good citizens' but a 'docile deviant population'.[60] Despite Foucault's opposition to what he calls 'totalizing', he frequently gives the impression that the panoptic prison has been made redundant through the development of a disciplinary network on a societal scale; the Panopticon-at-large. Analysts of electronic surveillance may be forgiven for picking up a relatively undifferentiated view of power from Foucault.

But it is one thing to say that boundaries may be blurred in new

technology contexts, and another to suggest that the Panopticon should be central to our understanding of contemporary surveillance. Giddens, for instance, differentiates between the means of economic production and the political means of administration, and also insists that prisons are qualitatively different from other social organizations. With respect to the first, the fact that during the nineteenth century locales were established in which regular observation of activities could take place with the purpose of control makes the workplace and state similar, but not the same. Hidden exploitation rules the workplace, whereas state power depends ultimately on force.

Regarding the nature of prisons, Giddens points out that inmates have to spend all their time there; they are what Goffman calls 'total institutions'. Contrast schools, business firms, or other civil organization, where only a part of the days is spent and where disciplinary power is far more diffuse. So Giddens correctly concludes that 'Foucault is mistaken in so far as he regards "maximized" disciplinary power of this sort [i.e. panoptic] as expressing the general nature of administrative power within the modern state.'[61]

Nonetheless, the neat theoretical distinctions – between government and commerce, between collecting data and supervising – do begin to blur when confronted with the realities of contemporary electronic surveillance. Increasingly, disciplinary networks *do* connect employment with civil status, or consumption with policing. Moreover, the characteristically modern geographical and temporal 'stretching' of social relations, facilitated by changes in transport and communications, is also undergoing change.[62] Now the advent of information technologies enables novel configurations. The worker could once leave the capitalistic enterprise behind at the factory gates. Now it follows him home as a consumer. The same home was once regarded as a private haven. The computerized 'king' may now enter the 'Englishman's castle', at will. Indeed, the householder carries him in, disguised as a social insurance number.[63]

Even if new technology does facilitate not only a novel penetration of the mundane routines of everyday life, but also a blurring of conventional boundaries, it is still not clear that this in itself augurs a general societal panopticism. For Bentham and the other bearers of modernity have in a sense done their work. Citizens of the advanced societies are already expert-dependent in a radical sense. We cannot but rely upon those 'in the know, the experts.[64] Electronic panopticism may equally turn out to be a vestigial residue of modernity's – Benthamite – utopian hunger for certitude.

The ghost of the unseen inspector may continue to haunt specific milieux, such as Zuboff's pulp mill, courtesy of computer-power. It may

even contribute to new forms of categorizing subjects across different spheres and thus serve to sustain social control, but this still does not add up to the more apocalyptic vision of a societal Panopticon. Nonetheless, even such 'panoptic residues' raise significant sociological queries.

This discussion of historical changes and of consumerism in particular brings me to my second question; does the panoptic do justice to the realities of social order in capitalist societies today? Numerous plausible answers have been given to the classic sociological query of how social order is maintained. To be worth anything, the answer must connect directly with contemporary realities.

Today, consumerism contributes heavily to the maintenance of social order; the Panopticon deals with those left out of the market. Zygmunt Bauman points to a duality between what he refers to as the 'seduced' and the 'repressed'. People become socially integrated – seduced – by means of market dependency. Though Bauman makes little reference to the fact, this is powered in part by commercial surveillance. But its strength does not lie in a panoptic 'imposing of norms'. Surveillance supplies a structure to channel behaviour, but one within which real choices still are made.[65]

Rather, social skills and economic capacity entitle the seduced majority to consume. Some panoptic methods may well underlie the surveillance techniques used to seduce. But the minority, the new poor or the underclass, is subjected to tight normative regulation, where the excluding capacities of the panoptic come into their own. This would explain why modern life is experienced by the majority as pleasure and not – as the 'social Panopticon' theorists see it – as a prison sentence. In fact, according to Clifford Shearing and Philip Stenning, a similar distinction is already present in the work of Foucault. They say he worked with both a generic concept of discipline and a (more fully worked out) 'historically specific examination of it in the context of carceral punishment'.[66]

Foucault's physics or anatomy of power, technology' represents the generic mode of discipline, of which the panoptic is merely a type. Discipline is dispersed throughout the micro-relations that constitute society. It is not, for Foucault, 'from above', like monarchical power. This embeddedness of power, say Shearing and Stenning, is what makes the Panopticon the exemplar of discipline. They go on to contrast the *moral* discipline of carceral punishment – for example in the Panopticon – with the merely *instrumental* discipline manifest in other locations such as factories, hospitals or workshops. Their own investigations of private security companies in Canada reveal a discipline that is strictly instrumental, not moral in basis. As they say, 'within private control the instrumental

language of profit and loss replaces the moral language of criminal justice'.[67]

The distinction between moral 'soul-training' of carceral discipline and the instrumental discipline of private security systems is a useful one, though how far it reflects what Foucault wanted to argue is debatable. Rather like Bauman, Shearing and Stenning see 'the dominant force in social control' as consumption, visible in microcosm – they offer a charming vignette – in Disneyworld. Less like Orwell's nightmare, much more like Huxley's *Brave New World*, here is consensually-based control in which 'people are seduced into conformity by the pleasures offered by the drug 'soma' rather than coerced into compliance by threat of Big Brother, just as people are today seduced to conform by the pleasures of consuming the goods that corporate power has to offer'.[68]

Here then is a plausible answer to the question about the reproduction of social order in the capitalist societies of the late twentieth century. Paradoxically, the panoptic may not be an appropriate image on account of its capacity to make 'society like a prison' so much as because of the embedded nature of its discipline.[69] However, this does not mean that we can safely forget the panoptic. Carceral discipline, perhaps relating to residual moral categories, may well still be experienced by Bauman's 'repressed', the underclass. But, as I stressed above, this is a residual and not a general, let alone an expanding, category.

But as the repressed are frequently, as Bauman puts it, 'flawed consumers', a question arises as to how far even the normative discipline meted out to them is actually moral and not merely instrumental. The norms from which they deviate are essentially rooted in consumer skills. It is primarily participation in society as consumers from which they are excluded, through lack of credit-worthiness, welfare dependence, and so on.

As it could be argued that the application of information technology encourages the extension of instrumental discipline, the question of whether the dominant trend is towards instrumental discipline becomes even more pressing. In a postmodern context, says Lyotard, the (moral) 'metanarratives' of modernity are replaced by, among other things, the (instrumental) categories of computerized control.[70] If he is right, perhaps Max Weber's worries about a completely 'rationalized' world[71] will turn out to have been justified.

The idea of a dual system of control raises further questions about political power, democratic institutions and citizenship. This brings us to the last question about the panoptic qualities of electronic surveillance. Does the panoptic yield a complete picture of the origins and nature of surveillance?

Of course, this question has already received a partial – and negative – answer, but what follows serves as a reminder of the ambiguities or paradoxes of surveillance. It involves our looking not only at where Foucault obtained his conception of the panoptic, but where Bentham got it from in the first place.

We may grant that Foucault theorized a more general view of disciplinary power than that embodied in the Panopticon. But he certainly gave the impression that citizens of modern nation-states find themselves increasingly to be the subjects of centralized carceral discipline. And, for someone who spent precious little time considering how the warm bodies of which he wrote might respond to such discipline, he made a curious closing comment in *Discipline and Punish*; 'In this central and centalized humanity, the effect and instrument of complex power relations, bodies, and forces subjected by multiple forces of "incarceration", objects for discourses that are themselves elements for this strategy, we must hear the distant roar of battle'. [my emphasis][72]

What did he mean? It is not clear that the roar of battle was as loud as Foucault predicted, or so distant. If the 'battle' is one of revolt against discipline, then this assumes, further, that discipline is viewed by subjects in an entirely negative light, and that there would be a considerable time-lag between the imposition of discipline and the battle. However, one could equally argue, on sound historical grounds, that changing processes of social control always occur in the context of struggle, and that the contest is confused, ambiguous and recursive.[73]

As we noted in Chapter Two, the much-prized achievement of welfare citizenship in modern societies could 'only become effective if accompanied by the growth of a state bureaucracy capable of enforcing these rights in practice'.[74] In other words, the burgeoning panopticism of nineteenth-century institutions emerged hand-in-hand with growing commitments to social rights. Recognizing people as unique identities to ensure that each is treated equally simultaneously makes their control that much easier.

This may be seen as a more general phenomenon which Giddens calls the 'dialectric of control'. In this view, all strategies of control 'call forth counter-strategies on the part of subordinates'.[75] It is a sociological theorem about the ways that 'the less powerful manage resources in such a way as to exert control over the more powerful in established power relationships'.[76] Of course, Giddens hangs onto human agency here, a premiss abandoned in Foucault's work. So the build-up of administrative power is accompanied by expanding reciprocal relations between rulers and ruled. Modern management practices can be viewed in the same light. Strategies and counter-strategies are in constant tension with each other. In this account, Foucault's battle is neither distant nor, necessarily, roaring.

To put the idea of the dialectic of control in a slightly broader context, it must be understood that Giddens uses it as part of a more general argument that forms of contestation and conflict take place on many levels. A key element of his critique of Marxism is that class struggle is not the archetypical, let alone only, kind of struggle that takes place in modern societies. Struggles over what he calls 'authoritative' resources are also extremely significant.[77] According to this theorem we would expect to find attempts countervailing power in all situations where surveillance is experienced negatively as constraint. While the careful study of surveillance may oblige us to explore more precisely just how this occurs,[78] as a guiding assumption it has much to commend it. Indeed, the present analysis owes much to this insight, as well as to the commitment to the significance of action within sociology.

Fears and anxieties about electronic surveillance, and critiques of or resistance to it, arise from – among other things – specific aspects of its panoptic character. Opponents of the 'new surveillance' deplore the fact that it depends upon categories, that no knowledge of the individual is required, that it is increasingly instrumental, that areas of personal life once thought to be inviolably private are invaded, and that it effectively erodes personal and democratic freedoms. Foucault offers little help at this point, not only because he did not comment on computer technologies, but more profoundly because he never examined the basis of his own 'moral outrage' against the Panopticon.[79] In my view, the basis of moral objections should rather be explored and worked out in relation to a critical theory of the Panopticon.

In the Panopticon itself the issues are sharply etched. What contemporary commentators object to is both prefigured there and emphasized by electronic technology. Bentham, following the Cartesian logic that regarded human beings as machines whose activities could be measured and controlled, wrote impersonality, abstract classification, and automatic power into the Panopticon. Precisely these features reappear, now digitally inscribed and intensified, in the new, computer-run surveillance.

Bentham's project was nothing less than a secular utopia, a model society-in-miniature, cut loose from any theological moorings that might complicate his claim that the Panopticon stood as the solution *par excellence* to the human condition.[80] In the crucial principle of inspection he explicitly parodied the doctrine of divine omniscience, taking it to be an unsurpassed means of moral control. What he conveniently ignored, though, was the personal character of knowledge present even in the biblical quotations with which he ironically epigraphed his text. It is hardly surprising, then, that the Panopticon excludes the personal, and slips almost imperceptibly from moral to instrumental categories.[81] It is equally

unremarkable, given this backdrop, that today's actors in the surveillance drama have started to focus their criticisms on these aspects of electronic panopticism — perceived control by inspection, and impersonal categorization.

Beyond Orwell, Bentham and Foucault

No single metaphor or model is adequate to the task of summing up what is central to contemporary surveillance, but important clues are available in *Nineteen Eighty-Four* and in Bentham's Panopticon. Orwell's nightmare, though technologically rather dated now, correctly spotlights the role of information and technique in orchestrating social control. Its focus on human dignity and on the social divisions of surveillance also remain instructive. But the shift from violent to nonviolent methods has come a long way since Orwell, and is given much greater scope by the advent of information technology for surveillance. Moreover, Orwell's dystopic vision was dominated by the central state. He never guessed just how significant a decentralized consumerism might become for social control.

The Panopticon, on the other hand, offers scope for social analytic interpretation in precisely such contexts. Studies referred to here illustrate the broad sweep of potential relevance, in administration, policing, the workplace, and the consumes marketplace. The Panopticon points to the role of subordination *via* uncertainty, and to ways in which power pervades social relations. It does seem to hold some promise for the age of subtle, computer-based surveillance.

Yet its use is also fraught with difficulties. While the adoption of computers does blur the distinctions between surveillance spheres, and thus poses questions for surveillance theory, this does not mean they are dissolved altogether. The Panopticon offers no neat 'total' explanation of surveillance. In addition, the Panopticon as a means of exclusion may well be in eclipse, leaving the advanced societies under the superior sway of consumerism, with only a minor role left for the harsher panoptic regimes.

In what follows, these themes are further explored. However, Orwell's 'Big Brother' and Foucault's understanding of the Panopticon should be in no sense be thought of as the only, let alone the best, images for yielding clues about surveillance. Powerful metaphors lie relatively unexamined in various films as well as in novels such as Franz Kafka's *The Castle* or Margaret Atwood's *The Handmaid's Tale*. In the latter, the gendered dimension of categorization, and its implications for a stunted citizenship

for women, is vividly portrayed.[82] At present, however, the majority of studies is informed by either Orwellian or Foucaldian ideas, which is why it is to these writers that the following pages contain most reference.

The surveillance society is examined, then, through the critical use of sociological analyses deriving mainly from the imagery present in Orwell and the Panopticon, mediated by contemporary figures such as Anthony Giddens, James Rule and Gary T. Marx. The ethical edge of the present analysis, however, emerges not only from the democratic and 'human agency' orientations of such figures, but also from a conviction that the philosophical and religious discourse obscured by theorists such as Foucault requires rediscovery and re-emphasis within contemporary social thought.