



## The Return of Panopticism: Supervision, Subjection and the New Surveillance

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### Abstract

This article revisits Foucault's concept of panopticism as it pertains to research on the new surveillance. Drawing on the work of neo-Foucauldian authors in surveillance studies the paper shows how the figures of the supervisor and inmate within the Foucauldian diagram suggest different directions for pursuing surveillance theory. On the one hand, there is a concern with processes of subjection and normalization that arise through the internalization of the gaze, while on the other there is a concern with processes of administration, social sorting and simulation that occur independently of embodied subjects. Foucault's model both allows for these twin concerns within the context of the new surveillance while serving as a source of further insight into the empirical nuances of contemporary surveillance relations.

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### Introduction

Recent world events following 9/11 and the expansion of the digital infrastructures of modern societies have conspired to produce a surge of interest in the interdisciplinary field of surveillance studies. The social and material practices of surveillance with its implications for the production of social order and social control are receiving renewed attention as more pervasive forms of institutional monitoring are being developed. Dataveillance (the collection, organization and storage of information about persons) and biometrics (the use of the body as a measure of identity) for instance have not only come into focus with the post 9/11 security consciousness of state institutions but these technologies are now becoming a regular feature of the everyday lives and culture of citizens. For many scholars these technological innovations fundamentally alter the organization, practice and effects of surveillance relationships, making them at once more dispersed, pervasive, fluid, and invisible. While the jury is still out as to whether this "new surveillance" (Lyon 1992; Marx 1988) heralds more repressive forms of social control or introduces greater capacities for negotiation and resistance, their appearance has spurred scholars to revisit canonical metaphors, tropes and models for understanding the character and significance of modern surveillance.

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There can be no theorization of contemporary surveillance relations without some orientation to the writing of Michel Foucault on discipline and panopticism. While there is certainly no lack of scholarly output on the matter, this background is central to orienting innovative research in surveillance studies. Indeed, this is one of the focal points of the earliest issues of this journal (“Foucault and Panopticism Revisited”). As with the special issue on Foucault, the problem for surveillance studies scholars has generally been whether the new surveillance conforms to a more or a less panoptic social order than Foucault describes. While the discussion of this would seem to be relatively unproblematic; a matter of comparing empirical experiences of surveillance with Foucault’s panoptic model of social control, there is nevertheless, some divergence in interpretations of what is meant by the idea of panopticism. Consequently, while panopticism has received a great deal of critical attention in recent work on surveillance, it is not unusual to see scholars interpreting Foucault’s discussion in fundamentally different ways (Lyon 1993, 1994; Norris and Armstrong 1999; Boyne 2000; Haggerty and Ericson 2000). While I agree with many of the points made by these scholars, I am nonetheless, extremely wary of throwing the baby of Foucauldian insight out with the bathwater of an overworked concept of panopticism. While previous articles in this journal have been especially critical of the continuing relevance of Foucault’s idea of the ‘panoptic’ (Yar 2003; Koskela 2003; Hier 2003) my intention in this paper is not to ‘save’ Foucault so much as offer an interpretation of the analytical significance and social theoretical stakes of two seemingly divergent interpretations of Foucault’s approach to panopticism within the field of surveillance studies. In effect, different interpretations of panopticism ground sometimes radically different understandings of the circuits of modern surveillance. I approach this discussion with an eye toward preserving and reworking key Foucauldian insights in light of the growing body of empirical research on contemporary surveillance. My own interpretation is further informed through a conversation with the writing of critical neo-Foucauldians interested in surveillance such as Vaz and Bruno (2003), David Lyon (2001), Mark Poster (1996), William Bogard (1996) and Gilles Deleuze (1992). At the end of the day I want to suggest that a ‘post-panoptic’ condition does not necessarily imply that we must be ‘anti-’ or ‘post-’ Foucauldian.

## The Fate of Panopticism

The discussion of panopticism, so often presented as the ultimate Foucauldian set piece, is predictably a more complicated and nuanced tale than many literal and even historical readings would seem to suggest (Lianos 2003). At the heart of the discussion is the exemplar of Jeremy Bentham’s Panopticon. The specific history of Bentham’s infamous project is ultimately less important than its use as a genealogical marker (Foucault 1977b). For Foucault, the Panopticon is an architectural design or plan that signals a convergence of a historically situated political and social ideology, a socio-material epistemology, and a pragmatics of social control and resistance. In its most concrete form, the Panopticon is a socio-material template for institutional orders of all kinds ranging from prisons, to schools, to factories, to hospitals.<sup>2</sup> In its abstract form, the

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<sup>2</sup> While we are often reminded that Jeremy Bentham’s prison was never actually built, there are a number of important historical corollaries that provide interesting insight. See: Werret (1999).

Panopticon “is a diagram of a mechanism of power reduced to its ideal form” (Foucault 1977: 205) but as William Bogard argues:

this should not be confused with an ideological formation or a representation which masks the truth of social relations... It is an unstable historical formation, neither universal nor the totality of social relations, but rather the form of a changing amalgam of localized events and processes” (Bogard 1991: 327-28).

It would seem that in this sense the Panopticon as a diagrammatic object is somewhat nebulous and while this makes it a perfect fulcrum for social theorizing it is arguably also prone to iconic simplification.

The iconic value of the Panopticon stems in part from Foucault’s jarring description of Bentham’s architectural plan:

At the periphery, an annular building; at the centre, a tower; this tower is pierced with wide windows that open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; they have two windows, one on the inside, corresponding to the windows of the tower; the other, on the outside, allows the light to cross the cell from one end to the other. All that is needed, then, is to place a supervisor in a central tower and to shut up in each cell a madman, a patient, a condemned man, a worker or a schoolboy. By the effect of backlighting, one can observe from the tower, standing out precisely against the light the small captive shadows in the cells of the periphery. They are like so many cages, so many small theaters, in which each actor is alone, perfectly individualized and constantly visible (Foucault 1977: 200).

This vivid image has resonated both in academic writing and popular culture (Kammerer 2004; Marx 1996), in part because of the idea of the building’s material capacity to enable total vision and control. The panoptic structure seems to speak to the sense of helplessness individuals often feel in the face of the overwhelming force of institutions (prisons, hospitals, schools, workplaces, families) to determine life within their confines... the sense that there is nowhere to run and nowhere to hide.

This material structuring of visibility is only one half of the panoptic equation. There is also an important component of horror. As Foucault continues:

Bentham laid down the principle that power should be visible and unverifiable. Visible: the inmate will constantly have before his eyes the tall outline of the central tower from which he is spied upon. Unverifiable: the inmate must never know whether he is being looked at at any one moment; but he must be sure that he may always be so... the Panopticon is a machine for dissociating the seeing/being seen dyad: in the peripheric ring, one is totally seen, without ever seeing; in the central tower, one sees everything without ever being seen.

Not only does the panoptic machine make one visible but it also hides the operations (the motives, practices and ethics) of the supposed viewer. To know one is being seen without being able to see carries with it an uncertainty that becomes a source of anxiety, discomfort and terror... Who is watching? Why are they watching? What will they do?

This seeming combination of structurally imposed visibility (one is always seen) and perceptual uncertainty (but one cannot see) has led many commentators to focus on the centrality of vision in the production of social control. Indeed, for some, this focus on vision has become a primary source of critique (Jay 1986; Yar 2003). Yet, as Bogard (1991) has observed, Foucault's comments on the seeing/being seen relationship should be understood as a consequence, not a cause, of the panoptic diagram:

If Foucault emphasized the importance of the gaze... it was always with a view to other problems: first, of the standardization of multiple techniques – the concrete operations – for partitioning space and ordering temporal relations (i.e. imposing form on the multiplicity of human conduct), and second, of linking these operations to the forms of discursive knowledge which direct the gaze and give it its object (336-37).

Thus, the Panopticon is not a vision machine so much as an ordering machine; a kind of socio-material assemblage for sorting and arranging social categories and individual persons so that they can be seen and understood. It is this sorting process with its origins in early modern plague management (according to Foucault) that produces the possibility of a certain kind of dominating vision (Green 1999). Crucially then, in a world where vision is increasingly attenuated, dispersed and mediated through communications technologies, it is to the prior panoptic sorting rather than to vision that we must attend.

## Two Panoptic Sorts

While poignant, the social-material architecture of Foucault's version of Bentham's Panopticon produces a kind of double vision; two different and sometimes divergent stories of the development of distinctly modern relations of surveillance, control and domination. First there is the story of what goes on with the supervisor or inspector in the central tower and second there is a tale of what happens to the person in the cell (the inmate, the patient, the worker, the student). The story of the supervisor takes us to a discussion of techniques of observation, information gathering, data management, simulation and what Foucault later describes as "a bio-politics of the population" (Foucault 1978: 139-40). These are techniques aimed in part at producing manipulable digital profiles of the inmate (a data image or databased self) enabling a variety of deductive operations on individuals as elements of a known population. In surveillance studies, the work of Oscar Gandy Jr. (1993) is illustrative of the focus on the supervisory capacity of modern informed surveillance. The story of the inmate, on the other hand, takes us to a discussion of techniques of the self and a focus on self-discipline, normalization, 'soul-training', the 'anatomo-politics of the human body' and ultimately studies in subjectification and

governmentality. Here, the focus is on the normalizing rather than the supervisory effects of surveillance. Good examples of this can be found in the work of Mark Poster (1984; 1996).

The Panopticon metaphor structures the development of both kinds of stories, but in the writing of critics there appears to be some frustration in the attempt to reconcile the two approaches with empirical research and everyday experience (Boyne 2000; Haggerty and Ericson 2000). In general, it seems that the more surveillance studies stress techniques of supervision, the more individual agency is left under-analyzed; and the more techniques of subjection are elaborated, the less recognition there seems to be of the role of supervision and administration especially in regard to information infrastructures. In the sections that follow, I will expand on the separate stories of the Panopticon, offering some critique and attempting to draw out their relevance for understanding the new surveillance.

## The Inmate

The well-cited punch-line of the panopticism chapter of *Discipline and Punish* suggests that the primary objective of the Panopticon is:

to induce in the inmate a state of consciousness and permanent visibility that assures the automatic functioning of power. So to arrange things that 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 are themselves the bearers (Foucault 1977a: 201).

All of this is supposedly a function of the relationship of vision established by the panoptic machine. Faced with an uncertainty with respect to whether he is being watched, the inmate begins to watch himself. That is, he behaves as if he was being watched and so is careful not to attract the ire of the observer who he imagines is there. The inmate thus tows the line and conforms to the explicit and even implicit rules of the institution; all because he imagines he is being watched.

The effect that this produces is nicely summarized in George Orwell's novel of dystopic panopticism, *1984*:

There was of course no way of knowing whether you were being watched at any given moment. How often, or on what system, the Thought Police plugged in on any individual wire was guesswork. It was even conceivable that they watched everybody all the time... You had to live – did live, from habit that became instinct – in the assumption that every sound you made was overheard, and, except in darkness, every moment scrutinized (Orwell in Sclove 2000: 22.).

Accordingly, Foucault observes that:

he who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection (1977a: 203).

Even if we understand the Panopticon as a literal system and not an abstract diagram we can begin to update the model to reflect the developments of the new surveillance. What is important for Foucault's version of Bentham's plan is that the inmate be aware of the gaze of the supervisor through signs of their presence. This could be the ominous tower with its shielded windows signifying the presence of the guards but it could also easily be the even more insidious sign of the CCTV camera or the orbiting spy satellite as material semiotic extensions of the human eye (the moveable camera can track an object just as a human eye can further heightening the anxiety that one is being watched by someone). In any case, it is the sign of presence of the supervisor and not his actual material presence that matters here and in principle, this is what makes it possible to substitute fake cameras for real ones and still achieve the same effects of power (Norris 2003).

Despite the conceptual power and attraction of this argument Foucault does not write much about this process in *Discipline and Punish* leading some commentators to consider the discussion of this internalized gaze of the inmate to be more about what Bentham was thinking than about what Foucault had in mind (Bogard 1991: 334). Nevertheless, for many sociologists and criminologists it is the idea of a self-policing subject that has drawn the most interest (Cohen 1985). Yet, on close inspection at least as far as the discussion of panopticism goes there is actually very little to work with and sociologists especially have access to more ample resources. The discussion of the internalization of control by the inmate appears perhaps as one part Freud (the application of psychic pressure by the super-ego), one part Parsons (internalization of norms), and perhaps even one part Goffman (the performance of normative behavior in total institutions). While Foucault might be credited with adding the important dimension of the regulation of the body to discussions of normalization his model (or is it Bentham's?) is ultimately not sufficiently volunteristic to be plausible. Foucault himself later abandons all pretenses to the 'internalization of control' thesis (see Foucault 1993) implied by *Discipline and Punish* but importantly, the relation between subjectivity and power remains. I will elaborate on this in reference to the simple panoptic machine of Bentham's prison plan so it can be explored further in the context of the new surveillance.

The most obvious and important innovation of the panoptic machine is that it signals a shift or at least an addition in the traditional operation of power. That is, from the exercise of an external, 'heavy' force (the material and resource intensive application of punishment) to a 'lighter' non-corporal condition (Foucault 1997: 203) of "mind over mind" (206). The language here is mostly Bentham's and forms part of the utilitarian justification for his project. As Bentham saw it, the Panopticon would be less resource intensive, less expensive and more efficient in its effects. Let

the inmates be their own guards, the workers be their own supervisors, the students their own teachers, the patients their own doctors and watch society flourish.

How could this work? The operational assumption can be borrowed from Bentham and also indirectly from Orwell; the inmate learns to conform to the rules of the prison to avoid retribution for any transgression. As a result of the panoptic arrangement the inmate's attention is focused on 'doing the right thing' rather than on scheming further transgression. When combined with other aspects of the disciplinary apparatus such as isolation, routinization and training the results are populations of so-called 'docile bodies' that are mobilizable for a variety of social ends. As Foucault lets the principles of panopticism extend outside the wall of the fictional prison we are faced with the ominous prospect of what Gary Marx has called the "maximum security society" and it is here that the simple machine begins to break down. David Lyon (1992) amongst others has argued there are important limits to how far the society-as-prison metaphor can be extended, especially in light of the new surveillance (not to mention in actual prisons, see Myrick 2004). I am sympathetic to Lyons' general critique but I want to address two points in particular, the issue of agency and knowledge as it pertains to the problem of subjection and the issue of enclosure as it pertains to the problem of power and control.

Despite the various structuralist readings of *Discipline and Punish* that deny agency to subjects (Lyon 1994) the story of the inmate is ultimately not a deterministic story, but rather a volunteristic one, especially given its utilitarian roots. Even Bentham's original model depends on the assumed ability of the inmate to recognize that it is in their interest to act according to the norms of the prison. Perhaps more important is that for the 'lighter' power of self-policing to take hold the inmate must have some amount of knowledge specific to the situation. They must understand the rules of the prison, they must be able to evaluate when an act is in conformity with the rules, and they must be able to recognize the signs of the supervisors' presence. At the very least then, the simple Panopticon presumes a population of rational actors who share a homogenous base of knowledge. While there are problems with this assumption, we can at least see that structuring the seeing/being seen relationship alone is not enough to effect social control. Under a purely structural-deterministic model, people who are blind, ignorant or irrational would be immune to the effects of panoptic power.

We can pursue this point even further; an interesting ethnomethodological aspect of inmates' agency is their potential to feign conformity (see for instance, Wieder 1974). While inmates need to know what counts as an action in conformity with the rules in order for them to conform, the same knowledge allows them to act only 'as if' they are in conformity. These inmates may simply perform in a Goffmanian sense for the supervisors that they believe are always watching (Goffman 1959; 1961). As far as the dominating gaze is concerned actions that conform and actions that feign conformity will look the same and the inmate has not internalized the norms of the prison at all. While one could argue that the effects of a genuinely conforming action and a feigned one are actually the same (the inmate still performs the same acts) this argument would nevertheless have to abandon all pretence to a theory of subjection thereby re-routing power back to its heavier external modality (the visible signs of the guards' presence, a system of material threats and sanctions, etc...).

What the capacity to feign conformity suggests is that self-policing can not arise from the threat of retribution alone since such retribution depends on the visual detection of acts of transgression. While the Panopticon makes all acts visible (in principle) it cannot distinguish between acts that conform to the rules and acts which pretend to conform to the rules. If visual detection is not possible then there can be no threat of retribution and the simple panoptic machine fails. Note that as a simple penological model the machine also fails if it rewards conformity rather than punishing transgression. In either case, conformity can be feigned to gain a reward or evade punishment.

The point of this discussion is that in order for the simple machine to work inmates must genuinely desire to conform rather than pretend to conform. How could we account for desire in this way? While it is beyond the scope of this paper to offer a social theory of desire, what seems to be the case is that the source of desire cannot be the rationalized world of a society-as-Panopticon but rather a more subtle and diffuse process of enculturation that would produce subjects under less structured and regulated conditions. That is, the simple panoptic machine alone is incapable of producing a genuine desire to conform. Bentham's plan would simply not have worked and his supervisors would have to rely increasingly on resource intensive 'external' force to maintain control.

When we replace the panoptic apparatus of the prison with a more plausible scenario of say the surveillance of urban streets through the use of CCTV cameras (Koskela 2003) the agency of those under surveillance is no less important and indeed becomes even more of a mitigating factor. The population of most urban streets is much more diverse than that imagined by the Panopticon. Their background knowledge varies along with their understanding of what counts as conformity and what is a recognizable sign of the supervisors' presence. It follows also that the more citizens know about where the cameras are and what counts as appropriate behavioral norms the more they would be able to feign conformity in the camera's field of vision. Indeed, we can even anticipate following Erving Goffman's discussions of the con artist, that no one would know more about the situation than the individual bent on some kind of transgression. Perhaps even more pertinent to the post 9/11 security situation is that the individuals one hopes to detect are the very individuals that have the best chance of evading detection, especially given more and more automated surveillance systems incorporating fewer and fewer human supervisors. Again, I wish to stress the double-sided nature of stories of surveillance as subjection. The more one knows about how one is supposed to behave the more one is able to conform, but by the same token one is also more able to feign conformity.<sup>3</sup>

Let us turn now to the problem of enclosure in the simple panoptic machine. If we theorize panopticism in reverse, that is, how we get from the urban streets to the prison we can more easily see how the panoptic prison is a mechanism for imposing order on the diverse agency and irrationality of the general population. Panoptic discipline functions first by enclosure. It collects and contains the population. Once contained, the population is divided, isolated (placed in

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<sup>3</sup> For this reason, it may be more appropriate from a security point of view for there to be no general awareness that surveillance is occurring. Power and control are entirely external and resource intensive in such cases but detection is also much more difficult though not impossible to evade.

individual cells) and oriented to the signs of the presence of the supervisor (all cells are oriented to face the tower). In addition, routinization and training homogenize the population giving individualized agents the shared ability to recognize and conform to the rules (as well as to feign conformity). Only once all this is accomplished can the Panopticon function and even then it is impossible to speak of domination. In the Foucauldian framework the inmate can and does always resist as this resistance is no less a function of panoptic power than the control of the population (Foucault 1982).

It is precisely in the conditions of enclosure, isolation and training that the Panopticon is said to break down as an appropriate metaphor for the modern surveillance society (Bauman 2000; Boyne 2000). Where the Panopticon signals immobility through enclosure, the urban streets signal mobility and the permeability of boundaries as citizens come and go at will. The population is not containable and therefore it is not isolatable. Citizens cannot be held in place long enough for the panoptic mechanism of 'being seen without being able to see' to work its magic. Citizens have neither the time nor inclination to recognize the surveillance apparatus and what cultural training there is is sporadic and incomplete, even norms as simple as the rules of the road are not universally understood. All this leads to the sense shared by other critics that the Panopticon model is analytically limited beyond the forced enclosures of 'total' institutions (Norris 2002).

And yet, as if anticipating this criticism, Foucault argues that the Panopticon is not after-all like the plague stricken town (an important point in light of Elden 2003). In the latter case, power "separates, it immobilizes, it partitions; it constructs for a time what is both a counter-city and the perfect society; it imposes an ideal functioning, but one that is reduced in the final analysis... to a simple dualism of life and death" (Foucault 1977: 205). The Panopticon however is "a way of defining power relations in terms of the everyday life of men. No doubt Bentham presents it as a particular institution, closed in upon itself... But the Panopticon must not be understood as a dream building: it is the diagram of a mechanism of power reduced to its ideal form; its functioning, abstracted from any obstacle, resistance or friction... it is in fact a figure of political technology that may and must be detached from any specific use" (205).

As a diagram, an idealization, and an abstraction the point is not whether society functions like Bentham's imaginary prison but rather whether, in any given context, power strives to be panoptic despite actual obstacles, resistances and frictions. The simple panoptic machine of Bentham is too static; it is a material enclosure into which people enter and leave (voluntarily or against their will). Foucault's argument however, is that panopticism is itself mobile, able to produce the effects of enclosure wherever people might be found. Bentham's panoptic architecture is misleading in this regard, there is nothing about enclosure per se that requires its conception in terms of a material structure, indeed, at times for Foucault enclosure is more a property of the psyche than a concrete spatial arrangement. This seems to be the case for instance, when he discusses his project in terms of a genealogy of the modern soul (Foucault 1977: 29) writing that "the soul is the effect and instrument of a political anatomy; the soul is the prison of the body" (30).

While scholars such as Judith Butler have developed this idea into a psychoanalytic interpretation of Foucault's theory of the subject (Butler 1997), I am inclined to search for these enclosures

elsewhere. While late modern populations are more mobile and exercise more agency than Foucault seems to account for it also seems that the mobility and agency of populations is still produced by cultural perceptions of where and when it is permissible or even desirable to move and act. This late modern condition of high mobility is arguably one of relative enclosure not the absence of enclosure. Even the highway, that paragon of mobility, is a space of enclosure between the various off-ramps. Or in an airplane, even while hurtling through the air, are passengers not caught in a structure more immobilizing than any prison?<sup>4</sup> These material boundaries and limits are continually augmented by cultural discourses that reconstruct the home, the workplace, the school, and the mall even as the distinctions between these spaces are eroded. Once enclosed not just by walls, but also by the cultural perception of limits, isolation and differentiation are possible; in front of the television or computer, at one's desk, in one's seat or in one's car. At these moments our gaze may be turned inward, to reflect on, to police or even to calculate one's behavior. All that panopticism arguably requires of us is segmentation and differentiation, the marking of our passage from one spatial and cultural zone to the next.

What about the problem of heterogeneous knowledge in the general population relative to prison-like enclosures? Segmentation and differentiation alone are not enough without their recognition and understanding. One needs to know when one enters the space of a school or a home in order to know how one is supposed to behave there. Reading with Foucault rather than against him (Matheson 1997), we can theorize a role for the synoptic machine of the modern culture industries accounted for by the critical theory tradition. According to critics like Matheson and Baudrillard, our relation to modern media is synoptic not panoptic; it can be described by a visual relation in which the many (an audience) observe the few (the television broadcast) but one can argue that such a synoptic apparatus exists symbiotically with the panoptic as a means of generating surveillable cultural enclosures.<sup>5</sup> While it is beyond the scope of this paper to elaborate on this point, one can draw on media theory to argue that the synoptic function of media is to produce a more or less homogenous knowledge and culture that will ideally be shared by ever larger and more diverse populations across space and time (even if this is not the case in practice). An appropriate update to Foucault's argument would be that audiences for these media are enculturated rather than trained or disciplined in any formal sense and audience behaviors are structured (though not determined) by the synoptic management of perception, risk, morality, desire and truth. One need not necessarily leave the Foucauldian frame altogether since the suggestion is that the media are primarily engaged in the production of kinds of cultural enclosures that produce panoptic effects not at all dissimilar from the Benthamite model.<sup>6</sup>

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<sup>4</sup> Indeed, as mobile enclosures, airplanes are perfectly surveillable spaces amenable to the latest technologies.

<sup>5</sup> One need only consider *1984* in which the propaganda machine of the State gets equal billing with the Thought Police in Orwell's dystopic ecology of domination.

<sup>6</sup> See Hier (2003) for a more Foucauldian argument developed along these lines.

## The Supervisor

I have considered the story of the inmate at some length now let us turn to the supervisor. I find Foucault's panopticism chapter to be quite frustrating because while in the lead up to the presentation of the Panopticon he patiently outlines precursory techniques of identification, classification and evaluation developed as a means of plague management these become effectively superfluous once the panoptic machine goes into operation and power shifts 'down' to the soul of the inmate. Why does Foucault initially focus so much on the supervisor's capacity to organize time and space, and generate knowledge when the point of the panoptic machine is that power may function perfectly well without his presence? More specifically, if the mere threat of the supervisor's (or anyone else's) vision is enough to induce conformity then why should the supervisor bother to look let alone collect any data?

Some critics have suggested that Foucault may have gotten off track in devoting too much emphasis to the internalization-of-control thesis of the inmate story. For instance, Lauren Goodland (2003) argues that:

Foucault notices Bentham's stipulation that 'the persons to be inspected should always feel themselves as if under inspection,' but he virtually ignores its supplement: 'what is also of importance is, that for the greatest proportion of time possible, each man should actually be under inspection' so that 'the inspector may have the satisfaction of knowing, that the discipline actually has the effect which it is designed to have' and so that he can supervise 'such transient and incidental directions as will require to be given and enforced, at the commencement at least of every course of industry' (Bentham in Goodland, 543).

Bentham's additional comments are helpful here for illustrating the important differences in Bentham and Foucault's interpretation of the Panopticon. The Benthamite response to the question of "why bother to look?" seems to be a matter of added value. For Bentham supervision is ultimately necessary only to direct the system, detect any transgression and to make good on the promise of retribution. Without this, the inmate, worker, schoolchild, patient, etc... would have nothing to fuel his imagination to keep himself in check. The supervisor's role in such a system is thus quite minor and easily automated such that "any individual, taken almost at random, can operate the machine" (Foucault 1977: 202).

Foucault sees more potential in the machine than Bentham does. At one point, Foucault opines that the Panopticon looks like a pre-modern royal menagerie where "the animal is replaced by man, individual distribution by specific grouping and the king by the machinery of a furtive power" (203). This has nothing to do with process of subjection in and of itself (since other animals are by their nature exempt from the process) but appears in the discussion more as a by-product of the structural management of visibility. The inmates, like the animals of the menagerie, are lifted from the context of their natural lives. They are isolated and forced to be visible so that they can be identified and compared to one another. It is in this way that "the Panopticon does the work of a naturalist" (203). Moreover, the structural arrangement of inmates allows for the

controlled intervention of experimentation. Experiments in medicine, penology, education, and worker productivity are all possible because “the Panopticon is also a laboratory” (203-4).

What might Foucault be getting at with his comparison to the naturalist’s menagerie? One could argue following Bentham that the supervisor’s roles as observer and experimenter are simply crucial components for increasing the efficacy of panoptic control. Indeed, the laboratory model of the Panopticon would be an important means of keeping the system dynamic by developing better and more efficient protocols for training inmates to act in accordance with appropriate norms. Certainly, this is one aspect of the machines operation but applied science is not what Foucault has in mind. Instead, Foucault sees the Panopticon as a model epistemological device for producing knowledge about the social world.

The Panopticon is thus a kind of scientific instrument like a microscope. Moreover, like a microscope, the Panopticon cannot be reduced to merely a machine for seeing. On this point, research on the sociology of scientific practice and visualization has much to offer. To ‘see’ an object under a microscope requires the transformation of that object (Hacking 1983; Latour 1987; Gooday 1991). It is dissected, separated, isolated from the larger wholes of which it is a part. It is then prepared for display, fixatives may be added, cross-sections taken, and so on... the process is not at all ad hoc but the result of the application of skill in accordance with detailed protocols. This is what allows the object to be compared to others and to a general body of knowledge. The visible object is, in effect, a by-product of all these operations. In addition, seeing an object under a microscope by itself is useless for the production of knowledge. The acts of preparation, display and seeing are accompanied by acts of recording; there is an accumulation of notes, labels, diagrams, images that account for the transformations so that the object can be traced back to its source.

The situation is comparable to the inmates as objects of panoptic vision:

This enclosed, segmented space, observed at every point, in which the individuals are inserted in a fixed place, in which the slightest movements are supervised, in which all events are recorded, in which an uninterrupted work of writing links the centre and the periphery, which power is exercised without division, according to a continuous hierarchical figure, in which each individual is constantly located, examined and distributed (Foucault 1977:197).

Thus Bogard is correct to argue against Foucault’s critics that: “the diagram of discipline cannot be uniquely identified with a micro-physics of the body, with techniques of training or normalization, or hierarchical observation, but refers also to a mechanics of administration” (1991: 334). On the side of the supervisor, there is actually a lot of work to do. In this context, panopticism speaks to the capacity of individuals, institutions and states to know about social groups and populations. This is not simply a matter of being able to see, but rather a matter of arranging the material and social world in a way that allows for the display of social behavior through the isolation and division of social beings as well as their organization and classification through the discursive practices of the supervisor. For Foucault, the supervisor is not simply an authority responsible for maintaining the system of control so much as he is a skilled

administrator, a bureaucrat, a scientist, and a laboratory technician charged with marking the connection between the individualized behavior of the inmate and knowledge of the general social body. In this sense, not just anyone will do. The capacities and competencies of the supervisor (or supervisory system) form an integral part of the panoptic structure, more so in fact, than the walls of the prison. When the walls are removed but the supervisory capacities remain we enter the condition of the new surveillance.

From this point of view, Foucault's discussion of the supervisor in the Panopticon may actually anticipate much of the recent scholarship on dataveillance. In principle, there is no reason why one can not substitute the operations of a human supervisor for a system of computerized monitoring as the basis for panoptic surveillance but for Foucault, this must amount to more than simply placing a camera in the window of the tower. "What are required are mechanisms that analyse distributions, gaps, series, combinations, and which use instruments that render visible, record, differentiate and compare: a physics of a relational and multiple power" (Foucault 1977: 199). This is a tall order that calls for expert systems and indeed, it is precisely the computational power of digital computing that allows for the panoptic administration of large, distributed and mobile populations. Further, to the extent that digital mechanisms of administration can analyze populations without the material enclosure of laboratory-like spaces we can certainly begin to speak of a "generalized mechanism of panopticism" (1977:216). Foucault thus acknowledges that the prison is an extreme limit of 'enclosed discipline' through 'social quarantine' perhaps similar to the menagerie's relation to the nature from which the animals have been removed. The extension of panoptic principles of supervision beyond the structural limits of vision is precisely what Foucault had in mind, it is but a hop, skip and jump from the eye, to the camera, to the computerized database as instruments of panoptic supervision.

With respect to making sense of the supervisory aspects of a generalized panopticism, surveillance studies has gone further than Foucault in demonstrating how information collected from individualized persons is organized and manipulated to alter, manage or even control the life-chances of those persons (Gandy, 1993). The simplest examples might be census data, which is used to generate profiles of various populations that guide the development of government policies. These policies, whether they be changes in the direction of state funds, the opening or closing of public institutions, or the creation of new laws have definite effects on persons independent of their knowledge. From census data we may move to insurance data, credit information, marketing data, audience feedback, and so on. In all these cases, data obtained from persons is managed independently and used to structure the lives of those persons.

It is on this point that the critique of Foucault takes on its strongest form. As Anthony Giddens (1990) has noted, modern surveillance can be characterized by ever increasing distances between the observer and the observed. This simple surveillance relation has attenuated to the point of non-existence with the implication being that surveillance operations of the supervisor go on without any reference to the inmate at all. The form of control implied by this surveillance operation is thus independent of the formation of the self-policing subject described in the story of the inmate. As a consequence, surveillance departs from the Benthamite diagram and power becomes quite 'heavy' again (this time with computers instead of humans) falling back on the

capacities of institutions to make use of the information they collect (Norris 2002). In the end, the story of the supervisor leads us away from diagrams of discipline and more toward what might be called diagrams of control.

## Societies of Control

Let us return to the panoptic prison fantasy. Certainly following Gary Marx (1988; Robins and Webster 1999) we can extrapolate from a few guards in the central tower to some highly efficient management and policing system, a kind of prototypical thought police, with an increasingly sophisticated technical capacity for monitoring (through CCTV, infrared cameras, electronic tags), data storage (high speed hard drives), networking (data conversion software) and analysis (computers capable of advanced pattern recognition and multivariate sorting). But, as many critics have already argued such a system is rendered operational only through the form of material enclosure imposed by the prison walls (Norris 2002). Not only does physical enclosure make constant monitoring technically feasible, but also self-discipline begins only when the prisoner cannot imagine a means of escape. Once there is nowhere to hide, it makes more sense to conform but as soon as the prison walls are gone, the system becomes more difficult to manage.

At the same time, it is important to point out that this is not for lack of trying since the same panoptic logic that envisions material enclosures also gives us the fantasy of prisoners roaming throughout society with surgically implanted electronic beacons that could be used to direct spy satellites. Panoptic discipline however, cannot operate through the technological fix alone (despite post 9/11 security marketing). Without the enclosure of prisons, factories or schools, subjects simply have an easier time imagining that they cannot be seen and as long as they believe they are invisible their *en* mass behavior will be less orderly. Panopticism, as a totalizing system, fails without an equally sophisticated cultural apparatus for reminding citizens that they are being watched. Some scholars, like William Staples posit just such a ‘culture of surveillance’ that would bridge the gaps in the panoptic machine. Other scholars have issued what amounts to a theory recall; the machine is just too faulty to make sense of the contemporary surveillance landscape.

Gilles Deleuze’s (1992) critique of panopticism follows this latter trend while giving due credit to “Foucault [who] has brilliantly analyzed the ideal project of these environments of enclosure, particularly visible within the factory: to concentrate; to distribute in space; to order in time; to compose a productive force...” But speaking of western societies after World War II, Deleuze argues that “a disciplinary society was what we already no longer were, what we ceased to be. We are in a generalized crisis in relation to all the environments of enclosure—prison, hospital, factory, school, family” (4). As a consequence of post-industrial transformations in the nature of production and consumption, even these discrete institutions are not after all, what we imagined them to be. For Deleuze, there is neither a technological nor a cultural fix for this postmodern social condition.

The institutions of post-industrial societies are more unstable and fluid than what Foucault's model of disciplinary society augmented by culture industries would seem to suggest and the effect of this is to decouple the imagined relationship between seeing and being seen; there is no longer (nor was there ever) a direct line of sight in the production of panoptic space. This is an argument that bears a strong resemblance to the focus of surveillance studies on the story of the supervisor. Deleuze proposes that following from Foucault what we are dealing with is not discipline but control. Discipline as a mode of power relies primarily on enclosures, be they material, cultural or psychological. Control however encourages mobility in an attempt to manage the wider territory and not just the social space of enclosures. Deleuze develops his model of control as follows: "enclosures are molds, distinct castings, but controls are a modulation, like a self-deforming cast that will continuously change from one moment to the other, or like a sieve whose mesh will transmute from point to point" (6). While discipline stabilizes and objectifies bodies, control modulates them. One way to understand this difference is that control does not act on the body so much as the environment through which the body moves. Thus, "in societies of control... what is important is no longer either a signature or a number, but a code: the code is a password" (6). Signatures and numbers are used to mark and identify individual bodies and therefore belong to a mode of panoptic discipline. Codes on the other hand, stand in for bodies and serve as passwords for gaining access or not to social locations. As Deleuze remarks, "the numerical language of control is made of codes that mark access to information, or reject it. We no longer find ourselves dealing with the mass/individual pair. Individuals have become 'dividuals' and masses, samples, data, markets or 'banks'" (6).

The concept of the 'dividual' is fundamental here, in societies of control the individual is doubled as code, as information, or as simulation such that the reference of the panoptic gaze is no longer the body but its double, and indeed this is no longer a matter of looking but rather one of data analysis. Deleuze's very short and abstract discussion of the shift from disciplinary societies to societies of control parallels the more empirically driven critiques of panopticism that point to a shift away from surveillance as a primarily visual relation to dataveillance as a mode of ordering information. In societies of control the surveillance apparatus does not act on bodies or minds but on information about bodies and minds. In this respect, dataveillance corresponds to the modulatory effects of power described by Deleuze: "the image of a city 'where one would be able to leave one's apartment, one's street, one's neighbourhood, thanks to one's dividual electronic card that raises a given barrier; but the card could just as easily be rejected on a given day or between certain hours; what counts is not the barrier but the computer that tracks each person's position – licit or illicit – and effects a universal modulation'"(7).

This modulation is made possible by the capacity of digital technology to generate and manipulate 'data doubles' of citizen-subjects. These are stable representations of identity such as no visual enclosure could ever produce. The object of traditional disciplinary surveillance is the body but in dataveillance the object of control is simply the digital representation of the body. Consider, for example, the Iridium Authenticam Iris Scanner which is readily available for use in personal security. As one magazine article on the Authenticam exclaims – "with biometrics you're the password."<sup>7</sup> It is difficult to imagine a more Deleuzian tagline. The issue here is less

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<sup>7</sup> <http://www.cnn.com/2000/TECH/computing/11/16/comdex.biometrics.idg/index.html>

about sensory recognition (the ability of the iris scanner to see who we are) and more about the stabilization and ordering of identity. Your biometric double, already programmed into the machine is what allows you to pass (or not). In effect, you take on the identity defined by your biometric simulacrum.

Information technologies act on identities (sometimes independently of perception) and literally transform them into what Bruno Latour (1990) has called 'immutable mobiles.' Simpler to arrange and control than actual bodies, digital identities are stable, transferable, transportable and combinable entities. These are kinds of data images or data shadows. Roger Clarke (1993) calls these entities 'digital personae', I have taken to calling them 'databased selves'. More than an identity, the databased self possesses a limited agency. It may act (supposedly on our behalf), granting us entry to the gated community, and it may be acted upon by others in turn (to deny us entry). It may have integrity as with medical information protected by law or it may sell itself to the highest bidder. Databased selves also exhibit the capacity for growth as new data is assimilated over time and by virtue of the systems in which they are embedded, they are capable of long-term memory, risk-assessment, and the anticipation of the future. What makes databased selves different from our actual selves is that databased selves are more easily accessible, observable, manageable and predictable than we are. Databased selves actually meet the Benthamite ideal better than the disciplined bodies of the Panopticon.

Mark Poster (1992) has perhaps developed the clearest articulation of what a Deleuzian reading of Foucault along these lines might entail. Poster understands the shift to control societies in terms of a kind of superpanopticism which he argues does not operate via external force or internalized norms but rather in terms of discourse and the linguistic properties of digital computation. Crucially, the story of the inmate is not abandoned so much as sublimated by Poster. At the core of the superpanopticon is the computerized database; a sorting machine that organizes and produces subjects. As David Lyon nicely summarizes:

the subject is multiplied and decentered in the database, acted on by remote computers each time a record is automatically verified or checked against another, without ever referring to the individual concerned... computers become machines for producing retrievable identities (Lyon 2001: 115).

In decentering or doubling the subject (dividualizing in Deleuze's terms), we are led, as Lyon continues to trace the story, to understanding surveillance in terms of simulation (Bogard 1996). We do not produce our databased selves, the databased selves produce us.

How could this be? The icon for superpanopticism is neither the eye nor the camera but the database or even better the *form*: the marketing survey, the census form, application forms, medical forms, etc... The operation that occurs at the interface between a subject and a form under superpanopticism is interpellation. We are interpellated by the form and the electronic infrastructure of which it is a part. As Poster writes:

the unwanted surveillance of personal choice becomes a discursive reality through the willing participation of the surveilled individual. In this instance the play of power and discourse is uniquely configured. The one being surveilled provides the information necessary for surveillance. No carefully designed edifice is needed, no science such as criminology is employed, and no complex administrative apparatus is invoked. In the superpanopticon, surveillance is assured when the act of the individual is communicated by telephone line to the computerized database... a gigantic and sleek operation is effected whose political force of surveillance is occluded in the willing participation of the victim (Poster 1992: 94).

The diagram of superpanopticism is not a diagram of surveillance in the traditional sense, no one is watching us and we do not perceive ourselves as being watched. We simply go about our business while our databased selves are assembled, scrutinized and evaluated in much more detail than the inmates at Foucault's Mettray prison ever experienced (Foucault 1977: 293- ).

Yet, as the supervisory operations of the superpanopticon shift from actual to databased selves Poster's theory of subjection through interpellation runs into trouble. Once the database is in place, it hardly seems to matter what actual subjects think or do since it is increasingly the case that databased selves can simply fill out their own forms. More and more often we do not even need to be asked for personal information as whoever needs it can simply consult the relevant database. Roger Clarke (1993) has discussed the idea of active digital personae; these are software programs enabled to make choices and decisions on behalf of a user. Rudimentary programs already exist for filling in identity data and passwords for secure websites. As such systems proliferate we begin to see large-scale bureaucracies act increasingly with no input of data from subjects at all but if this is the case then how is interpellation possible? Interpellation occurs when persons recognizes themselves as subjects of the call of another; when we recognize our name, or in Althusser's famous example, our hierarchical social position is acknowledged and produced in the response to the policeman's hail: "you there!" Without the participation of actual selves how can there be any interpellation. It would seem that with modern dataveillance, the grounded, embodied subject is increasingly left out of the story as the world is automatically made and remade around us.

Yet, without something like interpellation in the model of the control society there can be no subjection and a rift develops between the 'docile' databased selves and their increasingly irrelevant and indigent bodies. There can be no recipe for social order here only more fantasy. In order for superpanopticism to be a plausible model there must be an interface somewhere between the embodied subject and the database; databased selves must somehow be attachable to individual and collective bodies in the material world. Minimally, the subject must be able to recognize him or herself in their databased double for interpellation to function and failing this there must be some other means to attach material bodies to digital forms. Poster's neo-Foucauldian innovation moves us in the right direction but we need to probe further.

By way of conclusion then, I will suggest a possible direction for both theoretical and empirical research drawn from the preceding discussion. Without abandoning the insights drawn from

surveillance studies' focus on the story of the supervisor and the development of the bio-politics of administrative surveillance we need to continue to keep sight of Foucault's later work on subjection and the care of the self by focusing closer attention on what might be called 'surveillance interfaces.' These are the local, material sites where something like interpellation or attachment takes place; where the subject recognizes herself in her databased double. This kind of analytical focus recognizes the attenuation of relations between observers and observed while still acknowledging the chain of social and material intermediaries that produce effects of power. The interface of the computer screen, the camera lens, the telemarketer and even the simple bureaucratic form remain critical components for understanding the character of contemporary informed surveillance and it is in these contexts that we need to look a little closer at what Poster means by the 'willing participation of subjects.'

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