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3 Welcome to the Society of Control: The Simulation of Surveillance Revisited

WILLIAM BOGARD

I

Here are two illustrations of the simulation of surveillance, one from an Internet advertisement for Spector, a piece of software that monitors and records people's computer use, the second from an editorial outlining the dangers of a plan by the U.S. Defense Department, called Total Information Awareness (TIA), to create a universal database that will supposedly thwart terrorists and enhance 'homeland security.'

Spector

Imagine a surveillance camera pointed directly at your monitor, filming away everything that is done on your Macintosh. That is the idea behind the number one selling Internet Monitoring and Surveillance software, Spector.

Spector works by automatically taking periodic screen shots of a Power PC-based Macintosh and saves those screenshots to a local or network drive for later viewing. Screen shots can be taken as often as every few seconds, or as infrequently as once every few minutes.

Spector is ideal for consumers and corporations alike. Consumers now have the ability to see exactly what their children or spouse do on their computer when they cannot be around. Corporations and Educational Institutions can now make sure their employees and students are using their computers appropriately.

Recognizing that Internet filtering software is inadequate and inconvenient, Spectorsoft decided that the best way to put parents and teachers in control is to allow them to see exactly what kids do on the computer by recording their actions. With Spector, a parent/teacher sees everything the

child sees. If a child tries to access a checking account, or visits adult-oriented web sites, or is approached by a stranger on the Internet, the parent/teacher will be able to see that by playing back the recorded screens.

'Internet filters don't solve the problem. They fail to filter out all the bad stuff, and they prevent users from doing completely legitimate tasks by producing far too many false positives,' adds Fowler.

'In addition, filtering programs require constant updates, and that is extremely inconvenient. Spector doesn't try to stop the user from doing anything. Instead, it records their actions. That places the issue of responsibility directly on the user. When a child or employee knows their actions may be recorded and viewed at a later point in time, they will be much more likely to avoid inappropriate activity.'

In addition to recording by taking screen snapshots, Spector also records every keystroke typed. With Spector's detailed and automatic snapshot recordings, one can see all e-mails, chat conversations, instant messages and web sites visited.

Users have been raving about the simplicity and accuracy of Spector: 'Within 36 hours of installing Spector I had enough evidence to go to the police. It turns out that our daughter was caught up in a sexual relationship with her 37-year-old Middle School teacher. The man was arrested, pled guilty, was sentenced and barred for life from teaching. None of this would have been possible without the evidence that we obtained using your Spector software' writes Bob Watkins of Tennessee. http://www.spectorsoft.com/products/Spector_Macintosh/index.html

Homeland Security

November 14, 2002

You Are a Suspect

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[By, of all people, WILLIAM SAFIRE (former speechwriter for Richard Nixon)]

WASHINGTON. If the Homeland Security Act is not amended before passage, here is what will happen to you:

Every purchase you make with a credit card, every magazine subscription you buy and medical prescription you fill, every Web site you visit

and e-mail you send or receive, every academic grade you receive, every bank deposit you make, every trip you book and every event you attend – all these transactions and communications will go into what the Defense Department describes as ‘a virtual, centralized grand database.’

To this computerized dossier on your private life from commercial sources, add every piece of information that government has about your passport application, driver’s license and bridge toll records, judicial and divorce records, complaints from nosy neighbors to the F.B.I., your lifetime paper trail plus the latest hidden camera surveillance – and you have the supersnoop’s dream: a ‘Total Information Awareness’ about every U.S. citizen.

This is not some far-out Orwellian scenario. It is what will happen to your personal freedom in the next few weeks if John Poindexter gets the unprecedented power he seeks. Remember Poindexter? Brilliant man, first in his class at the Naval Academy, later earned a doctorate in physics, rose to national security adviser under President Ronald Reagan. He had this brilliant idea of secretly selling missiles to Iran to pay ransom for hostages, and with the illicit proceeds to illegally support contras in Nicaragua.

A jury convicted Poindexter in 1990 on five felony counts of misleading Congress and making false statements, but an appeals court overturned the verdict because Congress had given him immunity for his testimony. He famously asserted, ‘The buck stops here,’ arguing that the White House staff, and not the president, was responsible for fateful decisions that might prove embarrassing.

This ring-knocking master of deceit is back again with a plan even more scandalous than Iran-contra. He heads the ‘Information Awareness Office’ in the otherwise excellent Defense Advanced Research Projects Agency, which spawned the Internet and stealth aircraft technology. Poindexter is now realizing his 20-year dream: getting the ‘data-mining’ power to snoop on every public and private act of every American.

Even the hastily passed U.S.A. Patriot Act, which widened the scope of the Foreign Intelligence Surveillance Act and weakened 15 privacy laws, raised requirements for the government to report secret eavesdropping to Congress and the courts. But Poindexter’s assault on individual privacy rides roughshod over such oversight. He is determined to break down the wall between commercial snooping and secret government intrusion. The disgraced admiral dismisses such necessary differentiation as bureaucratic ‘stovepiping.’ And he has been given a \$200 million budget to create computer dossiers on 300 million Americans.

When George W. Bush was running for president, he stood foursquare in defense of each person's medical, financial and communications privacy. But Poindexter, whose contempt for the restraints of oversight drew the Reagan administration into its most serious blunder, is still operating on the presumption that on such a sweeping theft of privacy rights, the buck ends with him and not with the president.

This time, however, he has been seizing power in the open. In the past week John Markoff of *The Times*, followed by Robert O'Harrow of *The Washington Post*, have revealed the extent of Poindexter's operation, but editorialists have not grasped its undermining of the Freedom of Information Act.

Political awareness can overcome 'Total Information Awareness,' the combined force of commercial and government snooping. In a similar overreach, Attorney General Ashcroft tried his Terrorism Information and Prevention System (TIPS), but public outrage at the use of gossips and postal workers as snoops caused the House to shoot it down. The Senate should now do the same to this other exploitation of fear.

The Latin motto over Poindexter's new Pentagon office reads 'Scientia Est Potentia' – 'knowledge is power.' Exactly: the government's infinite knowledge about you is its power over you. 'We're just as concerned as the next person with protecting privacy,' this brilliant mind blandly assured *The Post*. A jury found he spoke falsely before.

II

All the old debates are raised by these two cyber-stories:¹ the disappearance of privacy, the cover-up and betrayal of secrets, the excesses of police power, Big Brother, Brave New World. Despite their continuing and even increasing relevance today, in a 9/11 world, there is much more going on here than these tired discussions indicate. We are, it seems, in the midst of a major transition, underway for years now, from *disciplinary societies*, which were organized principally, although not exclusively, by *technologies of confinement*, to what Deleuze has called 'societies of control,' or what I referred to less eloquently several years ago as 'hypercontrol in telematic societies' (Deleuze 1995: 167–82; Bogard

1 A sign of the times: our second example is already dated. Having been stung by the publicity surrounding Total Information Awareness, the U.S. Congress has slashed, although not eliminated, its funding. Whether or not the specific program survives, however, is a moot point, since its logic is what matters, and what is immanent to the forms of state command and control today.

1996). Less and less do we see social control technologies bound to specific territories, or governed by conventional territorial logics. The old institutions of confinement – prisons, schools, hospitals, workplaces, families – are breaking down, as they say, and new forms of control are emerging that are ‘deterritorialized’ and ‘decoded,’ in a word, *destratified*. The exclusionary techniques perfected in prisons, schools, and hospitals from the nineteenth to the mid-twentieth century and described so well by Foucault are old hat, as he himself recognized. State and military power are going the way of power in the workplace and on the street, indifferent to location and time, to longitude and latitude, and to constraints of scale (Foucault 1979). Control is now an inclusive, continuous, and virtual function, traversing every level and sequence of events, simultaneously molecular and planetary, no longer limited by walls or schedules. It is *disarticulated* – no longer organized by a principle of hierarchical or stratified observation, nor by a centralized power or set of rigidly segmented operations. Confinement henceforth is abandoned in favour of simulated controls that work with far more smoothness than the old strategies of spatial and temporal division (Poster 1990; Der Derian 1992).

In one sense, this development marks a shift from material to immaterial forms of coercion, set in motion by the new technologies of information and communication management (cf. Zuboff 1988: 219ff.). Disciplinary societies, of course, are not without immaterial controls. Statistical summaries and comparisons, numerical formulations, and a whole differential calculus of bodies and spaces were essential concomitants of discipline in the nineteenth century. Territories in the modern era, beginning in that age, became *coded as spaces of probability*, and confinement not just a matter of brute restraint but of organizing a whole social machinery in probabilistic terms. How is the collective body to be deployed for optimal effort? How are its movements to be synchronized, serialized, and standardized? Discipline became a science and art of correlations, of the rational connection of forces and functions; statistics became its means and compository of knowledge. Together, they produced ‘efficient and effective’ control across a host of interconnected institutions, always trying to improve performance and raise the ‘confidence level’ of various outcomes, to force a multiplicity to function maximally as a unit. In the factory, in school, and at home statistics combined with discipline to regulate the problematic relation between the possible and the real. How could training join with precise observation and measurement to convert what is merely latent or pos-

sible into a manifest function? With the advent of modern statistics that relation became formalized as a calculus of probability. The real was reconceptualized as a degree of likelihood, and possibility, once the most open of concepts, was rethought in terms of normal curves, tests of significance, and rules of inference.

The nature of control, however, is changing. Control is no longer merely a question of probability or efficiency. Statistical control, no doubt, is still very much with us. But it is no longer mired in the problem of the possible and the real. Who cares what is possible, or what efficient means exist to realize it, when one commands the virtual? Virtual realities are the order today, and reality is not a matter of statistical inference but of pure deduction, its truth less an outcome of controlled experimentation than of formal modelling, pre-programming, and digitalization. Control today is more about scanning data for deviations from simulation models than patrolling territories. Territorial control – old-fashioned surveillance – is only the final step in a series of prior operations that now take place on a purely axiomatic level (Hardt and Negri 2000: 326-7). It is the simulated crime – the virtual and not the ‘possible’ crime – that drives policing today. It is the model of delinquency, not its ‘reality,’ that pre-structures the field of monitoring and intervention.

The goal of information and communication management technologies is simply to control as perfectly and seamlessly as possible all conceivable outcomes *in advance*. This is the logic behind data mining, profiling, cloning, scenario engineering, sim-training, and the like: to substitute proactive measures for the old reactionary regimes of spatial and temporal division. While they still utilize statistics, the projected line of such measures nonetheless is to eliminate the dialectic of the real and the possible, or the probable and the unlikely, and with it the whole discourse of efficiency. The smoothest form of control, according to this logic, is not merely ‘efficient,’ it is ‘prefficient,’ that is, it eliminates problems *before* they emerge, absolutely, before they even have the chance to *become* problems. This is hypercontrol, an ultimate resolution to the problem of efficiency, with all the techno-determinist, totalitarian, racist, imperial images associated with that phrase. It is the *pre-emptive strike*, to use the terms of the Bush doctrine for combatting terrorism: reaction precedes reacting, precession of reaction, finality of reaction.

On the other hand, and without the slightest contradiction, with hypercontrol, nothing is ever final. These systems of proactive reaction, for all their finalities, produce a state of existential and not simply

statistical uncertainty. We can imagine the indeterminacy for the inmate surrounding the exercise of panoptic power in the twenty-first century perfected to the point of its own disappearance. At first glance, such uncertainty is something like the conditions of 'ostensible acquittal' and 'indefinite postponement' Kafka describes in *The Trial* (Kafka 1968: 156–60). But it is even beyond this. In that tale, one never knows the crime of which one stands accused, or when one might be arrested and charged. The current situation rather points to an uncertainty that extends to the *possibility of crime itself*. It is easy to imagine Kafka in a not-so-distant world where crime is perfectly pre-empted and guilt and innocence have lost their meaning, where everything and nothing is a crime. This too is part of the logic of hypercontrol. Henceforth, crime does not exist in virtue of discipline, which seeks to know and control it (Foucault 1979), but in virtue of simulation, which derives it from a model and thus renders its existence undecidable (Baudrillard 1996: 1-8).

We cannot fall back on easy metaphors to explain these developments. This is not Big Brother. In a world already scoured of problems, who needs an omnipresent watcher? And it is not Brave New World either. The new controls do not work on the level of pleasure or pain, but on the *plane of desire*. There is nothing revolutionary about control that operates through pleasure: any psychologist can make a rat run a maze. Only desire, Deleuze and Guattari say, is revolutionary, and the unparalleled intensification of technical control we are witnessing today is nothing short of a revolutionary movement within – and against – desire (Deleuze and Guattari 1983: 222–62; Guattari 1995: 204ff.). In fact, it is so revolutionary that it eliminates the problem of control itself; at least, that is, its imaginary. 'Societies of control' have dreams of a time when they can get out of the control business altogether, when the ancient 'war between technology and desire,' as Sandy Stone (1995) puts it, is over and everything goes on automatic. This is the dream behind Spector and Poindexter's Total Information Awareness program, indeed the whole global program to simulate surveillance. Not to watch, not to have to react, not to police, not even to measure or correlate, but to sit back and let the system, itself a product of desire, indeed of a kind of delirium, take command.

Let's Begin Again

It used be that when you went to work, you were not in school anymore, or that when you went home, you were no longer at work

(Deleuze 1988: 40). Now, the lines that once served to divide the various regions and times of control from one another are dissolving into a single form capable of infinite modulations. Deleuze and Guattari call this form an 'abstract machine,' while Hardt and Negri refer to it as the increasing abstraction of panoptic mechanisms within global empire (2000: 330). Deleuze (1995) described the old logic of confinement versus the new logic of control societies this way: 'The various placements or sites of confinement through which individuals pass are independent variables: we're supposed to start all over again each time, and although all these sites have a common language, it's analogical. The various forms of control, on the other hand, are inseparable variations, forming a system of varying geometry whose language is digital (though not necessarily binary). Confinements are molds, while controls are a modulation, like a self-transmuting molding continually changing from one moment to the next ...' (178–9).

If we consider them from the perspective of sign systems rather than territories, disciplinary societies, Deleuze writes, have two poles: *signatures* that stand for individuals, and *numbers recorded in registers* that stand for the places of individuals in a mass (and form the basis of statistical correlations). There is no contradiction or opposition between these poles. Disciplinary societies exercise power in both ways, by individuation and massification. In control societies, however, this duality collapses in favour of a single system capable of finely modulated adjustments. To take a musical example, modulation changes the key signature and various registers of a composition but not its formal structure or the internal relation of its parts. Signatures and numbers, Deleuze claims, are replaced with *passwords*, which determine whether or not you have access to information. Passwords in turn are *codes*, and codes are the new language of control in digital systems. The switch to digital forms of control involves a massive abstraction and a corresponding homogenization, the disappearance of both individuals and masses into packets of information, into bits and signals and spectra. 'Individuals become "dividuals" [that is, subject to control at multiple levels of the organization of the individual], and masses become samples, data, markets, or "banks"' (180). The new forms of control inaugurate not simply changes in the extension but *intensive* transformations of disciplinary procedures. They represent a 'phase shift' in the history of the exercise of power, in the same sense that Foucault described the historical transformation from sovereign to disciplinary power (1979, 1980a). We could make an analogy between ice changing into water and

what happens when disciplinary societies become societies of control. Discipline becomes liquid: it flows into every hole, fills every crack, and leaves nowhere to hide.

In fact, the matter is more complicated, as Deleuze himself would admit. What distinguishes control societies from disciplinary societies is not really the use of codes, which historically exist in all societies, but rather the specific form of *decoding and recoding* that control societies initiate. Baudrillard (1983, 1995) has characterized the shift as the passage from systems of representation to systems of simulation, or as the metamorphosis of reality into hyperreality. What is decoded in this passage is the relation of equivalence between the sign and its object, or alternately, the difference between truth and falsity, reality and fiction, and so on. We do not have to accept Baudrillard's at times fantastic conclusions to acknowledge that a fundamental recoding of relations of knowledge and power – and pleasure/desire, to complete the triad constituted by Foucault – are underway in information societies (Foucault 1980a). What this recoding amounts to in the first instance is a destruction of the reality principle upon which modern forms of both knowledge and power base themselves and its reconstitution as hyperreality. Knowledge becomes information, power becomes display. Ultimately, however, this resolves into a fundamental *disarticulation of subjectivity*, that is, of the status of the modern subject, its relations of identity and alterity, its connections to the law, and so forth. The subject is recreated as a 'virtual subject,' such as we find on computer networks.

We must study control society in exactly the same way that Deleuze and Guattari analysed capital (1983: 222ff.), as a complex socio-technical machine that exerts control through decoding and deterritorializing subjectivity. Where this was previously the function of surveillance, and more broadly, discipline, today increasingly it is the function of simulation, in particular, the production of simulated or hybrid subjects occupying simulated spaces, and targets of simulated forms of control. Modulated and infinitely 'modulatable' subjectivities are indifferent to institutional setting (home, work, play, school), to time and place, and to all the outdated strategies of modern state power. Let me explain.

In their recent book *Empire*, Hardt and Negri, who draw heavily on Deleuze and Guattari, list some of the features of these new systems of control (2000: 22–30). They are decentralized yet global in scope. They are nonlinear. They are increasingly immaterial and invest immaterial forms of production such as knowledge production, publicity and com-

munications, service work, and so on. Rather than fixing identities in hierarchies and systems of exclusion, they operate through the proliferation and management of multiple and hybrid identities. For Foucault, a defining feature of discipline in the production of the modern subject was its recoding of multiplicities and differences to binary oppositions: self and other, normal and abnormal, sane and mad, healthy and sick, delinquent and non-delinquent (Foucault 1965, 1975, 1979, 1980a; cf. Canguilhem 1978; Deleuze 1988: 23ff.). Biunivocalism and the resulting essentialization of identities are the hallmarks of modern power. Societies of control, in contrast, exercise power precisely through the production of differences and the radical deconstruction of the binary basis of identity. What matters most in postmodern forms of control is the absolute fluidity of identity, the disappearance of the line between self and other, the seamless integration of bodies and information systems. The global production of capital increasingly demands flexible, modulated subjectivities, receptive to the appeals of mass marketing, the swings of opinion polls, and the decentring of management practices. It also demands rapid mobility of global workforces, and the obliteration of the distinction between labour time and leisure time, work and play, factory, school and home (Zuboff 1988; Hochschild 1997). These requirements are increasingly accomplished through the digitalization of control. Rejecting the claim of some postmodernist theories that difference, play, and hybridity are liberatory in themselves and can be opposed to the modernist production of essentialist identities, Hardt and Negri have argued that postmodern capital has promoted these qualities to further systematic control at the global level (2000: 142). Empire no longer functions, in other words, to suppress differences, but to produce and micro-manage differences at both the level of content and expression.

III

It is most useful to think about hypercontrol in terms of the destratification of social control. This may sound contradictory, because we normally associate social control with the production of strata, that is, with the constitution of hierarchies of power (race/class/gender, etc.), categorical exclusions (normal/abnormal, mad/sane, healthy/sick), and so on. In one sense, it is quite true that nothing has changed: control still operates to create and maintain systems of unequal power and value, even more so than in the past. As Deleuze and Guattari say, destratifi-

cation always entails *restratification* (1987: 54). The destratification of control we are observing with regard to disciplinary societies is perfectly compatible with its reestablishment on a different level, or within the same level in different ways. This is why there can be no universal definition of control, no single form. Its elements change, its historical function varies, in response to changes in its milieu that themselves involve other kinds of control. There is no 'dialectic of control' (see, e.g., Giddens 1983: 39), only shifting between states of more or less control, contests among types of control, states of relative order and disorder. Change or 'becoming' is always a movement between less and more articulated states. There is no escape from (re)stratification. In the words of Artaud, who hated all fixed or imposed forms, it is a kind of condemnation, 'the judgment of God' (Deleuze and Guattari 1987: 150; Artaud 1988). One resists its commands, but it always finds new ways to speak, to 'express' itself, always institutes other modes of restriction or limitation. Discipline may no longer depend on confinement. It is destratified today, but it restratifies within the mode of information, and it demands a new practice of resistance. In the same way, the panoptic model no longer governs surveillance, but restratifies it within the mode of simulation. To fully understand the transmutation of discipline and surveillance into hypercontrol and simulation we need to frame the question of social control within the broader problem of stratification.

Deleuze and Guattari define strata as phenomena of 'thickening' in a 'plasma field' (1987: 502). For 'thickening' we can substitute the concept of 'articulation' – both refer to a change of *content* (the manner in which unattached elementary particles are selected and connected), and to a change of expression (how that content becomes rigid, develops fixed functions, etc.) (40, 502). To articulate is to stratify. The plasma field – which Deleuze and Guattari sometimes refer to as the 'Body Without Organs' or, with a somewhat different and broader connotation, the 'Plane of Consistency' – consists of 1) unformed, unstable matters and flows, 2) free intensities (energy levels), and 3) singularities (threshold events or bifurcators). It is *disarticulated*, that is, destratified, lacking both the connections and successions of elements that form the content of a stratum, as well as the functional relations between parts that constitute its particular expressive qualities. Stratification is the movement from less to more articulated states, from less to more organized milieus, and always involves the loss of degrees of freedom. Think, for instance, of expression in formal languages, as progressive articulation eliminates useless phonetic, syntactic, and semantic elements. De Landa (1997:

227ff.) has analysed such linguistic processes in terms of creolization and pidginization, while Laporte (2000) has likened the stratification of expression in language to a process of sanitation, specifically, the elimination of shit.

Following tradition, Deleuze and Guattari distinguish three kinds of stratification: physico-chemical, organic, and social or alloplastic, referring to the capacity to bring about modifications in the external world (1987: 502). Of course, our concern is primarily with the last kind, particularly as it relates to technologies or 'machinic assemblages' of control. The three kinds, however, are inevitably found mixed together. Stratification in general, as a process of thickening or articulation, involves 1) giving form to matter, 2) imprisoning intensities, and 3) locking singularities into systems of redundancy involving repetition and succession. Foucault's work on the prison provides an excellent example of social stratification in these terms. It is a machine whose 'articulations' comprise social, organic, and physical elements. Developing a microphysics of space and time, discipline sorts bodies and the gestures they are capable of making into homogeneous collections that serve formal functions. It maximizes and concentrates the collective body's energies for the completion of functional tasks such as work through repetition, drill, exercise, and so forth (1979: 135ff.). More recent authors drawing on Foucault (e.g., Gandy 1993; Lyon 1994, 2001) have emphasized the sorting and categorization functions of surveillance as a concomitant of disciplinary practice. Surveillance is one of those assemblages that acts as a 'surface' of stratification, a machine where element-particles are tested and some are selected for inclusion in the stratum, others rejected. What are the 'elements,' the content, of social strata? Not race, class, and gender, which are levels of expression, second-order phenomena. At the level of content, the elementary particles of social strata are body parts, partial movements, skin colours, scars, bits of hair, vocal sounds, DNA, semen, marks, that is, almost any 'dividual' item amenable to selection, repetition, or useful connection in the production of individuals.

Deleuze and Guattari (1987: 40–1) emphasize that all strata, including alloplastic strata, are 'double articulations' (see also De Landa 1997: 60). The first articulation involves a process of 'sedimentation,' which involves the sorting of particles into similarly composed layers and the imposition of a statistical order of connections and successions among those particles. They call this first articulation a 'connective synthesis,' and it concerns the production of a stratum's content, or alternatively,

its primary coding. Deleuze and Guattari refer to 'statistical connection' in the sense of quantum relations, and not at all in the molar sense of statistical relations between already constituted strata, what they sometimes call 'overcoding' (1987: 62, 219). Again, discipline provides an example: Foucault refers to training the body in certain skills in this way, as a connection/coding of small movements. Here surveillance is a means of sorting particular quanta. The second articulation is a process of 'folding,' or what De Landa (1997: 60) has called 'cementing,' which establishes functional structures from collected elements and constructs molar compounds or expression. With regard to discipline, this articulation refers to the production of what are commonly, if inadequately, known as macro-institutional structures, that is, integrated functions and systems of rank. Surveillance, at this level, is concerned predominantly with the regulation of molar divisions of class, race, gender, and so on. Deleuze and Guattari sometimes call the second articulation the 'disjunctive synthesis' (1983: 12–3). It forms the rigid segments we often associate with formal structures, such as bureaucracies, as well as 'distributes centers of power and overcodes aggregates' (1987: 210–13). The distinction between the two articulations is real, not merely conceptual. In practice, however, they are always mixed up together. State power, for instance, operates at both levels of stratification, content and expression. It is interested in the molecular as well as molar organization of society, and it polices not only class, race, and gender, but body fluids and chemistry as well.

Social stratification, for Deleuze and Guattari, is a 'machinic assemblage,' or the product of a machinic assemblage. I must defer a discussion of this complex idea here, except to say that 'machinic assemblages,' in their sense, are more than just technical equipment, but include systems of knowledge and relations of affect (Guattari 1990, 1995; Guattari 1996: 236). They produce, or if you will, acquire, a subjectivity. The panopticon – as a material arrangement of space and time, a machinery of observation and ranking, a strategy of control, a means of gathering information, and an instrument for the distribution of desire and the production of truth – is an important kind of machinic assemblage, part architecture, part philosophy and design, part pleasure and dream. When we refer to surveillance as a machinery of social stratification and control, it is also always in this expanded sense of the machine, that is, a collection of tools, engineering plans, infused with a kind of passion around which a certain collective body and subjectivity develops. For Foucault (1979), such a machine is imma-

ment to the production of 'docile bodies' (level of content) and 'delinquents' (level of expression).

For Deleuze and Guattari, every machinic assemblage is territorial, and the first rule for analysing assemblages is to discover what territoriality they envelope, for there always is one. The territory of the surveillance assemblage is essentially the field of actions and passions, upon which it imposes form and serves as mechanism for their distribution into relatively homogeneous 'layers.' Foucault (1979), describes this in terms of technologies of examination, normalizing judgment, and so on. But the general principle behind his analysis remains one of confinement, the division of space-time into affective and somatic territories that cement relations of power and produce subjectivity. One must be in this place at this hour, one must be visible and open to inspection within these prescribed zones, one may not enter or leave this area without the right credentials: different sets of rules governing each territory, and rules that separate one territory from another. The body itself becomes a territory upon which relations of power are exercised. The body is mapped out, its lines of force and resistance carefully recorded. We are all familiar with this story. Surveillance and discipline at bottom enforce a territorial principle: the forces that control the terrain, the knowledge of its boundaries, its high points and centres, its relief, its exposed regions and blind spots, control what unfolds there, the movements of its populations, the flows of materials and concepts.

Every territorial assemblage, insofar as it imposes a form, also entails a code, that is, a rule of selection or strategy of repetition. *We cannot separate territorialization and coding*, they always go together in the production of strata (Deleuze and Guattari 1987: 41). Coding, like territorialization, occurs at both the level of content and the level of expression. Languages, for example, are coded both as connections/successions of vocal elements and as grammatical rules. With regard to content and expression, codes are like filtering machines. They separate noise from information, or nonsense from sense. They 'deduct' free elements in their milieu and arrange them in graded orders. De Landa draws the analogy of a stream that deposits variably sized particles of sediment in relatively homogeneous layers on its bed, which later become compressed into strata, so that the moving water acts as a sorting mechanism (1997: 60).

Thanks to Foucault, we are familiar with the coding schemes, the diagrams and 'abstract machines' at the heart of disciplinary regimes. They are the 'engineering' schemas that separate normal from abnor-

mal populations, truth from falsity, reality from illusion, sanity from madness. In all cases, the code organizes a territory of control and divides one population from another, or compounds forces to produce integrated functions. Inevitably, in modern Western societies, the code is formulated to place power firmly on the side of truth, normality, and the real. Foucault sometimes refers to technologies of the self, the obligation to speak the truth about oneself (Foucault, Lotringer et al. 1997). We have already seen how Deleuze sees a movement from the language of signatures and numbers in societies of confinement to the language of codes in societies of control. But it is more accurate to say that one set of codes has been exchanged for another, in a movement that involves a fundamental decoding of one system of control and its recoding into another, from signatures and numbers to passwords and models, from signs of identification and systems of registration to informed profiles and genetic markers.

Deleuze and Guattari in fact make this very case in *Anti-Oedipus* (1983: 222ff.). There, capital is depicted as an immense decoding (and deterritorializing) machine. Every movement – flows of money, of resources, of body parts, of waste, of signs, of art, of power – must be decoded and recoded to serve the *axiomatic* of capital, which beyond the simple production of surplus value involves the destratification of identities and destabilization of systems of signification. Indeed, it requires the destruction of its own axiomatic in order to reduplicate it on ever higher, more inclusive levels. *It is no different with the disciplinary assemblage*. It is willing to sacrifice its own principle in order to reconstitute itself on a more deadly and smooth plane, and at an even lower degree of intensity. For Deleuze and Guattari, this is capital as a cancerous body without organs, the zero degree of its own death that its experiments in the control of production and work always aim for, including the annihilation of living labour and its reincarnation in ‘cyborg work’ (Deleuze and Guattari 1987: 163; Bogard 1996: 98ff.). Discipline moves into cyberspace, it dematerializes; surveillance mutates into simulation, it becomes hyperreal; the hyperreal is deterritorialized, it is decoded space.

IV

When I wrote *The Simulation of Surveillance*, my biggest mistake was to give too much weight to the imaginary of surveillance, a move inspired, in part, by reading Baudrillard. I argued simulation was the ‘dream-logic’ or ‘imaginary (pataphysical) solution’ of the surveillance ma-

chine: flawless control, control in advance, and thus in effect the end of control (1996: 23). If surveillance was a strategy of visibility, then simulation was perfect exposure. If surveillance was continuous observation, then simulation was the fantasy of vicarious experience: not only can I see inside your head, but I can have the same perceptions and experiences as you. If surveillance was the 'recording machine,' then simulation was the illusion of perfect reproduction: in *Spector*, the image it recorded is an exact reproduction of the image produced.

To be sure, Baudrillard saw simulation not quite as an imaginary, but as the hyperrealization of the image, or the disappearance of what separates the image and the real, and that is an entirely different matter. The image, he says, conceals its 'murder of the real' as it itself becomes 'more real than real' (the 'simulacrum is real'). It is the 'perfect crime' because the new reality, the same in every detail, replaces the old, and no one knows the difference (Baudrillard 1996: 1–8).

My book described the simulation of surveillance as a logic of control that is materializing before our very eyes in postmodern society, ever more totalizing, intensive, and thoroughgoing. The notion of control in advance was meant to emphasize its pre-emptive aspect; Baudrillard called it simply the code, the substitution of signs of the real for the real itself (Baudrillard 1983). If simulation is the perfect crime, the disguised murder of the real, then the simulation of surveillance is the perfect police, viz., absolute control over the production of reality. Perfect crime and absolute control all wrapped up in one. This is hypercontrol, more controlling than control, and I simply meant the policing logic that inspires technologies like *Spector*, or the homeland security measures that John Poindexter dreams up for the U.S. government, or a host of other current measures designed to push surveillance to its limit – indeed, to move it beyond its limit, which is territorial and implies, as we have seen, a logic of confinement. Dream up a world where surveillance is perfect, where it operates as a constant and complete background to daily life. The new surveillance no longer targets bodies *per se* – messy, unpredictable things – but the information bodies produce or harbour about themselves, contained on their hard drives or in their genes. There are no secrets here; all codes conform to one code that decodes them all. The police do not wait for a crime to happen, because they already have staged it, using profiles or genetic indicators. This imaginary is even more poisonous, if possible, than Orwell's, because in it control itself finally disappears into a pure operationality against which all resistance is impossible.

As I have indicated, I now think that these developments in control are more usefully described through a model of destratification and restratification, or deterritorialization and reterritorialization, decoding and recoding. The simulation of surveillance is not a dream or imaginary state of perfect control. It involves real and imperfect strategies of extending social control beyond systems of confinement, deterritorializing the space of enclosure, allowing enclosure to operate, as it were, 'at a distance,' or rather without regard to distance, the model of *telematic or virtual confinement*. The classic example is the monitoring bracelets worn by sex offenders to track their movements outside the prison, but it is easy to think of even more radical devices such as genetic mitigations and implants. To be sure, what we are witnessing is a kind of dematerialization of control, but although it has an imaginary logic, it is a fully positive movement in relation to the positive forms of surveillance and discipline it is in the process of replacing.

It is in the realm of decoding technologies that the simulation of surveillance truly transports us into a new logic of control. Confinement has a code as well as a territory, and it is this code that is broken by simulation. It is the very idea of confinement, as a means of control, its 'reality principle,' that is at stake here. The old notion of confinement entailed a restriction on movement, a limitation to one place, and a separation of that place from spaces of free movement. Today, the system itself demands nomadic flows of populations and resources and therefore porous borders. Foucault (1979) had already suggested in *Discipline and Punish* that confinement need not be physical, that confinement is not even necessary for discipline (cf. also Deleuze 1988: 42). Although he does not exactly use these terms, the sense of this work is that the production of the 'modern soul' involves a kind of self-policing, without the need for walls. At the end of the book, in the story of the child of Mettray, Foucault portrays the individual who comes to love his confinement (1979: 293). But already the limitation to one place is inoperative here, and Mettray, symbol of the carceral society, could be anywhere. A kind of decoding of the model of imprisonment, of confinement and the carceral, was already at work at the very beginning of disciplinary societies in the form of an interiorization of control and of self-monitoring. Today, societies of control are embarked on the next stage of this process, which involves the cancellation of the interior/ exterior duality and, as Deleuze has noted, the replacement of the individual self as a locus of social control with the form of the modulated 'dividual': no longer a unified self, but a kind of fractal subjectiv-

ity, endlessly divisible, and upon which control can be exercised at will in any context and for any purpose. A dividual can be any partial object or event, at any scale of organization, human or otherwise.

We don't have to stray into science fiction to find a control mechanism that can fix the position of any element at any given moment – an animal in a game reserve, a man in business (electronic tagging). Felix Guattari has imagined a town where anyone can leave their flat, their street, their neighborhood, using their (dividual) electronic card that opens this or that barrier, but the card may also be rejected on a particular day, or between certain times of day; it doesn't depend on the barrier but on the computer that is making sure everyone is in a permissible place, and effecting a universal modulation. (Deleuze 1988: 182)

None of these changes in the nature of control suggest that the prison, or the carceral more generally, is disappearing. They are perfectly consistent with more prisons and even higher rates of incarceration. What is changing is the *diagram* of relations of power, that is, how control is engineered. While barriers and enclosures certainly still constitute the most visible aspects of control, there is no doubt that computerization and biotechnologies are increasingly virtualizing the space of punishment. It is not difficult to imagine a day when crime control is simply a matter of comparing genes to a model of genetic normality. Today, of course, it has become normal at any barrier – transactional, financial, political, educational, residential – to present one's dividualizing mark – password, DNA, retina, face, whatever – for comparison to a soon to be 'virtually centralized' database of models. One need not be aware of any of these developments, as they are being accomplished automatically, without the least disruption to the normal flow of events. It is not the prisons that will disappear. Soon it will simply be the people (or parts of people!) that do not quite measure up to the model that will disappear, even before they are born, before they are formed. For in the end, this is what the decoding and deterritorialization of control, the simulation of surveillance, come down to: not individualization, or even self-monitoring/self-confinement, but the pre-formation of molecules according to models that allow for their easy experimentation and quick recombination. We know these things are on the horizon or even closer. They are imagined in science fiction films like *Gattaca*, where 'invalids' are those with natural parents and the wrong genes, and the literature on

cyborgs (Haraway 1990).² Hardt and Negri refer to them as the global functions of 'biopolitical production,' Poster as the Superpanopticon, I call them as hypercontrol, and so on (Poster 1990; Hardt and Negri 2000). We are all talking about the same things in different registers, the information and simulation revolutions in control. It is almost enough to make one nostalgic for the old systems of discipline and surveillance.

V

It is easy to present the transformation of control in black-and-white terms. The destratification of confinement, the deterritorialization of enclosed spaces, and the simulation of surveillance suggests a kind of one-way process. In fact, the picture is tremendously complicated. In Deleuze and Guattari, we have seen, stratification, destratification, and restratification are entirely relative terms. Nothing is ever destratified without its elements immediately being restratified in other ways and on other levels. De Landa has suggested that the model of stratification is itself too linear and deterministic and has proposed a notion of 'meshworks' to account for systems of control that are nonlinear and self-organizing (De Landa 1997: 62). Such systems evolve 'autocatalytically' and are nonhierarchical and decentralized. They are composed of heterogenous elements and relations rather than the relatively homogeneous layers that comprise strata, which is not to say that they cannot give rise to stratified structures. There is a great deal of merit in such an approach. Machinic assemblages have rhizomatic properties, they are multiplicities and have fractal branchings ('any point can, and must, connect to any other'; Deleuze and Guattari 1987: 7). Surveillance-simulation assemblages are complicated arrays of sensors, storage and recording mechanisms, databases, channels, screens, but also models,

2 In *Gattaca*, 'invalids' are contrasted to 'valids' whose parents assured their genetic perfection before they were born. In the film, invalids occupy the bottom of the stratification ladder and do all the unpleasant tasks of society. Here, typical of Hollywood, we are still given a portrayal of a future as technologies of truth and hierarchies of power. One can just as easily claim that invalids represent the destratified segment of society, below the social ladder altogether, a pool of waste materials waiting to be recycled into useful products. One could also imagine a society where invalids are done away with altogether, unpleasant work is handled by machines, and genetic engineering is a purely formal operation with no relation to truth and falsity, validity and invalidity.

statistical probabilities, and feedback loops. They embody desire and dreams, theatrics and disguise, lines of flight and capture.

In Deleuze and Guattari, machinic assemblages are already presented as something different than strata (1987: 503). They have a side that 'faces the strata' – in that sense, they operate on the edges or faces of strata as apparatuses of capture, that is, as machines that collect and sort the elements that will become a stratum's content. This is their function of territorialization and coding. On the other hand, machinic assemblages are 'cutting edges of deterritorialization and decoding.' They are the movements 'by which one leaves the territory' and are composed of 'lines of flight' or resistances to capture (508). They operate on *surfaces*, between strata (epistatic phenomena), or between a stratum and a 'body without organs' (unformed matter, non-formal functions).³ This is why Hardt and Negri have likened them to 'smoothing machines,' and have written about the development of global capital and its variable machineries of control as a process of smoothing. Smoothing is destratification, the loss of substantive and functional coherence as, for example, when a hard metallic object is melted down into liquid form (Bogard 1996, 2000; Guattari 1995; Hardt and Negri 2000: 332). It involves a shift in the mode of control from transcendent operator to immanent force:

Capital ... demands not a transcendent power but a mechanism of control that resides on the plane of immanence. Through the social development of capital, the mechanisms of modern sovereignty – the processes of coding, overcoding, and recoding that imposed a transcendent order over a bounded and segmented terrain – are progressively replaced by an axiomatic; that is, a set of equations and relationships that determines and combines variables and coefficients immediately and equally across various terrains without reference to prior and fixed definitions or terms. The primary characteristic of such an axiomatic is that relations are prior to terms. In other words, with an axiomatic system, postulates 'are not propositions that can be true or false, since they contain relatively indeterminate variables. Only when we give these variable particular values ... do the postulates become propositions, true or false ...' Capital operates through just such an axiomatic of propositional functions ... [It] tends toward a smooth space defined by uncoded flows, flexibility, continued modulation, and tendential equalization. (Hardt and Negri 2000: 326–7)

3 On the difficult notion of surfaces, as both material and abstract features of strata, cf. Avrum Stroll (1988).

Foucault described with great subtlety how the transcendent order of sovereign power was replaced by the immanent order of discipline (Foucault 1979, 1980a, 1980b). With the advent of societies of control, the immanent order, articulated through the deployment (*dispositif*) of a series of stages of abstraction – what we call hypercontrol or simulation – finally loses its institutional walls. Again, Hardt and Negri write:

We can say that the *dispositif* (translated as mechanism, apparatus, or deployment) is the general strategy that stands behind the immanent and actual exercise of discipline. Carceral logic, for example, is the unified *dispositif* that oversees – and is thus abstracted and distinct from – the multiplicity of prison practices. At a second level of abstraction, the diagram enables the deployments of the disciplinary *dispositif*. For example, the carceral architecture of the Panopticon, which makes inmates constantly visible to a central point of power, is the diagram or virtual design that is actualized in the various disciplinary *dispositifs*. Finally, the institutions themselves instantiate the diagram in particular and concrete social forms as well. The prison ... does not rule its inmates the way a sovereign commands its subjects. It creates a space ... in which inmates discipline themselves ... Sovereignty has become virtual (but it is for that no less real), and it is actualized always and everywhere through the exercise of discipline.

Today the collapse of the walls that delimited the institutions and the smoothing of social striation are symptoms of the flattening of these vertical instances toward the horizontality of the circuits of control. The passage to the society of control does not in any way mean the end of discipline. In fact, the immanent exercise of discipline ... is extended even more generally in the society of control. What has changed is that, along with the collapse of institutions, the disciplinary *dispositifs* have become less limited and bounded spatially in the social field. (2000: 330)

I have been writing as if surveillance represents the territorial dimension of control assemblages, and simulation the deterritorialized aspect, but in fact that matter is much more complex. In practice, surveillance and simulation, although really distinct assemblages, always mutually implicate and complicate each other's operations and development. Monitoring and recording inevitably involve an element of stealth, and modelling depends upon the systematic collection and distillation of information. It would be a mistake to posit a simple linear relation between surveillance and simulation.

When Deleuze remarks that the diagram of confinement is giving way to the society of control, although he sees this as a historical development, he does not intend us to view the matter as a simple replacement of one form of power by another. Relations of power in every society are a matter of mixed constitution; control always operates as a function of relative degrees of territorialization and deterritorialization, coding and decoding. Every 'apparatus of capture' (surveillance) is crossed by 'lines of flight' (simulation), and everything that flees, at some point, becomes a trap.

The scope of surveillance, of course, like discipline, is far wider today than in the past. The powers of monitoring and recording have expanded exponentially in postmodern societies, to the point where virtually every space, interior and exterior, has become a space of observation (Dürrenmatt 1988). There is no denying that this expansion produces intense effects of stratification. Everything is exhaustively classified and categorized, exclusions are more detailed, space and time are more rigorously mapped and divided. At the same time, control is more decentred and dematerialized, exercised increasingly in virtual space-time, well in advance of the operation of assemblages of surveillance. Just as Foucault claims that power cannot be understood apart from resistance, the relation between surveillance and simulation is not one of contradiction, but of implication and complication. The task in any analysis of social control is to determine in as detailed a way as possible the concrete mechanisms of stratification and destratification at work, and how they transform the traditional practices of institutional confinement.

Ultimately, as Guattari has written, this is a problem in the production of desire and subjectivity (1996: 193–203). What is at stake in the emergence of the society of control is an exceptionally complicated redeployment of global relations of affect and identity. It is clear that whereas the strategy of discipline was to channel a multiplicity of affects into a single stream and to produce unified institutional identities, to separate normal and abnormal, sane and mad, true and false, today the task of control is to destratify desire and the subject, to multiply channels of affect and promote the emergence of hybrid subjects, to free information from its connections to signification and truth, and to virtualize relations of power, all within the axiomatic of capital. The simulation of surveillance is the effort to convert the revolutionary force of desire into the carefully regulated production of pleasures – mass media, computers, marketing, gaming – and the bounds of essen-

tialist identity and experience into a bestiary of grotesque hybrid forms – cyborgs, mutants, emoticons – receptive to the commands of global production. One can only imagine such an unimaginable project will fail.

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