

“Cut Off the Head of the King?”

Contemporary Surveillance Analysis and the Society of Control

Sean Erwin, Serwin@barry.edu

The panoptic architecture described by Michel Foucault in, *Surveiller et punir* (1976), has been a dominant paradigm in surveillance studies since its inception as an organized field of inquiry. However, since the early 2000s this paradigm has come under increasing criticism. Scholars like Kevin Haggerty, Richard Ericson, David Lyon and William Bogard argue that digital surveillance technologies do not simply multiply the optics in the panopticon. These commentators argue that surveillance technologies no longer seek to discipline bodies as much as they aim to sort and channel them through different surveillance environments, construct surveillant assemblages, or reinforce the simulation of surveillance.ⁱ

Seeking a paradigm better able to account for the relationship between software algorithms and big data, these commentators, among others, have turned to Deleuze and his 1990 essay, “*Post-scriptum sur les sociétés de contrôle*”,ⁱⁱ as a model better adapted than the panopticon to account for the capabilities of today’s digital networks.

In this paper I argue that Deleuze’s notion of the society of control may in fact be better adapted to account for the networked character of electronic surveillance than Foucault’s panopticon. However, I argue that Foucault himself was very aware of the limits of panopticism and that his contribution to surveillance studies must not be restricted to that model alone. During his 1977-78 lectures, *Sécurité Territoire Population*,ⁱⁱⁱ Foucault introduced a new paradigm – *les dispositifs de sécurité* – the security mechanism. This paradigm overlaps with Deleuze’s model in three important ways: 1) Security mechanisms operate at the level of populations (both human and non-human) and do not depend on closed spaces like the prison, classroom and barracks in order to function. 2) The security mechanism is not an intrinsically hierarchical form of coercion. Those engaged in the activity of surveillance can be as much subject to surveillance as those whom they observe. 3) Security mechanisms can function in tandem with disciplinary regimes. This allows Foucault to account for the fact that the disruptive effects of electronic surveillance networks do not replace disciplinary spaces, though they may capture disciplined bodies in the process of virtualizing them.

Further, Foucault’s account of the relationship between security mechanisms and disciplinary normation exceeds both the panoptic paradigm and Deleuze’s account of the control society in one important respect. For Foucault error and systemic conflict are part of the routine functioning of deployments of power, and this is particularly true in the case of security mechanisms. Contemporary surveillance networks exhibit tendencies toward false positives and false negatives as seemingly irreducible design features and with sometimes devastating consequences, as the nearly 90% error rate of U.S. drone strikes in Afghanistan, Pakistan, Yemen and Somalia demonstrates.^{iv} Therefore, Foucault’s account of the security mechanism suggests new directions for surveillance studies not found in Deleuze’s brief sketch of the control society.

Limits of the Panoptic Model

Three characteristics limit the effectiveness of panopticism as a framework for contemporary surveillance trends. First, panoptic surveillance is principally surveillance

of human beings by human beings. Second, panoptic surveillance is uni-directional. The surveillance is always *of* the inmate *by* the guard. Third, panoptic surveillance achieves its aim when the inmate becomes self-monitoring, self-directing their behavior according to the published norms of the institution. For Foucault, the inmate's awareness that they are under constant surveillance and their awareness of the norms for correct behavior are critical to this process.

Contemporary surveillance milieus undermine these basic panoptic structures and put into question the appropriateness of panoptic logic for understanding many contemporary surveillance environments. For example, weather patterns in the South Atlantic and the Caribbean are monitored in the United States by the government agency, NOAA – the National Oceanic and Atmospheric Administration. I appreciate this as a resident of Miami, since this surveillance assumes critical importance during hurricane season. Here weather surveillance and the storm simulations are generated through algorithmic climatic modeling are for the welfare of human beings but the surveillance is not conducted *by* human beings nor is it surveillance *of* human beings.^v

The global system for disease surveillance is also principally of non-human agents. Funded and managed by the CDC and WHO the Global Disease Detection Program monitors and records the presence of certain classes of microbes worldwide with the specific aim of monitoring zoonotic agents, i.e., originating from animal hosts. The success of surveillance of this type of microbe depends on isolating the microbes from their carriers, which can be both human and animal. However very little work has been done on the nature of the monitoring of these human/animal/microbial surveillance hybrids or the technological processes involved in their detection and documentation.

Second, surveillance is clearly no longer one way. For Bentham and Foucault, guards in the tower conduct surveillance of the backlit inmates whose activity in their cells is transparent to their gaze. However, in today's surveillance contexts the "inmates" not only hold the cameras but take footage of the guards themselves. For instance, in the wake of the 2013 Boston marathon bombing the F.B.I. actively solicited photos and video shot by citizens and private businesses with CCTV cameras on Boylston Street for the sake of generating leads in the investigation.^{vi} Also, from the 2014 Michael Brown shooting in Ferguson Missouri to the very recent shootings of Alton Sterling in Baton Rouge and Philando Castile in Minneapolis raw video recordings taken by ordinary citizens have led to cases of successful legal action against law enforcement officers, the restructuring of some police departments, and a sustained, national debate around policing and race in the United States.^{vii}

Thirdly, the effectiveness of the panopticon stems both from the visibility of the inmates to the gaze of the guards *and* the inmate's constant awareness of the institution's published directives for their behavior. The aim of this double awareness is coercive, prompting the inmate toward becoming self-directing, guiding their own behavior.

However, in the absence of the awareness of being watched or the presence of meaningful norms can one speak effectively, as Bentham and Foucault do, of surveillance acting as a machine for producing disciplined behaviors? In a government report submitted to the U.K. Home Office in 2005 on the efficacy of surveillance systems deployed in Great Britain, the authors conclude:

the majority of the schemes evaluated did not reduce crime and even where there was a reduction this was mostly not due to CCTV; nor did CCTV schemes make people feel safer, much less change their behavior.^{viii}

These conclusions are shocking for the country with the highest ratio of CCTV cameras to citizens in the world and with the longest running project in smart surveillance as a means of behavioral modification. Though the authors acknowledge that CCTV surveillance functioned as a limited tool in the hands of law enforcement as a means for evidence collection (after the fact) the analysts judged *the payoff even here was minimal*.^{ix}

Similarly American cities like New York, Chicago, and Atlanta have also experienced surprisingly limited results despite exorbitant ongoing expenditures on vast surveillance grids.^x As circumstances surrounding the March 22nd, 2016 Brussels airport bombing have revealed, unaccounted for elements as simple as a *nom de guerre*, a misspelled name, or a discarded jacket frustrate both the tracking and predictive features of such systems.

Even detecting individuals already flagged by the system by law enforcement can be notoriously unreliable unless the number of persons actually under surveillance is *greatly* limited *and* environmental conditions are optimum.^{xi} An older gentleman of Arab American descent has a much greater likelihood of triggering calls for more scrutiny by the system than a 20-something Caucasian woman *already* flagged by the system's software as a person of interest.^{xii} As Introna and Wood (2004, 188) have shown the error rate for the software that comes standard with CCTV cameras increases considerably in the kinds of conditions one might find in an urban setting or a busy airport.^{xiii}

Deleuze and Surveillance

In the "*Post-scriptum*,"^{xiv} Deleuze argues that for well over a century processes of social ordering have been undergoing a decisive shift, away from architectures of discipline toward a surveillance-based, control society.^{xv} Where disciplinary societies mold subjects in analogically discrete, productive spaces, control societies modulate individuals through digitally continuous, metaproductive environments.^{xvi}

In societies of control, both similarities and differences among people are reduced to variations in digital code. In the contemporary surveillance context, knowing the body requires its breakdown into a series of discrete data flows that act as a supplement to the flow of bodies through the surveillance environment. For this to happen the flesh and blood body must have already been made, as Deleuze terms it, *dividual*.^{xvii} This *dividuality* represents a shift away from panoptic surveillance to digital surveillance, and it happens along two registers: First, biometric interfaces – from facial recognition cameras to iris scanners – are meshed with parts of bodies, transforming them into packets of code. Second, the algorithms driving these systems lay out the options available to encoded bodies within networks *in advance*.^{xviii}

Flows of flesh and blood bodies through the surveillance context are digitally 'striated',^{xix} fixed temporally and spatially by the different devices and processes whose co-functioning defines the assemblage.^{xx} The effectiveness of contemporary surveillance relies on mediating behaviors of real life bodies through networked interfaces that connect

the body to webs of information through, for instance, the fingerprint scan taken at the airport to the always-on location tracking many smart phone apps perform automatically.^{xxi}

For surveillance commentators like Kevin Haggerty and Richard Ericson, see advantages to Deleuze's paradigm with its clear capacity to accommodate rhizomatic linkages,^{xxii} cyborgic human/machine interfaces,^{xxiii} and the ability to explain features shared by open networks.^{xxiv} The operations of sorting, sifting and distributing at the heart of digital surveillance systems routinely adjust the patterns of lived life according to constantly changing criteria that shift as Deleuzian "dividuals" pass through distinct institutional environments.

However, a key feature of today's surveillance networks involves the network's predictive functions^{xxv} as they trigger alerts about specific individuals at least in part on the basis of physical characteristics like skin color, gender and age that often have no intrinsic connection with the behaviors for which the surveillance is presumably being conducted in the first place.^{xxvi} Due to this reliance on dividual characteristics even the most sophisticated surveillance networks have shown an astonishing tendency toward error. For instance, surveillance systems installed at Palm Beach airport and Tampa Bay stadium in Florida were finally dismantled because, after two years, both systems had failed entirely to register a single genuine security threat while, at the same time, generating an unending stream of false alarms.^{xxvii}

Issues occur as well where government interests converge with this fallibility of surveillance networks. Take, for instance, the August, 2015 bombing of the Erawan shrine in Bangkok. A high traffic tourist destination in Bangkok's exclusive Chitlom shopping district the area is saturated with CCTV camera coverage. Despite the immediate availability of surveillance photos that showed a curly dark-haired male in yellow t-shirt and dark glasses leaving a backpack at the scene, basic aspects of his identity could not be identified with any precision by the Thai security services. On the basis of surveillance footage, Bangkok police had no idea who the bomber was, senior officials acknowledging they were unsure whether the suspect was Thai or foreign, perhaps wearing a wig or fake nose to make identification difficult. In the wake of a second attempted bombing in the area pressure mounted to produce suspects. Though arrests were made and two ethnic Burmese migrants charged with the bombing the case has produced a cascade of doubts due to inconsistencies in the confessions, failure of DNA matches of the two with key evidence found on the scene, that make it highly unlikely that Thai authorities are prosecuting the right individuals.^{xxviii}

The control society certainly has advantages over the panoptic model for explaining how bodies flow through intrinsically open surveillance networks. However Deleuze does not consider here the significance of the routine failure of digital surveillance to function according to design. If due weight is given to the ubiquity of the false positive (and, also, presumably, the false negative) across surveillance networks, it becomes clear that the *practical effect of these systems* is not to determine potential threats.

Control Society against Panopticism

Due to the structure of their programming electronic surveillance technologies are open enough to be applied to non-human actors in open environments and flexible enough to track every position no matter its placement within institutional hierarchies. Scholars like Haggerty point to these advantages and claim that changes in surveillance technology

have arrived at the point where the panoptic model impedes understanding of contemporary surveillance environments.

On the other hand, theorists like William Bogard, though agreeing with the basic premise that panoptic logic no longer functions according to the strict architectures laid out by Bentham and analyzed by Foucault, trace a line of continuity between the disciplinary projects described by Foucault and the ongoing project of *simulating* surveillance key to developments in today's surveillance technology. As Bogard observes, ongoing projects to *simulate* surveillance in some cases now compete with direct, hands on observation. For instance, criminal profiling competes with the practice of police officers conducting a stake out just as genetic profiling competes with medical diagnosis of observed symptoms in prompting some surgical interventions.^{xxix} Nor do elementary students need to suffer bad grades or fail out altogether before being medicated against the development of ADHD given juvenile profiling in early grades for risk factors like the death of a parent or divorce in the family.

Haggerty and Ericson, following Deleuze, argue that the structures of the control society dismantle, discard and replace disciplinary power. Yet, commentators like Bogard, as does - I argue - Foucault, conceive a more complex set of relationships at work here between the panoptic gaze and the structures at the root of contemporary surveillance.

Foucault and the Security Measure

In the second and third lectures of his 1978 lecture series *Sécurité Territoire Population*, Foucault describes how the notion of population becomes organized as a correlate of bio-power and subject to intervention by security mechanisms. For Foucault the emerging practices of inoculation and vaccination in the 18th century signaled a decisive shift in medical practice away from disciplinary approaches to disease rooted in the practices of separating and containing the contagious. This shift occurred in tandem with the formulation of a new kind of object for intervention - *the population*. For Foucault the new responses of inoculation and vaccination to outbreaks of smallpox aim at the progressive normalization of a population by positioning aspects of its phenomena in relationships of mutual support and cancellation of one another.^{xxx} In the security approach to smallpox, it was reasoned that the disease must be allowed to show itself so that specific groups (like infants and young children) could be targeted for inoculation reducing both their mortality rate and, at the same time, the rates of contagion and mortality in the population as a whole.

By not attempting to eliminate the disease by directly targeting individuals, the strategies of inoculation and vaccination exhibit the characteristics of a security mechanism. Unlike disciplinary techniques, security mechanisms incorporate a certain amount of uncertainty, error and disorganization in their approach. However, Foucault consistently argues, in these lectures and elsewhere, that different regimes of power do not simply replace or eliminate one another. In the lectures of January 18th and the 25th of *STP* Foucault emphasizes that disciplinary power, as it became organized, did not simply replace sovereign power *nor did the ascendancy of security mechanisms cancel out disciplinary practices*. As he states:

Quote 1

“...the [sovereign] law prohibits and discipline prescribes and security - without prohibiting or prescribing yet while still eventually furnishing itself with some instruments of

prescription and prohibition - security functions by responding to a reality in such a way that this response cancels out this reality to which it responds...”

“...la loi interdit, la discipline prescrit, et la sécurité, sans interdire ou sans prescrire, éventuellement cependant en se donnant quelques instruments du côté de l’interdiction et de la prescription, la sécurité a essentiellement pour fonction de répondre à une réalité de manière à ce que cette réponse annule cette réalité à laquelle elle répond...”

(*Sécurité Territoire Population*, 2004, 48)

Foucault’s description here is consistent with, for instance, his account in, *Surveiller et punir*, where he writes that disciplinary power does not simply replace or cancel sovereign power but modifies it as it grows in strength.

Quote 2

“The power of the Norm appears throughout the disciplines. Is it the new law of modern society? Let us say rather that since the eighteenth century it has joined other powers while imposing on them new delimitations.”

“Apparaît, à travers les disciplines, le pouvoir de la Norme. Nouvelle loi de la société modern? Disons plutôt que depuis le XVIIIe siècle, il est venu s’ajouter à d’autres pouvoirs en les obligeant à de nouvelles delimitations.”

(*Surveiller et punir*, 1975, 186)

As Todd May and Ladelle McWhorter argue recently (2016), over 25 years after the publication of the *Postscript* there remain a number of institutions in our neo-liberal world solidly oriented toward disciplinary normation. These include the militaries of most nations, many systems of pre-university education, and some therapeutic institutions. Further, both despite and due to globalization, in the so-called Third World and the leftover factory areas in First World countries, factory discipline (and panoptic surveillance) are still alive and well.^{xxxii}

Conclusion

In his 1990 essay Deleuze seems to clearly argue that disciplinary society is being replaced in favor of the society of control. In the essay Deleuze gives no indication that he is aware of Foucault’s thinking concerning security mechanisms nor that he shares Foucault’s view that security mechanisms can circumscribe, cancel and redefine *but also* co-exist with and overlap both sovereign and disciplinary regimes of power. Further, on the issue of the control society, Deleuze seems to read Foucault as himself adopting his own position. In remarks made in an interview with Antonio Negri on the control society that were published with the *Postscript* in the Spring 1990 issue of *Future Antérieur*, Deleuze states:

Quote 3

“It is certain that we are entering the societies of control, which are no longer exactly disciplinary. Foucault is often taken as the theorist of disciplinary societies... But, in fact, he was one of the first to support that we're in the process of moving away from disciplinary societies; rather, we've already left them behind. We're moving toward control societies that no longer operate by enclosure but through continuous control and instant communication.”

“C’est certain que nous entrons dans des sociétés de contrôle, qui ne sont plus exactement disciplinaires. Foucault est souvent considéré comme le penseur des sociétés de discipline...Mais,

en fait, il est l'un des premiers à dire que les sociétés disciplinaires, c'est ce que nous sommes en train de quitter, ce que nous ne sommes déjà plus. Nous entrons dans des sociétés de contrôle, qui fonctionnent non plus par enfermement, mais par contrôle continu et communication instantanée.” (Pourparlers, 2003, 238)

Here, in this interview, Deleuze clearly acknowledges that Foucault himself saw this reorganization of disciplinary power occurring. However, for readers of *Securité Territoire Population* and the following lecture series, *La naissance du biopolitique*, Deleuze does so in terms that diverge from Foucault's analyses.^{xxxii} During this interview with Negri, Deleuze speaks of control society not only dismantling and reorganizing *but leaving behind and replacing* the disciplinary society. He speaks in similar terms in the *Post-scriptum* at several points. For instance, when he states:

Quote 4

“...disciplinary societies – we are already no longer these, we have ceased to be them. We are in a generalized crisis of all the milieus of enclosure - prison, hospital, factory, school family...competent ministers never cease announcing supposed necessary reforms...but each one knows that these institutions are finished, . It is a matter of managing their agony and of keeping people occupied until the new forces are installed that beat at the door. This is the control society which is in the process of replacing disciplinary societies.”

“...les sociétés disciplinaires, c'était déjà ce que nous n'étions plus, ce que nous cessons d'être. Nous sommes dans une crise généralisée de tous les milieux d'enfermement, prison, hôpital, usine, école, famille...Les ministres compétents n'ont cessé d'annoncer des réformes supposées nécessaires...mais chacun sait que ces institutions sont finies, à plus ou moins longue échéance. Il s'agit seulement de gérer leur agonie et d'occuper les gens, jusqu'à l'installation de nouvelles forces qui frappent à la porte. Ce sont les *sociétés de contrôle* qui sont en train de remplacer les sociétés disciplinaires.”

(Pourparlers, 2003, 242)

Here both his reading of Foucault on the issue of the relationship between sovereign, disciplinary and security mechanisms and his predictions of the direction of the resolution of their points of conflict have still not (at least *yet*) come to pass.^{xxxiii}

ⁱ For instance, Bousquet (1998); Butchart (1996); Cohen and Scull (1983); Cohen (1985); Gordon (1987 and 1990, 438-451); Horne and Maley (2014); Koskela (2003); Mann, Nolan and Wellman (2003); Marx (1988); Mathiesen (1980); Poster (1990). See Bogard (1996, 2006), Lyon (2003) and Haggerty and Ericson (2000) for alternatives to the panoptic model.

ⁱⁱ Deleuze (2003) 240-247.

ⁱⁱⁱ Foucault (2004).

^{iv} See for instance, http://www.huffingtonpost.com/entry/civilian-deaths-drone-strikes_us_561fafe2e4b028dd7ea6c4ff and <http://www.washingtontimes.com/news/2015/oct/15/90-of-people-killed-by-us-drone-strikes-in-afghani/>. Also, <https://www.theguardian.com/us-news/2014/nov/24/-sp-us-drone-strikes-kill-1147>. On the reworking of the imaginative geographies between U.S. “homeland” cities and those Arab cities purported to be terrorist threats, See S. Graham, “Cities and the ‘War on Terror’”, *International Journal of Urban and Regional Research* (June 2006, 255-76).

^v Activists and residents involved in the ongoing conflict between South Florida beach development and sea tortoise reproduction know that making a successful case against developers depends on

successful surveillance of turtle nesting patterns. For instance, electronic monitoring efforts of loggerhead hatches are critical to determining the effectiveness of measures taken by developers to reduce the effect of residential and commercial night lighting on disoriented hatchlings.

^{vi} For instance, it is a simple task to turn up dozens of news stories on the Boston marathon bombing that claim surveillance images furnished by the public cracked the case. On closer inspection these claims are both accurate and inaccurate. It is in fact the case that the surveillance images released by the FBI on April 18th 2013 played a key role in events leading to the death and arrest of the brothers. However, they did not play a key role in detecting and identifying the suspects. The FBI had isolated images of two persons it considered key suspects early on. However it initially decided not to release the images because they were both low resolution and taken in poor lighting conditions, many having been retrieved from privately-owned CCTV cameras by businesses on Boylston Street. Despite having some frontal shots, none of the images were of sufficient quality even to conduct a facial recognition search of Federal databases.

The main strategy behind the FBI release of images was to stem the tide of photos and video flooding social media outlets by the general public. On open source news sites like Reddit marathon spectators were posting images of anyone with a backpack, images of suspicious persons often circled with red ovals. Unsurprisingly, the predominance of circled images were of dark-skinned people in the marathon crowds. This trend culminated in the New York Post publishing their April 18th issue with the front page headline, "Bag Men: Feds Seek these two pictured at Boston Marathon". The article erroneously identified Salaheddin Barhoum and Yassine Zaimi as the supposed bombers despite statements to the NY Post by the FBI that the men in the picture were not persons of interest. (4/18/2013) By publishing the images culled from private CCTV cameras the FBI had hoped that the grainy blotches, that showed more or less adolescent, young adult men dressed in black, one with a hat and one with wavy hair might calm the social media frenzy and perhaps even trigger a good tip, which in fact *they did not do*.

However, they did trigger a reaction from the Tsarnaev brothers. When the brothers saw these grainy images they panicked and thought they were closer to being caught than they actually were. This led to the brothers killing a police officer on the MIT campus, a standoff of the two brothers with police, the death of Tamarlin Tsarnaev in a shootout and the arrest of Dhokarev on the basis of a tip from a Boston resident that the younger was hiding in a boat in her backyard. The use of surveillance footage taken by private citizens either through private CCTV cameras owned by private businesses or smart footage taken at the scene played a key role in the narrative that unfolded during the Boston Marathon bombing investigation, often in unpredictable ways.

^{vii} In 2014 in Ferguson Missouri, a bystander's video showed Michael Brown, 18, lying in the middle of the street after being shot and killed by a white officer. The images acted as a catalyst for the first of the riots in Ferguson. Photos and videos taken by ordinary citizens continued to play a key role in the riots that ensued over the next two years. After a video taken by a bystander surfaced of a South Carolina officer shooting Walter Scott in the back that officer was charged with murder. A video taken of former tennis star James Blake outside a Manhattan hotel in September was key in a finding that the officer used excessive force. Surveillance footage at a car dealership was key to the firing of the police officer who shot and killed Christian Taylor in August.

^{viii} Gill and Spriggs (2005) p. 115. See also Home Office/ACPO (2007) pp. 4-5 and Squires (2010).

^{ix} Because it developed as a national experiment the system is plagued by the kinds of inefficiencies that often confound roll-outs of technology. Vast disparities in coverage range from states of surveillance saturation that effectively push criminal activity from one neighborhood to other, less covered, areas essentially relocating criminal activity from one neighborhood to another. Different models of cameras, incompatible software systems and difficulties linking databases from competing vendors reduce the effectiveness of the UK's national surveillance grid – better thought of as discrete *grids* - considerably.

^x In 2011 the roll-out of Atlanta’s Operation Shield came with a long list of claims made by public officials and surveillance vendors. Conceived as a surveillance network composed of both private and public sector cameras monitored by a video integration center (VIC) *Operation Shield* was intended to, “use software that can identify suspicious activity and guide officers right to the scene of a crime as it’s occurring.” (Garner, 2011)

Two years after roll-out expectations and despite a doubling of Atlanta’s surveillance network operators no longer claim that the network will prevent crime much less record criminal acts as they occur. The system was discovered to be, “more useful for discovering details after the fact”. Where claims were made in 2011 that software would direct cameras with Gun Spotter software to cue up to the sound of gunshots now the goal of developers is to eventually coordinate camera coverage with incoming 911 calls. Though the project continues to receive support *Operation Shield* has only pushed some forms of crime out of the narrow corridors of coverage for privileged neighborhoods into less affluent areas.

^{xi} Introna and Wood (2004) 184-194. Also Gilbert (2010)

^{xii} Introna and Wood (2004) 184-194.

^{xiii} Thus, it may come as little surprise that being young, male and black in Britain ensures a higher rate of scrutiny by the UK’s 4 to 6 million street-mounted CCTV cameras (Gill and Spriggs, 2005, 116).

^{xiv} “*Post-scriptum sur les sociétés de contrôle*” was originally published in *Futur antérieur*, (1) Spring 1990. It was later reprinted in the collection, *Pourparlers* (2003) 240-244.

^{xv} “Dans les sociétés de contrôle, au contraire, l’essentiel n’est plus une signature ni un nombre, mais un chiffre : le chiffre est un mot de passe, tandis que les sociétés disciplinaires sont réglées par des mots d’ordre (aussi bien du point de vue de l’intégration que de la résistance). Le langage numérique du contrôle est fait de chiffres, qui marquent l’accès à l’information, ou le rejet. On ne se trouve plus devant le couple masse-individu. Les individus sont devenus des «dividuels», et les masses, des échantillons, des données, des marchés ou des «banques»”, Deleuze (2003a) 241. See also Deleuze (2003b).

^{xvi} For Deleuze, a panoptic space like the prison is also a kind of surveillant assemblage but one that attempts to close itself off to connections with outside spaces. As Bogard (2006) describes it: “A machinic assemblage joins or separates diverse material flows. For example, the prison, as Foucault sees it, is a territorial machine that works by enclosing and partitioning space, segregating bodies, or again, by connecting them together by larger, functional ensembles, coordinating their corrective flows, and so on”. (104)

^{xvii} Societies of control function through mechanisms that report the positioning of any element within an open environment at any given instant. For Deleuze, coding is crucial to this shift because codes are at the basis of predictive systems. These systems anticipate events (like crimes), conditions (like ebola), and behaviors (like smart phone consumption) that have yet to occur. Further, the old world of surveillance dependent on the layout of the city has now been transformed by what Virilio calls *audio-visual protocols*. (Virilio, 1997, 383) For Virilio the key to contemporary urban surveillance is *prospection*, or vision in advance (Virilio. 1989). The function of this kind of surveillance is not to discipline bodies but to sort them, subjecting them to regular events of interruption and re-direction as they pass through the surveillance context.

^{xviii} As Bogard (2006) states: “In its more advanced forms, it [the surveillant assemblage] is like a ‘pre-recording’ machine that can capture performances ‘in advance’ (in the same sense clones are like pre-recorded life forms, or profiles are pre-recorded statuses or identities”. (107)

^{xix} *Striation* refers to the process of introducing breaks and divisions into otherwise free flowing phenomenon. See Deleuze and Guattari (1987) 385.

^{xx} As an *assemblage*, surveillance environments constitute a collection of objects – cameras, fingerprint scanners, databases, tip hotlines, facial recognition algorithms etc – whose unity comes from how these different objects function together to shape a field of unified effects. For Deleuze

and Guattari any discrete assemblage is itself composed of multiple assemblages, which, in turn, are multiple. See Patton (1994) 158.

^{xxi} These processes operate from scattered centers of calculation, which, for Haggerty and Ericson (2000) include sites like forensic laboratories, statistical institutions, police stations, financial institutions, and corporate and military headquarters; as they describe them: “In these sites the information derived from flows of the surveillant assemblage are reassembled and scrutinized in the hope of developing strategies of governance, commerce and control”. (613)

^{xxii} See Haggerty and Ericson (2000) and Haggerty (2006).

^{xxiii} For the surveillance assemblage, the human body is increasingly then also a cyborg, or a flesh-technology-information amalgam. See Haraway (1991) chapter 18. As a collection of processing devices, the surveillant assemblage renders digitally ‘visible’ a host of flows from auditory, olfactory, tactile, chemical, visual, ultraviolet and informational inputs.

^{xxiv} Haggerty and Ericson (2000) 612. See also Bogard (2006); Galloway (2004) 13; Lyon (2003) 22-24 and (2006) 86-89.

^{xxv} As Newman (2009) states: “Control techniques are used not so much to identify a particular individual, but rather to identify a future risk and to attach this risk to certain types of individuals”. (106)

^{xxvi} Introna and Wood (2004) 182, 184-194. Also Gilbert (2010)

^{xxvii} See Trigaux (2001), Canedy (2001), Scheeres (2002) ad ACLU (2002).

^{xxviii} Assuming that there were at least some sought-for individuals among the populations under surveillance and that the systems failed to trigger an alert on any person of interest over the time of their deployment then the chances are considerable that the system issued also *false negatives* as well as false positives.

^{xxix} Angelina Joli’s decision to receive a double mastectomy on the basis of the mutation in her BRCA1 gene is a case in point. See, <http://www.dailymail.co.uk/health/article-3252402/Angelina-Jolie-effect-real-Actress-double-mastectomy-reconstruction-raised-awareness-cancer-treatment.html>

^{xxx} As he states: “By definition, discipline regulates everything. Discipline allows nothing to escape. Not only does it not allow things to run their course, its principle is that things, the smallest things, must not be abandoned to themselves.” On the other hand, security mechanisms: “do not tend to the nullification of phenomena in the form of the prohibition, ‘you will not do this,’ nor even, ‘this will not happen,’ but in the form of progressive cancellation of phenomena by the phenomena themselves.” (2007, 66)

^{xxxi} As they conclude: “...disciplinary normalization will not disappear as long as there are institutions and well-organized groups whose interests require its continuation.” (252)

^{xxxii} See Foucault’s analysis of Becker’s approach to the prevention of criminality at the level of the population versus the disciplinary regime Foucault had described in *Surveiller et punir*.

^{xxxiii} In conclusion the reading of Foucault and Deleuze as each forwarding opposing paradigms has set up blockages in the field of surveillance studies. It obscures the many points of valuable contiguity between the Deleuzian notion of control in general and the society of control in particular with Foucault’s reflections on *gouvernementalité* in general and the Foucauldian security mechanism in particular. Thought outside their opposition, Both offer critical resources for the development of new trajectories for critiquing contemporary surveillance phenomena.