Jean-François Lyotard and the Inhumanity of Internet Surveillance

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1. Introduction

As we have moved towards an information society so too has surveillance become increasingly informational in its object and operation. In our day-to-day exchanges we are uploading and sharing valuable quantities of information, making possible unprecedented levels of surveillance. David Lyon (1994) notes that surveillance in this context is about storing and processing personal information. This definition places a desirable emphasis on information storage, highlighting that surveillance is not just about how information is used but also the amassing of it in the first place. With this in mind, Gary T. Marx's (2002) characterisation of the "new surveillance" as the use of technologies to extract personal data adds a pertinent dimension; surveillance is not merely "snooping" but any technological means of extracting exploitable information from users – this, I suggest, is just as applicable to social networking as it is to more cloak-and-dagger methods. With the rise of new media, or web 2.0, surveillance hides in the open; we are seduced into giving up the information in the name of social commerce, creating what Mark Andrejevic (2007) calls a digital enclosure from which information can be extracted for corporate gain. On top of this, many of the surveillance technologies used in this context, such as "social ad" generating programs, operate algorithmically, processing information according to set parameters with minimal human input. A significant change in surveillance today can be detected, as visual modes are replaced with algorithmic software.

What we need are new theoretical tools for framing this shift in emphasis. In what follows I will argue that the work of Jean-François Lyotard in *The Inhuman* (2004) will assist us in keeping up with the advances in surveillance technologies. What Lyotard offers that, say, Michel Foucault does not is an emphasis on the informational. As Mark Poster (1990, 91) notes, Foucault had failed to take notice of new forms of surveillance and, I would add, the panoptic emphasis on the visual should be seen as today limited in scope. By drawing out the key arguments and concepts in Lyotard's *The Inhuman*, I will demonstrate

that this remains an important text for understanding the conditions of our information society in general, and new forms of surveillance in particular. Lyotard highlights the complicity of new technologies with capitalist extension whilst raising urgent ethico-political problems surrounding the impact of this dynamic and the inhuman functioning of new technologies (their difference and indifference to the human). This will provide a framework for a critique of surveillance through social media focused on its impact upon what it means to be human. I will argue that such surveillance is inhuman, serving to extend the capitalist system according to a dangerous logic – performative, heterophobic – whilst making the user complicit in the whole shoddy process. The approach here is theoretical, with examples of surveillance in web 2.0 (as well as other relevant examples) used illustratively.

2. Lyotard and the Inhuman

First published in 1979, Lyotard's *The Postmodern Condition* has been his most famous and most commented-upon text, a work that has been taken up by sociologists, philosophers and literary theorists, amongst others. However, this popular focus has as its consequence the neglect of another key text, *The Inhuman*, published nine years later. This text is largely philosophical in nature and has yet to have the same impact in the social sciences as its more heralded predecessor. In this section I will introduce Lyotard's work in *The Inhuman* in order to show its usefulness for understanding surveillance in our information society (see also Gane 2003 for a reading of this text that demonstrates its relevance to contemporary media theory).

Of course, *The Postmodern Condition* remains an important text and, before proceeding, I will highlight two elements of it that both illuminate a reading of *The Inhuman* and augment an approach to surveillance. First, Lyotard introduces "performativity" as the operating principle of what he calls "techno-scientific capitalism" (the combined force of technological and scientific R&D and advanced capitalism). Performativity is the optimization of the relationship between input and output (Lyotard 2005, 11). That is, the system works to constantly optimize its performance and the only legitimation for the power that it possesses is its very efficiency (Lyotard 2005, xxiv). The decision-makers – states but, increasingly, corporate leaders – apply "input/output matrices" to all elements of their purview and, also, to "us" allocating "our lives for the growth of power" and introducing a level of terror to the performance: "be operational […] or disappear" (Lyotard 2005, xxiv). This operation is nothing to do with justice or truth – or any of the key tenets of humanist progress – but is purely technological:

> [Technologies] follow a principle, and it is the principle of optimal performance: maximising output (the information or modifications obtained) and minimizing input (the energy expended in the process). Technology is therefore a game pertaining not to the true, the just, the beautiful, etc., but to efficiency: a technical "move" is "good" when it does better and/or expends less energy than another (Lyotard 2005, 44).

Everything must be translated into quantities of information, which are easily communicable, in order to gain optimal performance through efficiency. Anything that cannot be translated is abandoned (Lyotard 2005, 4). This leads to "the hegemony of computers" (Lyotard 2005, 4), the rule of performative logic and the dominance of a computerized form of capitalism. Here Lyotard identifies complicity between new technologies and the capitalist system, both sharing the same logic and the former allowing for the optimized performance of the latter. Deeply wary of this, his second useful move is

to pose the question: "who will know?" (Lyotard 2005, 6). That is, who can acquire the information? Who decides what of this proliferating information is true? Who gets to make the decisions based on this information? Who even knows the decision to be made? "Increasingly, the central question is becoming who will have access to the information these machines must have in storage to guarantee that the right decisions are made" (Lyotard 2005, 14).

The turn to *The Inhuman* is motivated by the more nuanced work on these two elements and by the more critical reading Lyotard gives, utilizing the notion of inhumanity to pose ethico-political problems that will allow us to frame and critique contemporary forms of surveillance. The book is a collection of commissioned lectures given by Lyotard that all seek, in different ways, to approach two questions: "what if human beings, in humanism's sense, were in the process of, constrained into, becoming inhuman (that's the first part)? And (the second part), what if what is 'proper' to humankind were to be inhabited by the inhuman?" (Lyotard 2004, 2). This notion of the inhuman is taken in two separate senses:

1) the inhumanity of the system (the techno-scientific development that results in the ascendancy of computerized capitalism);
2) the inhumanity that "haunts the human from the inside" (Gane 2003, 439), taking the soul hostage, as Lyotard puts it (2004, 2).

The second kind of inhumanity – hostage-taking – is somewhat opaque but I find Stuart Sim's reading here to be instructive, in part: "the inhumanity of our social conditioning: the pressure to conform to prescribed modes of behaviour" (Sim 1996, 130). However, as we will see, this does not quite cover the range of inhumanity of the second kind found in Lyotard's text and so I would add to this social conditioning the usurpation of properly human roles as a defining example.

2.1. Development through Translation

In *The Inhuman*, Lyotard redeploys his concept of performativity, now framed in terms of "saving time," in order to examine the nature of "development": the utilization of technological and scientific advances for the extension of computerized capitalism. He observes: "'Development' is the ideology of the present time" and the saving of time is its modus operandi (Lyotard 2004, 3). Since it operates solely by this performative principle, development has no goal other than its own furtherance. The principle way of achieving this, according to Lyotard, is through an incessant and all-encompassing digitalization. What we see today is the rewriting of everything as bits or units of information. This is the main effect of our technological environment (rather than the proliferation of simulacra pace Baudrillard). These bits of information conform to the chief principle of development: performativity. Lyotard writes: "Any piece of data becomes useful (exploitable, operational) once it can be translated into information" (Lyotard 2004, 50); it is easily read, quickly transmitted. Further: "The availability of information is becoming the only criterion of social importance" (Lyotard 2004, 105). That is, the hegemony of computers places demands on the individual to make available personal information in digital form such that is operational (computer-readable).

The increasing computerization of all aspects of society is directly linked to new potentials for all-encompassing surveillance. With the demand for everything to become translated into information comes the storage of vast amounts of personal data and an indelible electronic trail. These can be of immense value to corporations, for example, the detailed amount of personal information that is utilized in a credit check. Lyotard draws attention to the connections between a demand for development through increased

efficiency, digitalisation and the extension of the capitalist system through the exploitation of this "digital enclosure" (Andrejevic 2007). Development (as ideology) is inextricable from capitalist extension; information is big business – and surveillance essential to it.

2.2. Dominance

Our information society, observes Lyotard, heralds the dominance of computerized capitalism. Four points in this regard can be identified. First, the computerization of society, with its demand that everything be translated into information, creates the conditions for this dominance. Information can be frictionlessly exchanged which means that once anything is translated it becomes easily commodified. The possibility of resistance is foreclosed, as any sort of counterculture or subversion can be translated and so becomes "commercializable" (Lyotard 2004, 76) – and, thereby, consumed by the system. Lyotard remarks: "The question of a hegemonic teleculture on a world scale is already posed" (Lyotard 2004, 50). Second, there is the question of legitimacy. Who is responsible for this translation into information and who takes responsibility for it? Usually the state would be held responsible, but now the challenge to state power by corporations that Lyotard remarked upon in *The Postmodern Condition* has been completed, such that telegraphic breaching now goes well beyond state control. This means that multi-national corporations are manipulating what is stored and what is considered "good" information. By extension, they are then also deciding what is irrelevant, what is not operative and so what should not be inscribed in memory. That which cannot be translated or that is not efficient (i.e. dissenting or inoperative narratives, cultures, data resources, etc.), is forgotten, as "those parts of the human race which appear superfluous" for the goal of continued development are "abandoned" (Lyotard 2004, 77). So we see that the question of legitimacy (or the lack thereof) is intimately related to the question of transparency (who bears witness to the process when the perpetrators are not accountable in the way politicians would have been) and ultimately betrays Lyotard's concern that the system is intolerant of difference. Finally, this whole process of development is inhuman; humans are more its vehicle than its beneficiary. There is no "progress" here, only a process of complexification (the growth of the complexity of the system, or negentropy). As Lyotard puts it elsewhere: "It is no longer possible to call development progress. It seems to proceed of its own accord, with a force, an autonomous motoricity that is independent of ourselves. It does not answer to demands issuing from man's needs" (Lyotard 1992, 91-92). Development is an end in itself, striving only to achieve higher performance/efficiency and greater profits. "It is reproduced by accelerating and extending itself according to its internal dynamic alone" (Lyotard 2004, 7).

Lyotard's reflections on the dominance of computerized capitalism draw attention to the increasing role of corporations in surveillance, and the complicity of surveillance technologies with the capitalist order. Through the surveillance of electronic trails (websites visited, purchases made, etc.) it becomes possible to directly market goods and services, whilst the collection of geodemographic data makes it possible to prioritize premium customers (see, for example, Burrows & Gane 2006; Lyon 2003; Solove 2004). By removing friction (the inefficiency of acting without such information), both approaches result in faster capitalism. The opacity of this practice is alarming: who can be held to account? And how is the algorithmic software that processes personal information, making possible such marketing and prioritising, written? (That is, *who will know?*) What makes this inhuman is that, unlike surveillance by the state – where the justification is some form of human good (civil order, the reduction of crime, etc.) – the only goal of this corporate surveillance is increased performativity and therefore the extension of the system of computerized capitalism.

2.3. Hostage-Taking

The translating impact and dominance of computerized capitalism demonstrates inhumanity in the first sense: the internally inhuman functioning of the system, the translation of everything into information and the dominance of computerized capitalism, along with its intolerance for difference and its development with disregard for human needs. Our final reading of Lyotard will indicate an example of inhumanity in the second sense, (both) social conditioning (our actions taken hostage) and the usurpation of roles (that which is proper to the human taken hostage), illustrating the way that we become forced to think like computers or replaced by computers – human (reflexive) thought replaced with computer (determinant) thought.

With information "there's no longer any question of free forms given here and now to sensibility and the imagination" – just bits (Lyotard 2004, 34). That is, there is nothing to think through – just data to process. Lyotard is here concerned with what is lost when we move from a human to a computer mode of thinking. Human thought does not operate in binary code. It does not work solely with bits, with processed units of information. Rather, human thought takes in the full picture; it is focused, like the computer processor, but lateral too, taking in side effects and marginal data. Human thought can sift through data quickly, discovering what is useful and what is not without the need to run a series of trial and error tests. Most importantly, it is "a mode of thought not guided by rules for determining data, but showing itself as possibly capable of developing such rules afterwards on the basis of results obtained 'reflexively'" (Lyotard 2004, 15). This is what Immanuel Kant called reflective judgement, which stands in contrast to determinant judgement wherein rules are pre-given. Kantian reflexive judgement is described by Lyotard elsewhere as "the synthesis we are able to make of random data without the help of preestablished rules of linkage" (Lyotard 1988, 8) whilst the way of thinking that techno-science would impose – "programming, forecasting, efficiency, security, computing, and the like" – is "the triumph of determinant judgement" (Lyotard 1988, 21). Computers cannot defy rules or create their own: they simply follow them, lacking creativity.

Lyotard's reflections on the disparity between human and computer thinking contain two warnings. First, that as the demand in our information society to work with information increases, so we become more like the machines with which we work. We begin to think as computers – in terms of efficiency, processing, etc. – losing what is valuable about the human mode of thought. As Nicholas Gane notes, human thought is reduced "to the immediate *processing* of information, and to the selection of pre-programmed, and thus standardized, options from the framework of the system" (Gane 2003, 441). This is inhuman in Sim's sense, as the demand to operate in a computerized society puts pressure on us to conform to computerized (and capitalist) ways of thinking. Second, that in an information society the human is in danger of being replaced by the computer (in the work place, say) and so creative human thought is replaced by limited computer thought. This is inhuman in the sense of the usurpation of human roles. Lyotard demands that we consider the way that technologies are today replacing us in many activities and the way that their inhuman mode of thinking is inadequate and dangerous.

This account of the paucity of computer thought becomes increasingly urgent as more and more operations are given over to algorithmic software. The sort of "smart" surveillance technologies prevalent today can combine not only data-collection, but also decision-making – not only about what information is relevant, but increasingly what actions human or non-human actors should take in response to it.

3. Internet Surveillance Technologies

Many commentators highlight the present or near-future nature of "thinking things" (see, for example, Beer 2007; Hayles 2005; Mitchell 2005). These thoughtful objects take over many of the tasks that were previously the preserve of humans. I suggest, amongst others (Beer 2009; Lyon 2007), that it is important to situate surveillance in this context. A large part of surveillance today has become computerized. It is no longer so much about the visual tracking of persons – although this remains a large element of contemporary surveillance (see, for example, the debate in the UK about ubiquitous surveillance in cities such as Birmingham; for an example of press coverage see Lewis 2010) – but about the processing of information. To this end, many surveillance technologies now work algorithmically, sorting data through a series of set instructions. In what follows I will use examples that have already entered academic thinking in order to initiate a critique of, first, the operating logic of "inhuman" surveillance technologies and, second, their complicity with the extension of capitalist development.

3.1. The Inhumanity of Usurpation

In our contemporary "surveillance society", we are under the impression that our every move is being watched, with ubiquitous CCTV cameras supposed markers of this. Yet it is more common that we are watched only retrospectively, if something happens that requires it. Being recorded by CCTV is not the same thing as being watched. Often nothing happens to the data recorded other than it being stored for possible later access – if, for example, we are the victims of crime or commit a crime. However, new "intelligent" CCTV cameras change this situation. Although we are still not being watched, something is happening to the data that is collected: it is processed algorithmically by software. These technologies are leading us towards the "automation of street surveillance" (Graham 2005, 572), wherein human input to the process, after the writing of the software, is marginalized.

Event-driven CCTV is an example of the inhumanity of usurpation. Such technologies are programmed to recognize "apparently abnormal behaviours, presences, and people", for example "the signature walking styles that are deemed to be most often used by those committing criminal acts" (Graham 2005, 572). They work by having first been programmed to recognize deviation from normal (i.e. expected) behaviours. This human input – which of course raises the Lyotardian problem of who knows/decides what is expected/normal – then retreats, with software left to do the "thinking". As Stephen Graham reports, a foot moving backwards and forwards is interpreted as a kick, a rapid arm movement as a violent act (Graham 2005, 573). What we see is the migration of thinking from the human to technology. But will the software be able to tell the difference between a peaceful protest and a riot? Or a *parkour* runner and a burglar? Or street theatre and a street brawl? The problem here is the rigidity of the algorithmic mode of processing data compared with the human's ability to ascertain the contextual difference between what can be exactly similar movements.

The importance of this technology should not be underestimated when considering Internet surveillance. With all the video content uploaded to web 2.0 sites – Facebook, YouTube, etc. – the application of such behaviour-recognition software cannot be ruled out. At the time of writing student protests against tuition fees in the UK are gaining a considerable amount of media coverage. With some of these protests escalating into acts of vandalism or violence there is a perceived need to identify agitators. How might a seemingly innocuous video of one of the protests posted online by a student be processed? Might one student be loitering at the edge of the frame with a suspicious gait? It is presently unclear whether such techniques have been used in this context, but the potential is very real. Consider the "Recognizr" facial recognition technology discussed in Marisol Sandoval's contribution to the present volume. She observes that "Recognizr", developed by The Astonishing Tribe and designed to cross-

reference social networking sites with photographs taken on camera phones in order to recognise the face of the photographed individual, could be used for precision-targeted marketing by finding out an individual's buying practices through using an image of their face to locate their social networking profile. This, as Lyotard would observe, would make for a more efficient capitalist system but, in relation to usurpation, it is possible to imagine further applications. An individual's associations could be easily traced through such software, facial recognition applied to group photos posted online and offering an ambiguous account of with whom s/he has met. "Ambiguous" because being in a photograph with someone says nothing more than that they have met; and yet dangerous because of the guilt by association – with, say, known terrorists or exuberant protestors. If nothing else, the use of facial recognition technology in mobile photography suggests that behaviour-recognition through online videos on social networking sites is not too far-fetched.

We see with this computerized surveillance the inhuman with which Lyotard was so concerned. When surveillance is achieved through algorithmic processing it can be identified as inhuman in the sense of usurpation in four ways. First, a role that would ordinarily belong to the human comes to be technological. The decision-making power of these software algorithms challenges human agency (Beer 2009, 987). Humans are taken out of the decision-making process when analyzing surveillance data, taking human thought with them; more performative computer software takes our place and decision-making becomes a question of processing information according to set instructions. Second, this mode of technological "thinking" is impoverished in comparison with human thinking. Sim (2001, 35) gives a good example of this when discussing *The Inhuman:* if I get part of an address wrong when sending a letter, the deliverer will in many cases be able to work out where it needs to go and so it will reach its destination; get an email address wrong, and it will be bounced back to the sender. Lyotard argues that human thought can work with imprecise or ambiguous data, data that is not selected by pre-established codes; that it "doesn't neglect side effects or marginal aspects of a situation"; and that humans can intuit, think laterally and operate without rules (Lyotard 2004, 15). Compared to the strict algorithmic functioning of computers, where thinking is reduced to passing information through a determined sequence of operations, our thought is far more flexible. These "intelligent" surveillance devices are making decisions ordinarily entrusted to humans, with serious consequences (far more so than unsent correspondence), and yet with a vastly inferior mode of reaching that decision. Third, Lyotard's concern for saving time in *The Inhuman* plays out here, as such technologies operate in computerized time – or what Manuel Castells called "timeless time" (Castells 2006). The speed at which these technologies operate does not reflect the more thoughtful periods at which the human operates. As Nicholas Gane and David Beer note, "timeless time refers to a regime of instant communication and information exchange in which there is little time for reflection" (Gane and Beer 2008, 21). Without time for reflection, the sorts of decisions these technologies make are compromised, as instantaneous processing responds to spontaneous situations without pause for thought. Finally, this way of thinking instantiates computerized capitalism's disregard for difference. With event-driven CCTV, ludicrously, certain ways of walking or moving or behaving in general are identified as abnormal and, if not criminalised, deemed worthy of further surveillance. As Graham notes, such systems risk further demonization of minority groups, something already entrenched in "neoliberal […] landscapes of power" (Graham 2005, 574). For Lyotard, this would illustrate the inhuman effect of a system that operates in "gross stereotypes, apparently leaving no place for reflection and education" (Lyotard 2004, 64).

3.2. The Inhumanity of the System I

The (so-called) thinking surveillance technologies in our human environment can also be understood in terms of the inhuman in Lyotard's first sense: the inhumanity of the system. Take, for example, the RFID (radio frequency identification) tag. RFIDs have entered the academic imaginary in recent years (see for example: Beer 2007, 2009; Gane and Beer 2008, 62-64; Gane et al. 2007; Mitchell 2005) as part of the "thinking" environment. These tags are implanted in consumer goods to allow objects and consumers to be tracked through time/space; they can be "pinged" much like a barcode, but from a distance. With RFIDs there are "unprecedented capacities for surveillance and control, for RFID technologies now allow physical objects and bodies to be positioned and tracked through the Internet" (Gane and Beer 2008, 63). In an interview with N. Katherine Hayles, Gane remarks: "RFIDs are the dream of the capitalist marketplace, being able to identify and track consumers" (Gane et al. 2007, 331); track, that is, the *right* consumers. These tags allow goods and services to be targeted at specific groups of consumers in a faster, more efficient way – creating a smoother, frictionless system. With RFIDs those who are being tracked are often unaware, but we see also examples where something similar is a consumer "choice". Many applications on Apple's iPhone give users the choice to have their position located by GPS. This allows the application to present to the user nearby retail/leisure facilities, for example (as is the case with Wetherspoon's Pub Finder application). Similarly, the voluntary "checking-in" via a mobile Internet device of a user's location through Facebook's Place application allows for the location of the user and the offer of discounts at nearby shops, restaurants, etc. Is this tracking a nightmarish surveillance or the offer of a convenience culture?

Lyotard shows us that this dichotomy is a false one. That is, convenience in a system of computerized capitalism comes with surveillance as its price: for mechanisms of consumption to be sped-up the means of exchange needs to be sped-up – and this means digitalized. More than this, though, the surveillance/convenience binary can be restated as an opposition between control and freedom; yet freedom here is only freedom to consume more efficiently, to move through frictionless channels. The choice of freedom/convenience is a *choiceless choice* as we would merely be choosing to operate according to the performative logic of the system. *Choiceless* because this performativity is the very demand of the system: be operative or be obsolete (Lyotard 2005, xxiv). The danger is that those groups of people that do nothing to enhance and extend the development of the system (by making *themselves* convenient – trackable) are abandoned (Lyotard 2004, 77). The façade of "convenience" merely indicates what Lyotard calls "Mr Nice Guy totalitarianism" (Lyotard 1993, 159).

3.3. Pause for Thought

The technologies surveyed in this section highlight the state of surveillance and/through the Internet and further afield. We have seen how Lyotard allows us to understand the way these technologies work in terms of their inhuman "thinking" (processing) and their complicity with the extension of computerized capitalism. We can understand this latter process as "software sorting" (Graham 2005) or "social sorting" through surveillance (Lyon 2003) or as "knowing capitalism" (Thrift 2005); however Lyotard's notion of the inhuman captures not only this element – the way new technologies are complicit with the system, shaping the social for its furtherance – but the way that the very mode of technological operation works according to its logic: performative (or time-saving) and intolerant of difference. Gross stereotypes are written into surveillance software, whilst those who do not submit to surveillance become obsolete.

4. Surveillance through Social Networking

The technologies above go some way toward supporting Scott Lash's (2007) claim that power operates through the algorithm. As social life becomes "mediatized" (Lash 2007, 70) so does power extend into the everyday, through software: "A society of ubiquitous media means a society in which power is increasingly in the algorithm" (Lash 2007, 71). Beer (2009) has shown how this (Lyotardian) notion of power ought to be applied to "participatory web cultures" (or, web 2.0), and so my focus below is on surveillance through social networking sites. Lyotard has highlighted the complicity of technological development with capitalist extension. The potential of web cultures to be incorporated into capitalist culture was slow to be seen, with the early Internet (web 1.0) being a site of what Felicia Wu Song (2009, 136) calls "visionary communal" groups where strangers met with strangers to form online communities. Needless to say, this curious disconnection of technological development and capitalist extension was bridged and, in what follows, I will frame this history and the present practice of surveillance of social networking profiles for commercial ends as part of what Lyotard calls the inhumanity of the system. This includes three key observations: the opacity of the algorithmic functioning of this surveillance; the transformation of web cultures into capitalist cultures; and the system's disregard for difference. I will conclude this section with some reflections on the volunteering of information by individuals through social networking sites, or the inhumanity of social conditioning.

4.1. The Inhumanity of the System II

The Internet was not always a site of economic interests, early groups such as the WELL being formed with countercultural, communal ideals in mind (Wu Song 2009, 82). But with the mid-90s boom came online advertising: first, hypertext links that allowed users to navigate to advertising pages; these were largely ineffective since relatively few users "clicked-through" so, second, banner adverts became the norm, with the advert situated on the page the user was already accessing; third, more imposing forms then came to be used, such as pop-up adverts and flash banners; these were largely seen to be too aggressive and so, finally, what we now most commonly encounter are text adverts, small and situated to the side/s of web pages – such as those we see when we perform a Google search (Wu Song 2009, 84-85). However, advertising is only half the story. When the bubble burst in the early-00s, ushering in the end of web 1.0, media companies began a period of acquisitions, such that previously non-commercial sites – sites that were fundamentally communal, despite their reliance on selling "space" for advertising – became part of media stables (such as when the WELL was acquired by the online media company Salon.com in 1999) (Wu Song 2009, 82-83). It was only so long before corporations realised the value of the very form these communities took.

Take, for example, the Facebook profile: here are collected together various key items of information: name, age/date of birth, location, hobbies and interests, musical tastes, and so on. Users input this to present an identity to others. At the same time this is highly valuable information. Wu Song notes that "personal data become a form of currency in online participation" (Wu Song 2009, 88) – a form, I would add, of cultural currency that becomes a valuable commodity to corporations. The information contained in these profiles can be collected and analyzed to look for preferences and patterns of behaviours amongst the social network, allowing for precision targeting – an efficient mode of advertising, in tune with the Lyotardian principle of performativity. Anecdotally, I remember clearly being surprised when adverts for B. B. King tickets and Stevie Ray Vaughan t-shirts regularly appeared on my Facebook page: *how did they know?* As Wu Song notes: "Although the rhetoric and discourse of most online communities never even hint at the ubiquitous data collection and

surveillance that normally occur, such activities are buried in the fine print of the Terms of Service and Privacy Policy that most members never bother to read" (Wu Song 2009, 89). Facebook's privacy statement reads:

> We allow advertisers to choose the characteristics of users who will see their advertisements and we may use any of the non-personally identifiable attributes we have collected (including information you may have decided not to show to other users, such as your birth year or other sensitive personal information or preferences) to select the appropriate audience for those advertisements (Facebook Privacy Policy 2010).

Along with this personalized advertising, Facebook also collects site activity information and information on the kind of device used to access Facebook (including browser type, IP address, location and the sites the user visits) (Facebook Privacy Policy 2010). When shared with third parties, such information can be used for precision targeting of markets and consumers.

What is unclear, however, is how the information is processed. The controversy over Facebook Beacon, the advertising system that ran from its inception in 2007 to its deactivation in 2009, is illustrative (see http://en.wikipedia.org/wiki/Facebook_Beacon). This system used data from other websites – for example, online transactions – in order to target advertising on Facebook. Users complained that the process was opaque, and confusion about what data was being collected – which online actions tracked – was widespread. Whilst Beacon was shut-down, this obfuscation continues: nowhere in Facebook's literature is it clearly stated quite how their data-mining and surveillance works. The question Lyotard asks in *The Postmodern Condition* is posed once more: who will know? The power is in the algorithmic functioning of data-processing software, and yet its functioning is unknown to the users of social networking sites. Who writes the software? What commands does it follow? How does it target data? And what does it collect?

Whilst Lyotard's *The Postmodern Condition* prompts us to explore the hidden power of such technologies, and already warns of the commodification of (personal) information, it is his *The Inhuman* that can take us further in examining the impact of the logic that motivates it. Lyotard observes here that as cultures and subcultures begin to operate through telecommunications technology they run the risk of being consumed by capitalist culture. Their key elements – memory (taking in and storing knowledge) and recall (regulating access to knowledge) – are digitalized, causing cultures to become spatially-temporally "unanchored", therefore easily transmissible and "exploitable" (Lyotard 2004, 49-50). Cultures and subcultures begin to have a market value; once translated into information they can be packaged and sold. For Lyotard, nothing can escape this process as even the most subversive of countercultures can be marketed and so become profitable. What is so surprising in hindsight about the early stages of the Internet is that, despite being comprised of digital "webcultures" and communities, commercialization was slow to come. What we see with participatory webcultures such as Facebook is the way that they are increasingly being exploited for profit. The various diffuse subcultures and communities that exist within the Facebook framework have been colonized by the "hegemonic teleculture" (Lyotard 2004, 50) of computerized capitalism – the only real game in town.

This observation also highlights an ethico-political problem raised by Lyotard. When virtual communities become commercialized, different communities become different markets. This has two effects. First, as Wu Song (2009, 95) notes, when minority groups come to be seen as niche markets, the inequalities between groups are masked: all that is relevant is what data can be gathered about what they consume so that goods and services can be marketed accordingly. Instead of seeing unequally advantaged citizens, this process

sees dissimilarly consuming customers. Lyotard feared that such groups would be abandoned by the system unless they became performative (Lyotard 2004, 76-77). What we see today is that such groups are tolerated because, through data-mining, their inequality can be exploited for profit – which is to say, they have become performative. The effect is a systemic quietism towards social inequality, since it represents another space into which the system can extend. Second, as different cultural groups are exploited for profit "their members are homogeneously approached as consumers" (Wu Song 2009, 95). Instead of respecting the differences of cultural groups, this process sees only the cult of consumption. For example, one's identity as a lesbian or black man is re-defined as one's identity as a consumer who buys the kinds of things bought by lesbians or black men. Here we see the disregard of the system for difference: it is only tolerated to the extent that it can be used to market diverse goods and services – in effect subsuming it under the overriding sameness of consumption. In effect, as Christian Fuchs notes in his contribution to this volume, users are sold as a commodity to advertisers, fine-grained identity distinctions lost in the conformity of commodity.

4.2. The Inhumanity of Social Conditioning

The final exploration through Lyotard of this mode of surveillance involves returning to the second kind of the inhuman, the inhumanity "of which the soul is hostage" (Lyotard 2004, 2), understood in Sim's sense as "the inhumanity of our social conditioning: the pressure to conform to prescribed modes of behaviour" (Sim 1996, 130).

Social networking profiles, design flourishes aside, tend to be more or less the same. As noted above, standard items of information are displayed, such as name, age/date of birth, relationship status, location, hobbies and interests, and so on, and alongside the user's photograph this makes up the core of the profile. This information was important for building online communities and initiating friendships with previously unknown individuals in web 1.0, as some marker of shared characteristics and interests was necessary for such formations to be practicable. These standard profiles, as we saw above, were also eventually seen to be beneficial to corporations, as useful demographic data and consumption patterns could be read straight off them. As Wu Song notes, social networking in web 2.0 has moved away from the old "visionary communal" ideals of many web 1.0 communities: we seem no longer to be interested in "meeting anyone from anywhere" (Wu Song 2009, 136). Instead, sites such as Facebook are about maintaining communications with offline friends (loosely defined) with some geographically defined commonality: school friends, university friends, work colleagues, and so on. Why, then, this vestigial profile?

It seems, as Zygmunt Bauman (2008) notes, that we have become accustomed to putting the private into the public domain, as if we no longer see any distinction between the two. The trouble is that this incessant posting of personal information is exactly what speeds up and smoothes out the extension of computerized capitalism by facilitating targeted adverts and marketing strategies (Hill 2009). We translate our identities into valuable information and post it online, taken hostage by the very logic by which the system operates. One example, recent at the time of writing, will be illustrative. Coca-Cola ran a promotion for its Dr Pepper soft-drink brand on Facebook that involved users allowing their profile status to be hijacked by the corporation (see Dodd 2010). According to Facebook's Privacy Policy (2010), this interaction with a third-party means that they can subsequently access information about the user. These kinds of promotions show how users proactively allow personal information to be collected by third-party corporations. Perhaps more worrying, the Dr Pepper example demonstrates the willingness of users to relinquish control over the profile status update, usually a personal expression of current ideas or activities, to a product promotion. On the one hand, the expression of thoughts and feelings; on the other hand, the

shameless hawking of fizzy pop: the willingness of the user to allow the latter to be represented as the former demonstrates the success of a system that conditions the human to act towards the system's ends, with little regard for that which is proper to the human. Another example, discussed in Mark Andrejevic's contribution to this volume, suggests the further extension of this process. A Facebook application designed by Appirio gives employers access to their employees' social networks, allowing for direct marketing through "word of mouth referral" within that network; the company increases profits and the employee may earn a bonus dependent on the suitability of their social network. The idea that one's social network might be not only profitable to companies but to the social networker him/herself suggests a yet further conditioning for individuals to treat something as vital as social relations according to an exploitative logic. And if the canny employee, with an eye for the bonus, begins to build social networks with the potential for profiteering in mind, then the degeneration is yet more marked. If the human is a social animal, then we are witnessing the submission of that which is special to "being human" to the demands and scrutiny of computerized capitalism.

It is not so much that we are thinking like computers (as Lyotard also worried): we are thinking, communicating and expressing ourselves online like humans. The problem is, we are thinking, communicating and expressing ourselves in accordance with the operating logic of computerized capitalism, extending its operation. We translate everything about us into information in order to exchange it as cultural currency; at the same time, we make information exploitable by corporations according to the very operating principles – translation, exchange – of the system itself. A reading of Lyotard here allows us to reflect upon how surveillance through social networking impacts upon our very core of humanity, an approach that I suggest is complimentary to Mark Andrejevic's account of exploitation in web 2.0 in the present volume; whilst Andrejevic's focus is on the economic – alienation from the product of labour – a Lyotardian approach would suggest that we consider also our alienation from species-being. The inhumanity of this surveillance is that we internalise, not the gaze (pace Foucault), but the performative logic of computerized capitalism. We are haunted from within, the soul taken hostage (Lyotard 2004, 2) by this dehumanizing spectre.

5. Concluding Remarks

I have attempted here to demonstrate the usefulness of a Lyotardian theoretical understanding of the computerized surveillance that operates though the Internet. Such an account crucially includes: the commodification of information; the highlighting of the opacity of surveillance software; and an understanding of the complicity of new technologies of surveillance with the capitalist system, both functioning according to the principle of performativity. Further, the notion of the inhuman was shown to be a tool for opening up several ethico-political questions concerning: the paucity of computerized thinking in "smart" surveillance technologies; the disregard for difference in computerized capitalism played out through surveillance software; and the social conditioning of citizens into active information sources.

Lyotard asks: "What else remains as 'politics' except resistance to this inhuman?" (Lyotard 2004, 7). Resistance can take many forms. Sociological research into the functioning of surveillance software is necessary to address the problem of *who will know.* That way we can bear witness to the programs that "social-sort" or that threaten difference, whilst keeping tabs on what and how much information is collected. The problem of our own complicity is great in the context of resistance. Lyotard offered few solutions, and no programs of resistance. However, remarks in his *Postmodern Fables* (Lyotard 2003) may prove helpful. In resistance to flows of communication (such as social networking sites) becoming streams of capitalism, Lyotard suggests we become "subterranean streams",

underground yet springing up in undetermined locations on the surface (Lyotard 2003, 5). Whilst I partly agree with Gane that Lyotard is advocating a "radical 'underground' existence" (Gane 2003, 448) that would resist the capitalist order, it is important to emphasize the relevance of the spring. Resistance cannot merely be about opting-out, but about participating in unpredictable ways – such that the surveillance technologies of the capitalist order cannot keep up. Resistance might follow from more research into the algorithms that contain the power. The information we gleam could allow us to shape our profiles (in the loose sense) in ways that cannot so easily be read and that work to *our* benefit; in such a way we might remain underground whilst springing up when necessary or desired. This kind of *streaming* may not resist the capitalist order, but it would go someway to putting the ball in the court of the individual – and not the inhuman.

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