Rethinking the Role of Surveillance Studies in the **Critical Political Economy of Communication**

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Abstract

This paper argues that the study of surveillance needs to be afforded a more central position in the critical political economy of communication. Monitoring technologies have always been information and communication technologies. Surveillance also plays a constitutive role in mass and new media, and this deserves attention from communication scholars. Although monitoring technologies themselves may be neutral, when viewed from a macro perspective, they underpin patterns of surveillance that are complicit with structures of power. This paper focuses on surveillance practices associated with the workplace, consumer activity, urban spaces and intelligence gathering. The significance of these developments for the political economy of communication is then considered.

Substantive developments in the last 20 years have intensified and expanded surveillance practices. With reference to the globalization of finance and production; the growing dominion of transnational conglomerates; the development of panoptic data; and the logic of risk assessment, this paper argues that surveillance is constitutive of informational capitalism. Some authors have stressed the commitment of critical political economy to history, social totality, moral philosophy and praxis. Such commitments should inform the analysis of recent trends in surveillance. In that context, critical conceptions of surveillance also provide an ideal vehicle for political economy scholars to analyse the relations of power constituting informational capitalism.

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For all of us, surveillance is embedded in the fabric of modern living. In the workplace, as consumers, in urban spaces and through global surveillance networks, individuals are watched and quantified in a multitude of ways. The nature and expansion of such technologies requires critical attention by political economy of communication theorists. Surveillance technologies have always been, at their core, information and communication technologies (ICTs) in that they gather information about identifiable individuals and mass populations in order to communicate knowledge to their owner-operators. Like all of the ICTs subject to critical political economy analysis, monitoring technologies themselves are inherently neutral. When viewed from a macro perspective, however, patterns of surveillance are complicit with ruling structures of power. For this reason, the political economy of communication is uniquely placed to analyse and critique surveillance practices. In recent decades, the emergence of informational capitalism has interacted with surveillance technologies in ways that are of interest to political economy theorists. The data produced, traded and consumed throughout informational capitalism is inherently panoptic data. More than this, flexibility in production and consumption and the application of the logic of risk management by private and public organisations also rely to a large extent on surveillance practices. This paper discusses the significance of these developments for the political economy of communication, with reference to the workplace, consumer activity, urban spaces and intelligence gathering.

Meehan, Mosco and Wasko (1993) have stressed the commitment of critical political economy to history, social totality, moral philosophy and praxis. In my view, such commitments should underpin the analysis of recent trends in surveillance. This also

means that the study of surveillance within the political economy of communication needs to be re-conceptualised, and afforded a more central position in the discipline. In order to make this argument the paper consists of four parts. Firstly, I will consider critical conceptions of surveillance. Secondly I will outline the role of surveillance in the context of mass media and new media, in order to show that monitoring is integral to traditional political economy of communication analysis. Next, I will show that surveillance is best viewed through the eyes of political economy because of its focus on structural relations of power. Having discussed the general role of surveillance in the contemporary era, I turn to the construct of informational capitalism in order to reiterate the view that surveillance studies should inform political economy of communication analysis.

Critical Conceptions of Surveillance

In order to analyse the inherent nature of surveillance it is necessary to begin with Michel Foucault (1977). In discussing the role of surveillance in constructing individual subjectivity, Foucault regarded life under the surveillance gaze as place in which "visibility is a trap". Where subjects are disciplined by the unverifiable possibility of supervision, rather than outright punishment per se (Foucault, 1977: 200). Foucault based his account of modern disciplinary surveillance on Jeremy Bentham's eighteenth century design of a prison called the Panopticon. Although the prison was never actually built, Foucault saw it as an architectural realisation of an emergent penology in early modernity. If constructed, the Panopticon prison would be a tall, circular structure containing a central observation tower and surrounded by multiple small compartments housing the inmates. Each cell would feature one window facing the central tower and another throwing light on the occupant from behind. This design would allow the observer (or "intendant") "unimpeded visual access" to surveil the prisoner, who, in turn, would only see the face of the tower. As the cells are isolated from each other, the possibility of collective resistance is precluded by the segregation of individuals (Foucault, 1977: 200; Gandy, 1993: 22). Subjects experience a state of confusion induced by the feeling of constantly being watched. However, the watching is eternally unverifiable and asymmetrical; it is the possibility that someone is looking that disciplines the subject (Foucault, 1977: 200). In this way panoptic surveillance has a preventative character; a power of mind over

mind. Obedience occurs as subjects internalise standards of discipline based on the threat of punishment, more than the punishment itself. Discipline is not simply imposed on subjects from the outside, but is subtly present in them already, rendering disciplinary practices more effective. In this regard, human subjectivity is influenced from the outset as individuals assume a disciplinary outcome, based on the uncertain presence/absence of surveilling eyes (Gandy: 1993).

For Foucault, the knowledge-power project through surveillance is an inherently modern modality of power. Through its role as a preventative measure, knowledge-power discipline exerts a "moral influence on behaviour" a type of power that is both productive and constraining (Foucault, 1977: 210). Foucault argued that systematic and pervasive surveillance characterises all modern institutions, extending through schools, hospitals, charities, the workplace and most pertinently the state apparatus. In the workplace, for example, discipline is both a way of preventing theft, and a way to increase speed, productivity and therefore profits. At the same time, it converts the bodies and forces of the workers into productive machinery for a profitable economy (Foucault, 1977: 210). In the modern era, panopticism is more closely aligned with coercion than with the civil society it purports to protect. Foucault writes that within modernity, citizens see surveillance-based discipline as a foundation for social equilibrium. Disciplinary institutions appear to protect individuals by supervising and punishing deviants, which appear, in turn, to safeguard civil rights. However, when viewed as productive mechanisms of power, panoptic disciplines work to coercively unbalance societal relations and align power with particular groups or ruling elites (Foucault, 1977: 223). In this critical conception, surveillance, and the miniscule "procedures" which accompany surveillance based discipline transform human diversity into a rigid system of management, differentiation and classification, fixing every deviancy into a hierarchy (De Certeau, 1984: 46, Staples, 2000; Ward, 2000: 105).

Foucault's writings provide a critical conception of how the knowledge-power project operates in surveillance-based discipline. More recently surveillance critics have applied Focualdian panopticism to the case of electronic surveillance (Lyon, 1994; Lyon, 2001; Clarke, 1988; Garfinkel, 2000; Gandy, 1993). For some writers, electronic information databases constitute electronic panopticons of infinite

(cyber)space.[1] For David Lyon (1994; 2001) the proliferation of diverse types of monitoring throughout everyday life has brought about a "surveillance society". Surveillance is routine and mundane, embedded in the institutions governing corporeal world, enacted by citizens on each other (social surveillance) and infinitely expanding in electronic space. Operating in what Oscar Gandy (1993) terms the "panoptic sort" or the raw data of human experience, "electronic panopticons" manage and control mass populations. In the private sector, information matching is used to identify and classify employees or consumers and reference them against particular norms. In the public sector the state may profile potential criminals and other threats to social order. Dataveillance is facilitated by data-matching and data-mining technologies based on micro-electronics and digitalization. Individuals can be identified by social security or IRD numbers, their movements mapped according to credit card transactions, bill payments and credit ratings (Lyon 1994: 71). The gaze of electronic surveillance is unwavering, automatic and invisible. The uncertainty of inspection produces "anticipatory conformity" in subjects who may seek modes of resistance to surveillance, but who are more likely to comply with standards of discipline (Zuboff, 1988). As in the factory, school or prison, electronic panopticism works as a system of rewards and punishments. For example, the data about a job applicant's credit history or criminal record affects their employability and citizens are rewarded by qualifying for life insurance or punished by being denied credit (Lyon & Zureik, 1996: 96). Often implemented in the name of information efficiency, electronic panopticons operate primarily to reference individuals against particular norms for the purpose of rehabilitation and normalization, seeking to transform behaviour through a process of continuous disciplinary surveillance (Gandy, 1993: 24).

Taken together, these arguments seem to point to the view that panopticism is the all-encompassing organisational construct in modernity. There are, however, some

[1] I am leaving to one side arguments as to whether electronic panopticism is qualitatively new and "post-modern" as they are not directly relevant to my purpose here (Lyon & Zureik 1996: 8; Bogard, 1996: 57). Briefly, electronic surveillance is different to traditional panopticism because it is decentred, virtually networked and operates without a central observer. While modern surveillance circumscribed individual behaviour, post-modern surveillance deals primarily with the data shadow left by an individual's transactions and activities (Elmer, 2003: 223; Poster as cited in Lyon 1994: 71; Lyon &Zureik, 1994: 184; Staples, 1997: 44;). Although such writers may overstate the distinction between modern and post-modern surveillance, their arguments reveal how the saturation and intensity of electronic surveillance, expands beyond the direct control of its owner operators.

difficulties with this approach, a number of which are articulated by Michel de Certeau (1984). In particular Foucault's conception of power as diffuse, pervasive and productive is problematic. From Foucault's perspective it is possible to conceive of resistance to surveillance-based discipline, but not of escape or evasion.[2] For de Certeau, Foucault has successfully argued that discipline has pervaded every facet of modern life, but has not allowed for "the fact that everyday life has not been reduced to a rigid set of regimes, such as the notion of discipline implies" (as cited in Ward, 2000: 100). As de Certeau argues, everyday people may subject disciplinary practices to "oblique forms of reading", which subtly change the meaning and intent of disciplinary power. There are "styles" of operating which exist within disciplined space; "uses", "actions" or "re-uses" which may discreetly re-organise surveillance-based discipline from within its own logic (De Certeau, 1984: 30).

Moreover, as articulated by David Lyon's (1994) conception of surveillance as "Janus-faced", monitoring operates through "care and control" and may have material benefits for citizens on a day-to-day level. The word "surveillance" itself can have both positive and negative connotations. By definition, the word can also mean care through education, such as the supervision of a tutor. The word may also refer to parental oversight in the sense of "keeping an eye" on a sick child (Atkins et al., 1980: 645; Simpson & Weiner, 1989: 309). Surveillance also facilitates certain political practices which are aligned with the normative ideals of democracy. The electoral roll facilitates full-franchise elections, while surveillance of tax regimes and codified wage and salary remuneration may facilitate the provision of social welfare. It should also be acknowledged that surveillance technologies themselves are inherently neutral and can be used to reinforce or scrutinise the exercise of power. From the latter perspective, an employer might be surveilled by a subordinate, or brutal police actions may be captured on camera.

[2] Whether or not Foucault implied the possibility of resistance to surveillance is a point of contention among theorists. Leonard (1990) notes that the theorist "indicts, sometimes explicitly, more often implicitly, the idea that modernity contains within itself the potential for human emancipation" (as cited in Morrow & Brown, 1994: 29). Graham Ward argues that Foucault implicitly allowed for resistance because he believed that unveiling operations of power allows subjects to take up "a more active and engaged process of self-fashioning" (Foucault, 1985, 1986, 1988, 1990 as cited in Ward, 2000: 85).

In light of the preceding arguments, my own critical conception of surveillance acknowledges that monitoring can have both enabling and disabling effects. Bearing in mind that surveillance can and does "care" for citizens in daily life, and that co-operative communicative action is manifest within society, surveillance is nonetheless an accessory to durable relations of power on a macro level. Although power through surveillance does operate at a micro level (among social actors), it is also located in asymmetrical capitalist structures operating on a macro level. Consumers, audiences and citizens do make real choices and are capable of emancipative politics, but these choices are framed by particular structures and limitations. The recent restructuring of capitalism, technological advancements and the predominance of "informationalisation" have rendered surveillance tendencies more pervasive, intensive and "complicit" with macro relations of power. Surveillance does not create these power relations from the outset, rather, it entrenches and reproduces them. To understand how this process occurs in given circumstances, it is necessary to employ the insights of critical political economy. More than this, the study of surveillance should be re-contextualised and afforded a more central position within the discipline, as well as that of communication studies as a whole.

Surveillance, Mass Media and New Media

In order to build my argument that the analysis of surveillance should be integral to the political economy of communication, I will begin by addressing the "communication" aspect of the discipline. My intention in this section is to position surveillance technologies as information and *communication* technologies, and as such, to elucidate the role that surveillance has played in media traditionally analysed by communication scholars. Finally, I will indicate future areas of media analysis which overlap with surveillance studies. In this, I will argue that surveillance has always been crucial to the political economy of communication, even if it has not been explicitly articulated as such.

Surveillance technologies have always been, at their core, information and communication technologies (ICTs). They gather information about identifiable individuals and mass populations. A Closed Circuit Television camera may gather information on workers entering and leaving a building, which is then communicated as data, or transformed into knowledge that is useful to management in determining

punctuality. As I will show in the next section, monitoring devices are also closely linked to other ICTs, as in the case of consumer databases or the Internet, and to new and mass media products.

In the past, the political economy of communication has focused on relations of power associated with the production and consumption of television, radio, print, or the "old media" (see for example: Garnham, 1990; Gomery, 1989; Herman & Chomsky, 1995). Surveillance has played a part in this process and this has often been overlooked. In terms of production, media organisations themselves make up part of the vast mosaic of monitoring tendencies that characterise contemporary life. For example, news media outlets may conduct consumer surveillance in the form of ratings in order to facilitate the commodification of audiences for financial gain. So to, may journalists and media organisations surveil individuals, groups and the state while fulfilling their fourth estate role. The world's media also gather information through the process of reporting that can be useful to national security agencies (Davies, 2002: 72). As Thomas Mathieson has argued, the mass media can be thought of as a "synopticon" in which the many (citizens) watch the elite few (as cited in Lyon, 2001: 92).

Just as traditional media contributes to the production of surveillance, so to do film and television encourage the consumption of monitoring practices. Visual culture disseminates a penchant for voyeurism and exhibitionism, as is the case in the reality television format (Berko, 1992; Staples, 2000: 59). Reality TV is surveillance-based at its core, with shows such as *Cops, America's Most Wanted* and MTV's *The Real World* using surveillance mechanisms as a central plot device. As Gillespie (2000), Palmer (2002), van Zoonen (2001) and Jones (2003) have argued, reality TV euphemises monitoring by presenting total surveillance as an amusing experiment in identity. In this regard positioning monitoring as inherently benign and pleasurable helps shape audiences' overall perceptions of surveillance.

In terms of film, when audiences are entertained by viewing through the gaze of cinematically and televisually constructed surveillance technologies, they become surveillers themselves. For John Turner, the medium of cinema (and the act of watching films) is itself "hyper surveillant" because audiences perform the attributes

of the gaze in a way that is familiar and apolitical. The mechanics of film invite spectators to enjoy "the gaze", but at the same time renders them subservient to its direction. The act of spectatorship collapses traditional private-public and interior-exterior distinctions as it enables the viewer to observe the lives and spaces of diegetic subjects in a way that would be impossible otherwise (Turner, 1998: 94). In this way, the medium of film, the gaze of the cinematic eye bears a close relation to that of the unwavering surveillance gaze.

These illustrative examples reveal the complex and mutually productive relationship between surveillance and traditional media outlets. The next relevant area for the political economy of communication is representation.[3] In particular media texts produced by dominant structures of power tend to depoliticise the corrosive social effects of surveillance. As I have argued elsewhere, mainstream popular representations of surveillance complement political and economic structures of power by ideologically depoliticising contemporary surveillance practices (Brown, 2005). Although filmic texts are contradictory and involve aspects of domination and resistance, films such as *Enemy of the State* (Scott, 1998), *Antitrust* (Howitt, 2001), *The Bourne Identity* (Liman, 2002), and *The Truman Show* (Weir, 1998), all work to naturalise the position of surveillance technologies in society at large. Cinematic representations may fetishize the imagery and energy of surveillance technologies by positioning audiences as the voyeuristic accomplices of surveillance practices. By celebrating the spectacular elements of surveillance, films preclude critical analysis of its socio-historical character. Moreover, surveillance devices are depicted as omnipotent tools capable of begetting power and knowledge. Monitoring technologies never falter or fail to gift the "perfect information" required for any character to fulfil their aims. Indirectly, this naturalises and legitimates the place of surveillance in societies generally. If surveillance devices are vividly effective in bringing perfect information and watertight security, any discussion surrounding monitoring is limited to the intentions of the owner-operators of these devices. In this way, mainstream film depoliticises surveillance by presenting it as a pleasurable experience (Brown, 2005).

[3] In the past, political economy has not traditionally undertaken textual analysis, but as Golding and Murdoch point out, what might be called "the political economy of texts" should seeks to illustrate the

In the last decade, political economy research has begun to describe, if in a fragmentary manner, the structures of power which shape new media products (Mansell, 2004). Substantial studies of surveillance and new media would strengthen this area of research. The critical political economy of communication has a particularly important role in analysing the mutually productive relationship between surveillance practices and the Internet. In particular, the intense monitoring of cyberspace by private corporations seeking information on consumer behaviour is worthy of critique. At the same time, the Internet is an arena for the democratising of surveillance devices through their purchase and consumption over the World Wide Web. In this way, surveillance is implicated in the construction, consumption and use of the Internet.

Monitoring of online behaviour is conducted by national security agencies trolling for "terrorist" activity (Hentoff, 2003; Parenti, 2003), employers tracking the habits of their workers (Lyon 2003d; Parker, 2000), and overwhelmingly, consumer surveillance organisations. Using the information garnered from "Cookies"[4] direct marketers construct consumer profiles from the online habits of identifiable individuals (Parenti, 2003; Graham, 2004; Lyon, 2002a). More covertly, "web merchants" may monitor Internet chat-rooms or news groups, collecting email addresses, I.D.'s and demographic information based on users' online behaviour and postings. This information can then be sold to other interested parties and direct marketers (Kelly & Rowland, 2000).

Top-down monitoring of the Internet has become so pervasive that critical commentators (Graham, 2004; Lessig, 2001; Luke, 2004) have argued that the structure of the net, originally designed to support decentralized and open communication, is being reconfigured through private ownership. Transnational corporations control and exploit the Internet to maximise profit and surveil

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relationship between media products and their production and consumption (Golding & Murdock, 1996: 19).

[4] A "cookie" is a small text-file that automatically downloads from a website to be placed on a net user's personal computer. Information is saved by a PC's web browser and sent back to the server whenever requested. Its main function, therefore, is to track users' Internet habits for analysis by the cookie producer ("Internet glossary of terms," 2001). Most "cookies" simply report back to home base the sites its host computer has visited, but some are intelligent enough to count key strokes and copy entire files. This information can then be connected to the user's identification, home and business addresses, credit card details and even passwords (Parenti, 2003: 101).

consumers. There is more at stake here than the simple monitoring of netizens, or even the pervasive targeting of consumers via cyber-advertising; the very browsers used to view the World Wide Web have a role in creating and funnelling a surveilliable consumer culture. Robert Luke (2004) for example, has argued that when net users construct their own cyberspace "home" portals using Microsoft software, they are essentially creating a "commodified space of safe consumption", which is subject to intensive surveillance and biased towards Microsoft products (Luke, 2004: 149). In order to access their home portals, users move back and forth across Microsoft's firewalls, each time feeding the corporation personal data in exchange for access. At the same time, users are continually pushed towards the sites of firms with commercial relations with Microsoft; each page offering a range of online commerce opportunities (Luke, 2004: 149). In this way, the net itself is carefully tailored to maximise surveillance opportunities and potential profits for major Internet owners (Luke, 2004: 245).

At the same time, the Internet is an arena in which surveillance is democratised and spread through consumption, creating a new, digital, multi-directional surveillance space. The use of personal web cameras by citizens broadcasting their lives in real-time transcends traditional ways of viewing private and public life. Individuals may purchase such technologies in order to display their everyday (home) life to net users. Correspondingly, those surfing the net may pay a fee to consume the lives of web camera owners. On one level, this case of popularised social surveillance over the Internet depoliticises the act of monitoring. At the same time, however, web cameras "make manifest" issues of surveillance (in relation to domesticity, intimacy, pornography, self-image and community) such that discussion of "privacy" is facilitated (Knight, 2000: 21). The use of web cameras, as well as the purchase of many other surveillance devices over the net, highlights how the effect of such technologies is not pre-ordained, but rather socially constructed through their use and consumption (Diffie & Landau, 1998: 302). With its traditional commitment to analysing production and consumption, political economy is uniquely positioned to critique the breadth and depth of new media surveillance. In the future, the political economy of communication might analyse the overlap between surveillance and mass media-new media convergences. In particular, the panoptic data which is produced by internet use is subject to commercial calculations by corporations with interest

holdings. The technologies consumed through the use new media products, and the representation of monitoring in media texts are also of interest. Finally, political economy theorists might critique the role of private ownership in determining Internet content or government surveillance and censorship. In this way, the study of surveillance incorporates traditional and emergent areas in the political economy of communication.

Towards a critical political economy of surveillance

Turning from media to the wider question of ICTs, the critical political economy of communication is uniquely positioned to analyse continuing developments in the spread and intensity of surveillance. When viewed from a macro perspective, surveillance reveals itself to be complicit with durable relations of power. Although monitoring technologies are themselves neutral, relations of power define the relationship in which they are produced and consumed. For this reason, political and economic power determines the organisation of surveillance, rather than the latter being driven by technological advancements in monitoring devices. Subsequently, patterns of surveillance saturation mirror asymmetrical access to resources in contemporary society. As Meehan, Mosco and Wasko have noted in their (1993) discussion of the future of the field, critical political economy's commitment to history, social totality, moral philosophy and praxis, ensures it is well prepared to rise to the challenges posed by changing national and global relations of power. In particular, they mention the role of the political economy of communication in researching "the deepening divisions between communication haves and have-nots, *the growth of the panopticon* and the role played by entertainment in the creation of hegemony" [emphasis added] (1993: 109). To this end, and to illustrate my argument that surveillance is complicit with contemporary relations of power, I will begin by providing a short illustrative account of monitoring in four areas; the workplace, consumer activity, urban spaces and international intelligence networks. I will then indicate why the framework of critical political economy is necessary to analyse contemporary surveillance practices. My purpose here is to utilize a critical conception of contemporary surveillance and to show why the latter is a central manifestation of political economy of communication research.

The first two areas of illustrative inquiry can be grouped under the heading of surveillance and capitalism. Together, the workplace and consumer surveillance represent two interrelated faces of private sector monitoring. In the workplace, surveillance both impacts on workers from above (workplace monitoring) and is at the center of work processes themselves (socialisation). The supervision of employees is as old as the institution of work itself, but in the modern era it is built into the fabric of the workplace. Macro tendencies such as the growth of transnational organisations have increased surveillance flows, operating virtually and in real time such that *networked* workplaces can be monitored (Dicken, 2003). The global character of TNC's is predicated on their capacity to organise and supervise labour world wide through surveillance. Risk averse and reliant on flexibility in labour management, TNC's use information and communication technologies such as computers, faxes, and video conferencing to deliver increasingly efficient processes of internal communication, greater automation and successful decentralisation of territorial operations (Donaghu & Barff as cited in Harrison, 1994). In the "after-Fordist" workplace, employees are watched more intensively and their actions are quantified in a greater number of ways (Dicken, 2003). Taylorist scientific management is re-calibrated to respond to the pressures of flexible accumulation, forming a new digitalized supervision of contemporary work (Parenti, 2003). New technologies accelerate existing trends of labour division, such that worker productivity can be closely monitored remotely and in real time. Impacting invasively on the experience of work, "Spy" technologies record keystrokes, log Internet use, even time coffee breaks to the second (Levy, 1994). The proliferation of surveillance devices is not qualitatively new, but their pervasiveness extends capitalist control over labour.

The monitoring of consumers is a growing area of surveillance studies. Such processes complement workplace surveillance and help sustain contemporary capitalism. Drawing from the Frankfurt school (Adorno, 1979), and the writings of Jean Baudrillard (1968, 1970), consumption can be understood as a crucial means of perpetuating capitalist organisation and production. To this end a supervening panoptic sort categorises, classifies and predicts the behaviour of consumers, sorting them according to their position in the social order (Gandy, 1993; Lyon, 2002b). Personal information is aggregated into large databases and analysed to assign economic behaviours within a given population (Clarke, 1994). Geodemographics and

direct marketing allow for individual consumers to be targeted or avoided, depending on their demographic and psychographic information profile (Goss, 1995). Shopping in urban and suburban spaces generates panoptic data, but at the same time these areas are subject to ordering through surveillance tendencies (Davis, 1992). Cities are redesigned to promote clean spaces of consumption while shopping centres increasingly resemble prisons (Davis, 1992). New technologies allow for consumers to be generally surveilled in cyberspace, as well as through particular electronic transactions and activities, creating virtual panopticons for market researchers (Gandy, 1993; Parenti, 2003). Over the last fifteen years, entire systems of consumption related to the mass media, urban space and cyberspace have been subject to constant monitoring. Viewed in this light, the overall aim of consumer surveillance is not just to monitor behaviour, but to reverse the perceived benefit of the "free market" – consumer choice itself (Lyon, 2003c).

In urban spaces, surveillance devices both extend and underpin dual city configurations. Surveillance allows elite groups to extend their actions in virtual time and space, while maintaining secure local places through gated communities and CCTV saturation (Graham, 2004). The city "redoubles" itself in cyberspace, which in turn is heavily monitored and subject to restrictions of access (Davis, 1992: 6). Cities become characterised by an "unsynchronicity" between global long-wave economic cycles, national governmental policies and the agendas of charitable institutions toward marginalized groups. In these circumstances, the poor experience "unsynchronised" time-space cycles and delineated life-chances (Wolch & Deverteuil, 2001: 150). Excluded from the kinetic elite who exist in flexible, global time and space, the poor experience the place they live in more keenly. Saturated surveillance in urban spaces impacts on criminality and policing. As private organisations fund CCTV, police take on paramilitary roles involving high-tech equipment (Davis, 1992). At the same time, the functions of surveillance devices "creep" from high risk policing into everyday crime fighting (Parenti, 2003). Surveillance is promoted as a "silver bullet", able to provide perfect solutions to complex social issues, even though it is often unregulated and carried out by private security firms (Marx, 1992 as cited in McCahill, 2002: xiv). In this regard, CCTV is open to abuse or discriminatory use. Sociologists of urban space have argued that monitored spaces challenge public sphere principles of universal eligibility.

Surveillance restrains the natural commotion of the cosmopolitan city, precluding proper democratic use and segregating life chances (Ellin, 1997; Flusty, 1997; Fyfe & Bannister, 1998; Smithsimon, 2003).

There is a mutually constitutive relationship between surveillance for the purposes of national security intelligence and structural power. Nation states are themselves predicated on intricate surveillance webs, deployed for the administration and control of large populations (Whitaker, 1999). In recent years, the traditional fear of the enemy "Other" has been intensified by risk management styles of organisation which favour prediction and the exclusion of potential deviants (Lyon, 2003a). The resulting national security policy affects individuals and groups in unequal ways, creating restrictive social arrangements for foreign nationals and citizens alike. The global consequences of recent international terror attacks accelerate existing surveillance tendencies, rendering them more pervasive and intensive (Lyon, 2003a). In the climate of fear and suspicion which has followed September 11th, domestic policing has become increasingly militarised and legislative changes have curbed civil liberties in the pursuit of a "safer" society (Wood, 2001). Pre-existing international surveillance networks were strengthened as part of the so-called "war on terror" and were underpinned by imperialistic tendencies within the U.S. (Whitaker, 1999).[5] When national security is used as a handle to control individuals internally and abroad, surveillance is revealed to be complicit with state power and is built into the very fabric of contemporary society.

These substantive developments in surveillance are best understood through the eyes of critical political economy because of its concern with capitalist relations of power, and with the relationship activity between economic organisation and the political, social and cultural realms (Golding & Murdock 1996: 14). As a subject for analysis, surveillance cuts across these areas. Monitoring is both produced by powerful private and public organisation, consumed by publics and represented in popular culture. More than this, the "critical" nature of political economy means that it seeks to unveil aspects of monitoring which may be publicly obscured. This in turn, contributes to a

[5] There is much debate among U.S. and international scholars as to whether the current foreign policy constitutes imperialism or not. For a review of three different perspectives: (E. Harrison, 2004) or

greater awareness of the behind-the-scenes role played by surveillance in perpetuating consumption as synonymous with everyday life; reasserting tradition divisions in labour relations; reconfiguring public space in private interests and extending imperialist tendencies in international intelligence networks. In this context, the policy-orientated concerns of critical political economy enables it to engage with the role of privacy legislation and other pragmatic measures in order to combat corrosive uses of surveillance (Golding & Murdock, 1996: 12).

At the same time, critical political economy is informed by theoretical insights from writers concerned with the broader understandings of critical social theory (Golding & Murdock, 1996: 12). For example, surveillance studies certainly benefit from Foucault's (1977) insights into the inherent nature of surveillance-based discipline. Such studies need to draw upon critical political economy to explicate how the material frameworks within which "real actors" confront a "real world" saturated by surveillance (Golding & Murdock, 1996: 13). By the same token, Jurgen Habermas' (1989) notion of the "public sphere" provides a normative working principle for democratic urban space, which can be supplemented by a political economy analysis of the reconfiguration of such a space by private and publicly controlled CCTV cameras. Most pertinently, because surveillance is an issue of theoretical, normative and practical urgency, political economy enables us to consider how surveillance impacts on the lived experience of subjects operating in the material world. Combined with historically informed understandings of the research task at hand, this approach should underpin any discussion of surveillance (Golding & Murdock, 1996: 13).[6] Finally, the framework of critical political economy is well placed to consider the position surveillance in sustaining *informational* capitalism. I will now elucidate why such a focus enriches our understanding of surveillance practices.

("Manifest Destiny Warmed Up," 2003). In any case the degree to which US foreign policy is driven by imperialistic tendencies is predicated on the proliferation of extensive surveillance networks.

[6] Structures of power do exist, but should not be conceived of in the functionalist tradition as "building-like edifices, solid, permanent and immovable". Rather, structural power is a dynamic formation which is constantly reproduced and responds to surrounding pressures (Golding & Murdock, 1996: 15).

Surveillance and Informational Capitalism

As I have suggested, surveillance is complicit with the emerging relations of power associated with *informational* capitalism. Golding and Murdock indicate in their description of the tenets of critical political economy that the discipline should be historically informed and responsive to the changes brought about by "late capitalism" (Golding & Murdock, 1996: 13).[7] In this context critical political economy has already contributed to critiques of optimistic academic discourses on post-industrialism, globalisation and the information society (see for example, Webster, 1995). Attention to surveillance should be at the heart of these critical understandings, as an extension of the existing research. Additionally surveillance should be recognised and as a prominent feature of informational capitalist developments. In my view informational capitalism is both guided by surveillance logics, and works to facilitate the extension of surveillance itself. In this context the concept of surveillance can also be thought of as vehicle which enables political economy of communication theorists to critique dominant discourse on the "information society".

When referring to "informational capitalism" I follow in particular Manuel Castells' (1989) conception of the "informational mode of development", which he argues emerged during the "restructuring" of US capitalism during the 1970's and 80's. Castells argues that both private and public organisations worked through their respective crises (caused by the demise of Keynesian macro-economic policy), by undertaking a restructuring process which established a new model of socio-economic organisation (Castells, 1989: 23). The crises, caused primarily by rampant inflation, labour militancy and the oil shocks of the late 1970s, converged with the emergence of new information and communication technologies and generated a new mode of economic organisation reliant on the greater use of 'information' in the productive process (Castells, 1989). Under the informational mode of development, knowledge

[7] In this paper I have chosen to employ the term "informational capitalism" rather than "late capitalism" because the idea of the *informational* mode of development encapsulates the role of information in the global capitalist economy. As I will show in this section, panoptic data and the logic of risk assessment help entrench existing societal inequalities. This is best described by a focus on role of information in sustaining and developing the capitalist system. Similarly, my intention is to continue in the critical spirit of Castells' (1989) work, rather than his later conceptions of the "network society" (1996). The developments outlined by Castells' 1989 thesis continued to be important in the 90s, and as I will argue later, also characterise contemporary, informationalised capitalism.

drives capitalist development. Knowledge organises and facilitates production, but is also a result of the process; the raw product itself (Castells, 1989).

According to Castells, the "informational mode" arose out of a particular evolution conjoining three intersecting spheres: production, consumption and state intervention (Castells, 1989: 18). The intersection between these three spheres was co-ordinated by core new technologies based on microelectronics for the purpose of information processing. In the sphere of production, the rise of the large corporation to organisational predominance brought with it the need for flexible production requiring efficient information flows (Castells, 1989: 18). In the area of consumption, information gathering systems were created to meet the marketing requirements arising from the increased distance between buyers and sellers in the mass market (Castells, 1989: 18). Finally, in the state sector, information processing enabled the expansion of government intervention into new areas of economic and social life in more subtle ways. Under the informational mode of development, the state and associated organisations define "strategic goals" which infiltrate social activities in non-institutional ways. Objectives such as military superiority help bring various facets of society into the same system of incentives and disincentives. In turn, the state steers society by manipulating the network of information flows which surround this goal (Castells, 1989: 18). In this section, I will apply the study of surveillance to these three areas (production, consumption and state intervention). The structure of the section does not explicitly follow this framework, but rather focuses on four relevant themes: information and panoptic data; changes in the global organisation of production; the application of risk management to consumers and citizens; and finally the globalizing nature of surveillance itself. In a sense, the first two can be though of as production/consumption, and the latter two as state intervention.

Panoptic data and information flows

Critical attention to surveillance studies should centrally inform analysis of informational capitalism because much of the data produced, consumed and traded in this economic paradigm is panoptic data (Gandy, 1993). As I have already indicated, information generated by surveillance technologies has played an historic role in directing and sustaining capitalist organisation. Recently, writers have argued that

consumption has become the primary means of generating capital in the information age (Castells, 1989; Baudrillard, 1968, 1979).[8] In this new paradigm, surveillance and panoptic data enable the channeling of consumption and consumer behaviour.

A number of writers have pointed to changes in capitalist organisation that have generated a growing relationship between consumption and informationalisation. Castells (1989: 18) argues that the creation of mass markets has brought the need for "specific marketing and effective distribution by firms", based primarily on information-gathering systems. Harvey (1989) has stressed that persuading citizens to embrace new kinds of needs (through advertising and marketing) plays an important role in encouraging consumption, which in turn sustains a capitalist economy. Together, these arguments point to the role of information (particularly surveillance-based information) in directing consumer behaviour. In this respect, Oscar Gandy (1993) argued that contemporary global capitalism is guided by, and operates through the "sorting" of surveillance-generated personal data.

The information generated by the day to day activities of individuals living within capitalist systems may itself be neutral, but can be gathered and used as a fundamental resource in social control, over and through consumption. Facilitated by data-matching and data-mining technologies, the "dataveillance" of individual and aggregate groups is becoming increasingly pervasive. Individuals can be identified in reward schemes or membership programs, their movements mapped according to credit-card transactions, bill payments and credit ratings (Lyon 1994: 71). Alternatively, "infopreneurs" purchase records from private institutions and pillage public records to accumulate enormous quantities of information. Focus groups and surveys are used to get inside the consumer's head and supermarket loyalty cards track shopping habits. Combined, the data creates massive "marketing consumer information files", which are used to direct-target individuals and are traded with

[8] I refer here to Baudrillard's (1968, 1979) argument that the problem for contemporary capitalism was no longer the contradiction between "maximisation of profit" and "rationalisation of production" (from the point of view of the producer), but rather a contradiction between virtually unlimited productivity and the need to dispose of the product (Baudrillard, 1988: 38). Put simply, from the second half of the twentieth century developed nations were capable of making (or sourcing) almost anything at reasonably little cost, so the manipulation of individuals to consume became pivotal in sustaining a capitalist economy.

other similar files from associated companies (Weitzen, 1998 as cited in Goss, 1995: 5).

Developments in micro-electronics and digitalization allow for efficient mass storage of information and for panoptic information to be searched in multiple, non-linear ways (Clarke, 1994). Individual consumer habits can be codified, referenced against norms and assigned economic behaviour patterns within aggregate groups. In turn, this enables specific consumers and selected niche groups to be directly targeted with tailored products (Buchwald, 2001 as cited in Parenti, 2003: 102). This is highly profitable in terms of advertising but also facilitates a growing personal information industry. Corporate enterprises gather data in a number of ways. Information can be purchased on the open market, generated internally or gained through linkages between businesses and the public sector (Lyon, 2003b: 168). The information can be automatically analysed and matched at great speeds, allowing for the successful administrative processing of information, charging of services, and direct-marketing.[9] More than this, personal information can be sold to other interested parties as a commodity. This aggregation of personal information into massive corporate databases is now a multibillion-dollar industry, growing "rhizomically" and playing a central role in directing consumption in the information age (Lyon, 2003b: 162).

In the political economy of personal information, gathering knowledge as a scarce good confers power on its possessors (Gandy, 1993: 17). Under the informational mode of development, private firm use ICTs to specifically codify and target niche groups of consumers (Castells, 1989). As Robins and Webster (1999) have argued, ICT's have facilitated the extension of Taylor's "scientific management" from workplace management to the "social management" of the market place. By viewing Taylorism as a philosophy based on capitalist imperatives, Robins and Webster have shown how the creation of "efficient" workplaces is complemented by the creation of "efficient" markets through electronic market research surveillance. In this way

[9] For example, during the 1990's Amex was understood to have amassed detailed information on over 34 million clients, including "where they travel, what they buy, where they eat" (Friday Report, 1990, as cited in Gandy 1993: 66). The company reportedly examined each of its card members on as many as 450 categories on a daily basis. This facilitated both the authorization of charges and the marketing of auxiliary and affiliate services to card members. In essence Amex was taking advantage of its surveillance-generated knowledge about the similarities and differences between people to extend the reach of its control and discipline behaviour (Gandy, 1993: 24).

consumption is subject to the "scientific management of need, desire and fantasy" as well as the precise reconstruction of need as a commodity (Robins & Webster, 1999: 98). When Robins and Webster discuss the ability of global, targeted advertising and direct marketing to discipline the consumer they suggest a direct, coercive connection between capital and consumer (Lyon, 1994: 140). This feature of informational capitalism entails a series of power relations that should be the subject of critical political economy analysis. The discipline has an important role in analysing the production of panoptic information flows, the capitalistic nature of such data, and the ways in which it is used to exert control over consumption. Moreover, this will allow political economy to unveil the character of informational capitalism.

Surveillance and the informationalisation of production

Surveillance also plays an integral role in changes to production processes and work environments under the informational mode of development. Within the sphere of production, the rise of the large corporation to organisational predominance brought with it "an economy based on large-scale production and centralised management", subsequently creating the need for efficient information flows (Castells, 1989: 18). From the 1980's flexibility in organisational structure and in capital-labour relationships have become pivotal in the formation of a new world economy in which corporations adapt constantly to world market trends. For example, technological innovations in microelectronics (computers) have transformed the production process by allowing for "Flexible Integrated Manufacturing", "advanced office automation" and most importantly "the general application of flexible integrated production and management systems" (Castells, 1989: 12). The need for corporations to employ ever-changing, slimmer production processes in order to sustain profit margins requires intensive "digital Taylorism", to enable flexibility in labour processes (Parenti, 2003). In the informational capitalist workplace, workers are watched and recorded more intensely while their productivity is calculated and quantified in a growing number of ways (Dicken, 2003: 107). Strategies like the "benchmarking" of "best practice" or obsessively logging hours and producing "minute by minute productivity scores" are employed to extract the maximum labour power from an individual worker (Parenti, 2003: 131-132). Each of these practices is designed to bring greater transparency to

worker activity and to push productivity to its limit in speed and quantity, in order to meet the demands of the global marketplace.

Informational capitalism is also characterized by a concentration of knowledge and decision making processes at the top of transnational organisational hierarchies, widening the division between intellectual and manual labour. This means that the only "truly indispensable" parts of any corporate organisation are its core management executives, with most other work (and workers) replaceable by automation (Castells, 1989: 30). This means that global conglomerates rely on the ability of surveillance technologies to deliver real-time productivity data on labour practices which are geographically disparate from management. In the case of Ford's 1999 "world car", the company relied on telecommunications to control decentralised production flows, and the fast transportation of parts and automation to enable the use of unskilled workers (Dyer-Witherford, 1999: 136). In this context, surveillance plays the crucial role of allowing global conglomerates to control their factories remotely and in real time, extracting maximum productivity through knowledge of the labour process (Donaghu & Barff as cited in B. Harrison, 1994: 206). In these two examples, surveillance can be positioned as integral to changes in production under global, informational capitalism. At the same time, monitoring allows for entrenchment of traditional divisions between labour and management in ways that deserve attention by political economy researchers.

Informational capitalism and risk assessment

A further important link between surveillance and informational capitalism concerns the role of risk management. When applied to mass populations, surveillance allows for the evaluation of uncertainty and the identification of deviant individuals and groups. This enables the general application of risk management as a form of economic reasoning by organisations in the public and private sectors. Pressured by the forces of globalization and capitalist restructuring, corporations use risk-evaluation to control employee behaviour, find and manipulate niche-markets and influence consumer decisions (Lyon, 2003b: 172). In the finance, insurance and consumer credit industries, risk management is used to calculate the collateral for credit (Gandy, 1993: 86). At the same time however, the sorting of high-risk

customers and the elimination of undesirables allows companies to appeal to groups for whom the probability of success is high. For example, some call centres have in-built "algorithmic surveillance systems" which use customer records to automatically queue calls according to how profitable a client is on the line (Graham, 2004: 325). In this way the science of credit management lies in determining who is likely to pay, and who is not, through the screening and sorting of applicants in advance (Rule, 1974 as cited in Gandy, 1993: 86).

In this way, surveillance allows for flexibility in penetrating the niche areas of profitable consumption, as well as for the sorting and discarding of "risky" consumers. But risk management in the private sector also has a sharp edge for consumers. In the insurance industry "selective discrimination" or, the classification and exclusion of particular individuals from risk pools, forms "the backbone" of policy (Reichman, 1986, as cited in Gandy 1993: 86). On one level, this appears to be an acceptable way of managing risk, but when the practice of redlining (refusing home loans or mortgage because of high risk) is taken into account, the ominous possibility that citizens will be segregated and life-chances adversely affected begins to emerge (Gandy, 1993: 88).[10]

The logic of risk assessment also pervades public sector policy. In Western cities, police monitor groups perceived to pose a threat to the status quo in order to move them out of public space. For example, the ComTrak system deployed by New Jersey police monitors "low to no risk juveniles" in a manner that allows them to select and program zones where young people can and can't go at given times (Rimbach, 1998 as cited in Parenti, 2003: 174). Consequently these groups are also excluded from participating in the democratic construction of public space. As Nelken (1994) has noted, the "underclass" is increasingly seen as "a risk to be policed" rather than a "social group to be integrated" (as cited in McCahill, 2002: 16, [emphasis

[10] The sharp edge of risk management is accelerated through globalisation and the often "leaky" nature of surveillance containers (Lyon, 2001: 103). A 1999 Reuters article outlines how banks and other large financial institutions such as Fleet Financial Group (Boston) have been buying and using consumer mailing lists for years. Again, the potential for the abuse of the customer databases is increased through globalization and the expansion of banking organisations into non-banking activities. Consumer groups worry that the worst-case scenario might entail "a customer being denied a mortgage because a bank's affiliate knows he or she has cancer; or a customer denied insurance when an underwriter who has access to credit records sees purchases that reveal an unhealthy life style" (Reuters, 1999).

McCahill's]). For writers concerned with the "dual city" surveillance and risk management work to segregate citizens and entrench bifurcated life chances under informational capitalism (Castells, 1989; Davis, 1992). Dualism manifests itself in residential areas, where real estate prices work as exclusionary devices and gated-dwellings employ private security agencies to insulate small communities. These trends represent a desire to geographically divide citizens on the basis of social concerns about who is a "legitimate" user of public space and who poses a "risk" to security (Graham, 2004).

Risk management is particularly pronounced in the national-international context. Most routine national-security centred intelligence operates through risk assessment (Whitaker, 1999). Based on the assumption that "perfect information" (Winseck, 2002) exists and has the power to reduce uncertainty, democratic liberal states develop extensive webs of surveillance in order to isolate the enemy. Ostensibly, risk-based screening is an objective rational technology, similar to criminal identification. But unlike other types of assessment, intelligence gathering involves a high degree of prospection as to whether a person has the intention as well as the capability to do something (Davies, 2002: 72). In this way, risk screening is innately ideological, subjective and arbitrary as well as being framed by a particular view of whose security deserves to be protected (Lyon, 2003a: 25-26; Whitaker, 1999).

Since the terror attacks of September 11th 2001, security agencies have sought to accelerate existing risk management through intensified monitoring (Lyon, 2003a: 44). Based on the assumption that maximum security is both desirable and obtainable by high-tech, total surveillance, value-laden definitions of the "Other" have led to saturated surveillance in urban spaces and airports as well as greater capacity for electronic information sharing among official agencies (Lyon, 2003a). At the same time, governments preoccupied with risk assessment have adopted a managerial focus, which denies the political origins of terror and seduces citizens into seeing safety and security as commodities which need to be paid for (Garland, 2001, as cited in Lyon, 2003a: 103). Risk assessment is accelerated through digitalization, new technological innovations and information sharing systems. One example can be seen in the CAPAS and CAPAS II software implemented in airports after the September 11th attacks. CAPAS profiles likely terror suspects by combining data from the FBI,

the National Crime Information Centre (NCIC), state department databases, the IRS, Social Security Administration, State Motor Vehicle and Corrections Department, credit bureaux and bank records. The software has the ability to create a "threat index" which in turn allows the authorities to single out individuals and further check and scan their bags thoroughly (Borin, 2002 as cited in Lyon, 2003a: 133).

Anticipatory and pre-emptive, this type of surveillance constructs identity rather than simply establishing it, and works prospectively to determine future events. Furthermore, the binary classifications of safe-dangerous effectively penetrate the corporeal world of the "untrustworthy" (van der Ploeg, 1999 as cited in Lyon, 2003a: 99). The reliance on risk aversion reflects a new set of social relations characterised by diminished direct relationships between law enforcement agencies and citizens. Large databases create a social distance between individuals and institutions, as organisations tend to deal with a person's data shadow, rather than with them directly (Clarke, 1994: 120). In this context, risk management, both as a logic associated with surveillance and as a feature of informational capitalism requires theoretical and practical consideration. Taken together, surveillance practices in production and consumption, as well as those impacting on national and international space, fundamentally define the nature of "informational capitalism".

International communication and global surveillance

Surveillance also provides a handle to critique sanguine accounts of globalisation, as networks of monitoring themselves become increasingly global. Accompanying the needs of informational capitalist public and private organisations are technological developments in surveillance networking which enable a vast and disturbing global extension of uncontrollable, intelligence-driven surveillance practices. For example, as national polities concede power to transnational corporations, traditional ways of looking at national security are superseded. Nation states network in their own way, beyond democratic scrutiny by forming security alliances which consolidate the role of the executive state in combating security threats (Lyon, 2001: 89; 2003a: 117). In particular, satellites and Global Positioning Systems construct supra-territorial surveillance networks. In 2002 there were 24 satellites in orbit each using long distance, microwave radio relays to intercept up to 20,000 simultaneous phone calls from across the globe. Together with GPS, satellites pinpoint exact locations of

objects based on latitude, longitude and grid references. This represents an unprecedented capacity to digitally transmit and analyse vast amounts of economic, political and military-intelligence information (Davies, 2002; Landau, 2003: 119; Ridelson, 1958 as cited in Whitaker, 1999: 15). Supra-territorial surveillance networks such as the UKUSA Comint agreement result from globalization processes as surveillance itself becomes "globalized" (Lyon, 2003a).[11] These networks impact on an increasing number of geographically disparate citizens around the globe more in a way that is intensive and pervasive. They also enable global political policing on the part of the United States (Whitaker, 1999). This critical understanding of globalized surveillance can mobilised by oppositional groups to show how technological developments in digitalization render whole societies transparent for the purposes of monitoring. The analysis of global surveillance networks provides an ideal vehicle for political economy to critique relations of power impacting on the globalisation process. More than this, the study of international communication requires a political economy critique of surveillance in order to fully analyse technological developments at a global, supervening level.

Conclusion

In order to recontextualise the role surveillance in the political economy of communication, I began by building a semantic conception of surveillance.
For the purposes of this argument power has been understood to operate through "various modalities" (Fairclough, 1989). Power occurs through the subjective internalisation of disciplinary techniques, but also results from asymmetrical access to resources; it is located in fluid but material *structures* of power. Bearing in mind that surveillance can and does "care" for citizens on a routine basis, and that where surveillance is controlling and disabling citizens may resist the gaze through escape or evasion, surveillance is nonetheless complicit with relations of power on a macro, sociological level. In approaching the "communication" feature of the discipline, I have argued that monitoring technologies are at their core, information and communication technologies. Surveillance has also overlapped with new and mass media in a way that has been neglected in the past. Monitoring techniques are both

[11] David Lyon emphasises that surveillance is becoming "globalized" in the sense that there is increased networking of surveillance. He is not suggesting that there is centralized "global surveillance" *per se* in the sense of a "unified panoply of surveillance technologies" that is all-encompassing (Lyon, 2003a: 139).

produced by mass media and new media institutions and these are (ideologically) represented in the texts themselves. At the same time, new media such as the Internet are sites in which surveillance devices may be consumed and popularised.

After illustrating the ways in which surveillance is related to structural power. I argued that monitoring has been integral to the constitution and reproductions of informational capitalism. Panoptic data comprises most of the information flows which oil the machine of informational capitalism. Surveillance also drives the growth of TNC's and in corresponding changes to the geographic location of production. Surveillance also allows flexible production processes to respond to the global market. Surveillance enables the precise uncovering and penetration of niche markets and thereby shapes patterns of consumption. In another sense, surveillance enables informational capitalism through the logic of risk management. The monitoring of individuals and aggregate groups allows for the economic reasoning of risk assessment to be applied to citizens moving through urban spaces and in national and international contexts. In this regard, surveillance creates new social arrangements characterised by restriction for those deviants judged to be a "risk" to the status quo. Finally the spread of informational capitalism is complemented by the globalizaion of surveillance itself. Private and public international networks of monitoring become increasingly extensive, and more distant in origin for citizens and individuals across the globe. These developments require greater attention from the critical political economy of communication; the study of surveillance must be recontextualised as a central focus of the discipline.

Most importantly, this brief illustration of the complicity between surveillance and prevailing relations of power has revealed that systematic monitoring must be confronted. This is a matter of both theoretical and *practical* urgency. The traditional commitment shown by critical political economy to praxis, or the conjoining of theory with practical political intervention, must underpin the study of surveillance. Such an approach must also contain an underlying project of social justice and political self government (Golding & Murdock, 1996: 13; McChesney, 2000: 115). This means recognising that surveillance has the potential to be enabling when constructed in accordance with normative principles. As Pierre Bourdieu has argued, western societies need to "rekindle reasoned utopianism" and throw off the shackles of

economic fatalism to approach the future with a positive but discerning vision. In terms of surveillance, this would mean recognising that citizens have the right to design monitoring practices according to their collective and democratic needs, rather than accepting discourses of fear, security and economic imperatives. In short, we must approach recognize that surveillance can fulfil some of our needs, but do so with our eyes wide open.

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