



'Cam Era' – the contemporary urban Panopticon.*

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Abstract

Deriving from Foucault's work, *space* is understood to be crucial in explaining social power relations. However, not only is space crucial to the exercise of power but power also creates a particular kind of space. Through surveillance cameras the panoptic technology of power is electronically extended. The article examines parallelisms and differences with the Panopticon and contemporary cities: visibility, unverifiability, contextual control, absence of force and internalisation of control. Surveillance is examined as an emotional event, which is often ambivalent or mutable, without sound dynamic of security and insecurity nor power and resistance. Control seems to become dispersed and the ethos of mechanistic discipline replaced by flexible power structures. Surveillance becomes more subtle and intense, fusing material urban space and cyberspace. This makes it impossible to understand the present forms of control via analysing physical space. Rather, space is to be understood as fundamentally social, mutable, fluid and unmappable – 'like a sparkling water'. The meaning of documentary accumulation changes with the 'digital turn' which enables social sorting. The popularity of 'webcams' demonstrate that there is also fascination in being seen. The amount of the visual representations expands as they are being circulated globally. Simultaneously the individuals increasingly 'disappear' in the 'televisualisation' of their lives. The individual urban experience melts to the collective imagination of the urban. It is argued that CCTV is a bias: surveillance systems are presented as 'closed' but, eventually, are quite the opposite. We are facing 'the cam era' – an era of endless representations.

There is no need for arms, physical violence, material constraints. Just a gaze. An inspecting gaze, a gaze which each individual under its weight will end by interiorising to the point that he is his own overseer, each individual thus exercising this surveillance over, and against, himself. A superb formula: power exercised continuously and for what turns out to be a minimal cost. (Foucault, 1980: 155)

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Take a walk with Foucault

In Michel Foucault's words, Jeremy Bentham – the designer of the Panopticon – 'invented a technology of power designed to solve the problems of surveillance' (1980: 148). The idea of video surveillance is almost literally the same: a technological solution designed to solve the problems of surveillance in urban space. People under surveillance are – as in the Panopticon – to be seen but to never know when or by whom; under control but without physical intervention. Recently, the number of surveillance cameras in urban space has grown massively (different cities in detail, see e.g. Takala, 1998; Lyon, 2002; McCahill and Norris, 2002; Töpfer *et al.*, forthcoming). It can be claimed that through surveillance cameras the panoptic technology of power has been electronically extended: our cities have become like enormous Panopticons (Lyon, 1994; Fyfe and Bannister, 1998; Tabor, 2001).

A number of authors have pointed out that the surveillance of cities shows interesting and important parallels to Foucault's thought (Fyfe and Bannister, 1996; Herbert, 1996; Soja, 1996; Hannah, 1997b; Norris and Armstrong, 1999; Fox, 2001 among others). Cities, like the Panopticon, can be seen as a 'laboratory of power' (Foucault, 1977: 204). In both cases surveillance 'links knowledge, power and space' (Herbert, 1996: 49). In cities, the routine of surveillance makes the use of power almost instinctive: people are controlled, categorised, disciplined and normalised without any particular reason.

On the other hand, many have argued that the Panopticon is not necessarily the best possible metaphor to be used in analysing contemporary surveillance (Poster, 1990; Norris and Armstrong, 1999; Bauman, 2000; Lyon, 2001). It represents 'modern' ideas of surveillance and is tied to the ethos of discipline. In postmodern societies power, control and order seem to have become more dispersed and flexible. Visual surveillance 'provides a (literally) *superficial* image of an individual and their outward behaviour, in contrast to the depth and personality sought by traditional disciplinary observation' (Jones, 2000: 8). Surveillance can be seen as representing the panopticization of urban space 'only in a very partial sense' (Norris, 2002: 268). The notion that surveillance is based on visual observation and centralised monitoring, as per the Panopticon, 'should not lead to the automatic assumption that in its operation and effects it is identical' (Norris and Armstrong, 1999: 91). Furthermore, it has been argued that the Panopticon is replaced by a 'post-Panopticon' (Boyne, 2000: 300), or an 'electronic superpanopticon' (Lyon, 2001: 108), and has been 'decentered' being 'both fragmented and unified at the same time' (Whitaker, 1999: 143). The panopticism we now face is 'imperfect' (Hannah, 1997b).

Despite this critique, I shall not completely reject the possibility that Bentham's original ideas – and Foucault's interpretations of them – might help us to understand some of the elements of the postmodern forms of visual control. In this paper I examine surveillance as it is executed with surveillance cameras, in cities. I endeavour to increase understanding on the effects of surveillance in contemporary urban space, deriving from Foucault's work on power and space.

The critique of increasing surveillance has focused on the presumed changes it might cause in space and social practices. It is feared that surveillance will lead to a 'vicious-circle of defence'. It is likely to make urban space segregated, polarised, more difficult to approach and stay in, less lively, less spontaneous and even 'dead' (Davis, 1990; Flusty, 1994; Mitchell, 1995; Ellin, 1997; Koskela, 2000a). Furthermore, surveillance can be used as a tool for reinforcing the 'purification' and 'homogenisation' processes of urban space. What follows is '[t]he destruction of the street, or city centre, as an arena for the celebration of difference' (Bannister *et al.*, 1998: 26).

The urban experience of being watched through a surveillance camera is, naturally, only one of the approaches to surveillance. With computerisation, surveillance is becoming more subtle and intense. It also spreads from material space to cyberspace. It has been argued that the real 'superpanopticon' exists in electronic environments – in the 'word wide web of surveillance' (Lyon, 2001). The 'webcams' distribute images to the audience on the Internet connecting 'local gazes' with the global community (Green, 1999). Local presence is replaced not by absence but, rather, by 'tele-presence' (Virilio, 2002: 109). The computer integrated surveillance systems link visible surveillance to the other forms of technological control (e.g. Curry, 1997; Graham, 1998; Whitaker, 1999). When surveillance cameras are combined with visitors' registers and 'people-finding tools', such as face recognition systems, supervision touches a wide range of issues around privacy and human rights. While older surveillance systems mainly watched over the public as anonymous crowd new technologies make it possible to recognise individuals and to combine faces to data bases of criminals, activists, etc. We are accompanied by our 'data doubles' (Lyon, 2002) or 'digital individuals' (Curry, 1997), and this 'exponentially increases' the panoptic power of surveillance (Norris, 2002: 270). 'Tele-surveillance' is the main component of representation and control in what has been called 'the era of the great global optic' (Virilio, 2002: 110).

Electronic means are also increasingly replacing informal social control (Oc and Tiesdell, 1997; Fyfe and Bannister, 1998). While surveillance may aim to support informal control it tends to drive responsibility away from individuals, creating a feeling that there is no longer need to watch over each other (Taylor, 2002: 81). Surveillance covers private premises and places of consumption as well as public urban space. The controlled spaces 'signal exclusion' (Sibley, 1995: 85). To understand how widespread surveillance actually is, a typology of places may be useful (Table 1).

Places are categorised as public versus semi-public (i.e. freely accessible space versus mostly accessible space which may be privately owned and can be closed at some time of the day) and surveilled versus unsurveilled (i.e. where surveillance cameras are placed). The table applies best to places where regulation of surveillance is rather low, such as British, Finnish or Estonian cities, for example (see Koskela, 2000b; McCahill and Norris, 2002). However, places covered with surveillance vary considerably: in some cities, such as Berkeley, parks are under surveillance (Mitchell, 1995) and in some cities, such as Berlin and Copenhagen, surveillance of open public space is forbidden (CCTV Surveillance, 2000; Töpfer *et al.*, forthcoming). What it comes to the understanding of space, this clearly represents a simple, obvious interpretation of urban space but, nevertheless, telling. Take a virtual walk with Foucault, around almost any major city

within the Western world, and his ideas will make the point: the Panopticon is 'present' nearly everywhere (cf. Eräsaari, 1995).

Table 1. 'A walk with Foucault': a rough categorisation of urban places under surveillance in cities where the level of regulation is low.

	public	semi-public
surveilled	streets squares market places pedestrian areas	shopping malls department stores terminals vehicles of public transport banks, hospitals libraries, schools churches
unsurveilled	most parks and urban forests	some small shops some schools and churches most restaurants

Foucault has been 'concerned with the ways in which the modern subject was constituted by disciplinary technologies of power' (Grimshaw, 1993: 53). Obviously, the purpose of surveillance cameras is to exercise power: to control deviant behaviour; and, to reduce crime and keep cities secure. However, with this ostensible control come other forms of power, either intended or unintended. The politics of seeing and being seen are complex. To achieve better understanding of the changes surveillance brings with it, a closer look at space is needed.

'Like a sparkling water'

Deriving from the work of Foucault (e.g. 1977; 1980; 1986) space is understood to be a fundamental basis for the exercise of power. Spatiality is crucial in explaining social (power) relations. Nevertheless, researchers have sometimes ignored the importance of space. As Soja (1996: 148) points out '[t]he power-knowledge link is acknowledged by every Foucauldian scholar, but for Foucault himself the relationship was embedded in a trialectic of power, knowledge, *and space*.' More specifically, it is not only the structures of space – the spatial forms – that matter but the social processes that are bound to the production of space. Thus, as Liggett and Perry (1995: 9-10) conclude:

For Michel Foucault space is both a way of thinking synchronically rather than diachronically and a means for bringing together architectural or physical space and domains or realms of thought. Thus his notion of spatial practices is a complex constellation of the ideological and the material. [...] One of Foucault's concerns in interrogating space as both materiality and ideology is as a means of understanding how *power* is constituted and operates.

Both Foucault himself and most scholars – especially geographers – deriving from his work have emphasised the 'spatialisation of power' rather than focused on how power affects the nature of space. Geographers comment on Foucault declaring that he develops a 'spatially sensitive analysis' (Herbert, 1996: 48), or that his work is 'foundational to spatial theory' (Liggett and Perry, 1995: 6). Some have argued that 'Foucault's sensitivity to space represents a decisive break from the historicism of much social theory, providing a new model for a postmodern geography' (Driver, 1997: 280). However, despite these several enthusiastic notions that Foucault's work has an important meaning for the conceptualisation of space, most scholars still tend to focus on his theory of power without a critical consideration on his understanding of space. Nearly every sentence where Foucault has used the word 'space' has been quoted several times by geographers! Nevertheless, the concept of space itself remains vague.

What I want to argue is that the interpretations overpower the original conceptualisations. Although, undoubtedly, careful reading of Foucault can reveal implications about space as socially produced – as for example the works of Soja (1989; 1996), Philo (1992), and Gregory (1994) show – as Foucault himself has pointed out, in most of his work his notion of space is mainly *physical space*. It was a particular organisation of architectural space that made it possible to separate, rank and observe people, which is crucial in the exercise of power (Foucault, 1977; Driver, 1985). '[D]iscipline proceeds from the *distribution of individuals in space*' (Foucault, 1977: 141, italics added). Hence, Foucault's spatial *metaphors* have too often been used uncritically.

In fact, it has accurately been pointed out that Foucault never did attempt a detailed self-conscious or systematic conceptualisation of space (Philo, 1992: 140; Soja, 1996: 147). Whereas concepts such as 'power' or 'knowledge' were under his critical consideration, 'space' was often taken almost for granted. Furthermore, since Foucault's analysis was on 'clearly defined, segregated institutional spaces' (Fyfe and Bannister, 1996: 39; see also Driver, 1997: 281) – such as prisons, hospitals and schools – the diversity or change in the nature of space was apparently not critical to his thought. However, in relation to urban space under surveillance the social – and changing – nature of space is precisely what matters. If space is considered to be a social product the nature of space itself deserves more attention. The relationship between power and space changes: not only is space crucial to the exercise of power but, reciprocally, *'power also creates a particular kind of space'* (Koskela, 2000a: 257).

Foucault's work that clearly differs from others is an article called *Of other spaces* (1986; originally a lecture in 1967). It provides a presentation of 'heterotopias' (for a profound analysis see Soja, 1996) and in it Foucault describes space in quite an exceptional way.

He writes about 'space of our dreams', 'internal' and 'external' space, and 'a space that can be flowing like a sparkling water'. Foucault glorifies space – by talking about 'the epoch of space' (1986: 22) which is replacing the important role of time (i.e. history) – but simultaneously builds concepts that are disengaged from architecture and come close to the idea of the social production of space. Rather than politics and economy (which have quite often been the basis for the argument that space is socially produced) he describes the spaces created by human habits, cultures and religions. This means that Foucault's ideas come close to Lefebvre's concept of 'representational space' (1991: 39) which he describes as 'space as directly lived through its associated images and symbols, and hence the space of "inhabitants" and "users" [...] space which the imagination seeks to change and appropriate'. Unfortunately, this work was never published by Foucault himself and the concepts used were never developed further.

In analysing the parallelisms and differences with the Panopticon and contemporary cities, it is important to acknowledge that urban space is far more complex than the concept of space in Foucault's interpretations of the prison. In cities, people may sometimes be metaphorically imprisoned but, nevertheless, they are not under isolation but quite the opposite: a city is a space of endless encounters. Whereas a prison is an extremely homogenous space, a city is full of diversity. This diversity – of both spaces and social practices – makes it impossible to compare urban space simply and directly to the Panopticon. 'Too much happens in the city for this to be true', as Soja (1996: 235) points out. However, there are several principles, characteristic to the mechanism of the Panopticon, which are clearly present in the surveillance of cities. Some are almost self-evident some more unexpected, but yet, they are all worth specifying.

'A dream of a transparent society'

The major effect of the Panopticon is, in Foucault's words (1977: 201), 'to induce in the inmate a state of conscious and permanent visibility that assures the automate functioning of power'. The emphasised meaning of *visibility* is perhaps the most obvious and often recognised panoptic principle. The basic nature of the exercise of disciplinary power 'involves regulation through visibility' (Hannah, 1997a: 171). 'Power is exercised through 'the 'eye of power" in the disciplinary gaze' (Ramazanoglu, 1993: 22). To be able to see offers the basic condition for collecting knowledge, for being 'in control'. In urban space 'absolute visibility is legitimated with the claim and the guarantee of absolute security' (Weibel, 2002: 207). Both in the Panopticon and in the space of surveillance, social contact is – most often – *reduced to visual* (Koskela, 2002). It is, however, worth noting that many surveillance systems include loudspeakers which can mediate messages to the public – as per the idea of 'a speaking tube system' in the Panopticon (Ainley, 1998: 88).

The Panopticon embodies the power of the visual. Visibility connotes with power. Within surveillance, visibility does not just have an important role but its meaning *overpowers* other senses. This has consequences, as I shall argue, to how prejudice is structured. By increasing surveillance '[a] dream of a transparent society' (Foucault, 1980:152), a society where everything is subjugated to visual control, has almost been

realised. In its extreme form, surveillance based on light and visibility is realised in what is called 'the nightsun' – a helicopter equipped with a searchlight that is used to oversee suburbs that are expected to be restless (Davis, 1990). What makes visibility so important is 'fear of darkened spaces' which are 'zones of disorder' (Foucault, 1980: 153) and should not be tolerated since they constitute a threat. Surveillance is used to 'sanitize' urban space, to exclude 'the Other' in a literal as well as metaphorical sense. 'The deviant' – such as drunks, junkies, panhandlers, bag-ladies etc. – are the 'dirt' of our times and need to be 'cleaned away' from public urban space in order to make it more attractive for those who are able to consume (Davis, 1990; Flusty, 1994; Mithell, 1995; Sibley, 1995). 'Visibility is cleanliness: "light" equates with "soap"' (Koskela, 2000a: 260). Visibility helps to ensure (social) purity and supports in keeping (social) space clean.

Furthermore, the function is two-sided since as the prisoner is visible so are the signs of control: the prisoners will always be able to see the tower from which they are watched (Foucault, 1977). Equally, will the citizens in urban space see surveillance cameras placed in visible positions, constantly reminding them about their own visibility? Even when the actual cameras cannot be seen, signs such as 'For your security, these premises are protected by a video surveillance system!' indicate surveillance it, thus, being 'classified as visible' (Marx, 2002: 14). 'The signs of control' are to be seen.

The gaze of a surveillance camera is 'calculated to exclude' (c.f. Munt, 1995). A camera represents total one-way-ness of the gaze by making it impossible to look back. One may see the cameras but an eye-contact with it is impossible. There is no 'mutual' gaze. It would feel ridiculous to try to *flirt* with a surveillance camera. Its objects are constantly seen but with no possibility to 'respond' or 'oppose' the gaze. It has been pointed out that 'the all-seeing' power has roots in mythology and religion: '[t]he overpowering and ubiquitous eye of God can be considered as prototype of this hegemonic vision' (Schmidt-Burkhardt, 2002: 18). The nature of the potential overseer is 'God-like', someone who is there, and simultaneously, is not: '[h]is presence, which is also an absence, is in his gaze alone' (Whitaker, 1999: 34). One can only be the observed, but not the observer.

'The inmate must never know'

However, not all the cameras are placed to be seen: as crucial as visibility is to maintain power is also *unverifiability*. In the panoptic prison, 'the inmate must never know whether he is being looked at any moment; but he must be sure that he may always be so' (Foucault, 1977: 201). Watching remains 'sporadic', but 'the threat of being watched never ceases' (Hannah, 1997b: 347). The inmates face 'the constant torture of the random but ever possible gaze' (Ainley, 1998: 90). Accordingly, in urban space unverifiability is characteristic to the function of surveillance. The consequence of increasing surveillance is that in everyday urban life people are more visible to invisible watchers than ever before (Fyfe and Bannister, 1998). 'The private actions of the gazed upon become the public spectacle of the gazers' (Hillier, 1996: 97).

Even if one sees a surveillance camera one can never know whether there is somebody behind it. From the location of the camera it is impossible to infer the location of the persons behind the camera. One does not know if there is someone looking, and if yes, who they are or how far away they are. Surveillance seems to 'transcend both spatial and temporal barriers' (McCahill, 1998: 41). The hidden locations of the control rooms make it impossible for the public to see from where they are observed. The '*politics of location*' become ever more complex since it is technically possible to place the monitoring room into another floor, building, city – or country (see Koskela, 2002). People under surveillance are forced to trust someone else, someone whom they are unable to see but who might see them.

Space becomes 'stealthy and slippery': impossible to find and reach (Flusty, 1994). The public will be left unable to be subjects of their own being (Koskela, 2002: 268). The empty gaze of a surveillance camera can be interpreted – literally – 'as a threat' (Hillier, 1996: 96) rather than security. In an urban environment both the objects and perpetrators of the gaze are also less clear than in a prison. The department stores and shops may use cameras to monitor their own personnel as well as the customers (e.g. Takala, 1998; CCTV Surveillance, 2000). In addition, ever more often the monitors are placed so that also the customers themselves can see them. Surveillance cameras can also be hidden or miniaturised, or even crawling or flying 'cyberinsects' (Whitaker, 1999: 88). Since the gazes and their directions are multiplied, the Panopticon is replaced by 'polyopticon' (Allen, 1994: 145) or perhaps, an 'omnicon' (Groombridge, 2002: 43). Anybody may watch anybody, anytime, anywhere.

'The principle of his own subjection'

He who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection. (Foucault, 1977: 202-203).

Being constantly conscious of being watched by invisible overseers leads to *internalisation of control*. While the Panopticon ostensibly keeps the body entrapped, it is in fact aimed at the psyche: in this mechanism 'the soul is the prison of the body' (Foucault, 1977: 30). People internalise the rules, regulate their own behaviour even when it is not necessary and, thus, exercise power over themselves. Power operates by creating 'bad conscience' (Lash, 1990: 58, quoted in Faith, 1994: 59). Accordingly, the panoptic nature of video surveillance imposes self-vigilance (Koskela, 2000a: 253). Surveillance 'manufactures conscience' (Tabor, 2001: 128). It works as the modern penal discourse: it individuates, normalises and mobilises human bodies (Faith, 1994: 59).

Internalisation of control means 'easy and effective exercise of power' (Foucault, 1980: 148). This is exactly the political argument used to defend the expansion of electronic surveillance: it is claimed to be easy and effective. New surveillance technologies are often highly appreciated by the police because compared to the 'old-fashioned' patrolling

by foot video surveillance makes it possible to oversee larger spaces with the same amount of personnel (Koskela and Tuominen, 1995).

Surveillance is about the 'regulation of bodily and other visible activities' (Hannah, 1997a: 171). The bodies under surveillance do not need to be regulated since they regulate themselves: they are 'docile bodies' (Foucault, 1977). From the perspective of the overseers, the 'bodies' seen in a surveillance monitor are 'doll-like' (Koskela, 2000a: 251). While being under surveillance, indeed, is a bodily experience, it is also an *emotional event*. Surveillance as an emotional experience evokes a variety of feelings: the objects watched can feel guilty without a reason, embarrassed or uneasy, shameful, irritated, fearful; also secured and safe (Koskela, 2002). What ensures discipline simultaneously erodes confidence. Guilt and embarrassment will guarantee (self) control. As Tabor (2001: 135) writes: '[t]he very idea of surveillance evokes curiosity, desire, aggression, guilt, and, above all, fear – emotions that interact in daydream dramas of seeing and being seen, concealment and self-exposure, attack and defence, seduction and enticement.'

Self control is not a necessary or stable condition. The emotional experience of being under surveillance is often ambivalent or mutable. A surveillance camera can make one feel safe but then, all of a sudden, change to a sign of danger. There is no sound dynamic of security and insecurity, nor power and resistance. Hence, the 'emotional space' that surveillance creates is unstable, nebulous and unpredictable. This space is *'like a liquid'* (Koskela, 2000a: 259, italics added).

Urban space is not a space of coercion in the same sense than a prison is because being in it is – at least ostensibly – voluntary. In cities people are not imprisoned but can move freely and are entitled to leave. They do not 'suffer continuous confinement' (Hannah, 1997b: 344). Nevertheless, if one wanted to *avoid* being under surveillance it would be impossible to live in a contemporary city. Especially in city centres it has become impossible to choose ones routes so that surveillance would be avoided. While being in a city may be voluntary, the new forms of control are increasingly involuntary (see Marx, 2002). In that sense, cities *do* form a space of coercion.

'An operation of correction'

Foucault describes imprisonment as 'an operation of correction' (1977: 245) aiming to 'cure' the 'delinquent'. Correspondingly, surveillance aims to 'normalise' urban space. It multiplies the effect of social norms which contribute in controlling behaviour and represents 'an orderly, controlled vision of public space is squeezing out other ways of imagining public spaces' (Mitchell, 1995: 125). The routine surveillance of urban space aims to ensure the exclusion of delinquency or deviance. It reflects the fears about population regarded as different. As Hubbard (2000: 248) argues

this 'exclusionary urge' has been most vividly demonstrated in the way that city space, often regarded as democratic and open, has become increasingly regulated. As a result, groups and individuals whose lifestyles

are viewed as incompatible with so-called 'normal' ways of behaving have had their access to urban space limited.

'[T]he basic logic of the Panopticon operates to maintain normality among the already normal.' (Hannah, 1997b: 349). Surveillance is used to monitor the groups, whose visual appearance is interpreted as somehow deviant, producing a particular type of 'normative space-time ecology' (Graham, 1998: 491). It is a 'powerful tool in managing and enforcing exclusion' (Norris, 2002: 267). Visual appearance forms the basis for prejudice. Surveillance is used to exclude 'suspicious' youths, the homeless, political activists, people of colour, or sexual minorities (e.g. Crawford, 1992; Lees, 1998; Norris and Armstrong, 1999; Fopp, 2002). The intolerant or racist attitudes of the ones responsible for surveillance is mediated and even reinforced by the cameras. Being 'black' ensures a high rate of scrutiny. Norris and Armstrong (1999: 155) found out in their research in Britain that black people were 'twice as likely to be surveilled for no apparent reason' than white. The practices of surveillance tend 'to inflate stereotypes' (Lyon, 2001: 63). Thus, surveillance contributes to reinforcing existing power relations rather than challenging them. The control is 'ridden with racism and sexism' (Graham, 1998: 491).

Furthermore, what must be acknowledged is 'the gendered nature of to-be-looked-at-ness' (Groombridge, 2002: 34). From the operators' point of view, women are 'invisible as suspects' and also 'invisible as potential victims' but clearly visible as targets of sexual interest (Norris and Armstrong, 1999: 127). It is, indeed, possible to use surveillance cameras as a means of sexual harassment (for a more detailed argument see: Koskela, 2002; also Hillier, 1996; Ainley, 1998; Brown, 1998). Gradually, incidents have been published around the world, showing examples of gendered abuse of control. Police officers, soldiers as well as private guards have been reprimanded for improper voyeuristic use of surveillance cameras. The controlled areas are at risk to be included in women's 'cartography of avoidance' (Epstein, 1997: 138).

Moreover, the cultural codes and politics of seeing and being seen are deeply gendered. There is some voyeuristic fascination in looking, in being able to see. It is clear that women have agency over their own practices of looking and can use both direct eye-contacts and technologically mediated gazes as a means for resisting oppression. Nevertheless, it can be argued the female body is still an object of a gaze in different way than the male body. This also applies to women being viewed through a surveillance camera. While men are more likely to be targeted in general, women are more likely to be targeted for 'voyeuristic reasons' (Norris and Armstrong, 1999: 114). 'The offensive gaze' belongs to men.

However, reciprocally there may be fascination in being seen, as the amount of 'webcams' showing public as well as private daily lives demonstrate (see for example Burgin, 2002). While being under surveillance may generally be involuntary, it is also the case that 'many people are seeking to increase their visibility' (Groombridge, 2002: 43). Just as the new forms of control are widespread, so are the forms of antipode and resistance created. No longer is panoptic surveillance, necessarily, interpreted as a threat but rather 'as a chance to display oneself under the gaze of the camera' (Ernst, 2002:

461). Visual representations are often connected with sexuality. Pictures circulated in the Internet range from young women turning the real-life images into pornography (by charging the viewers of their home pages) to gay communities building a (global) collective identity by presenting their lives in the net. The same point is valid in the 'reality shows' in TV, such as *Big Brother* (e.g. Weibel, 2002). 'The algebra of surveillance structures the reveries of voyeurism, exhibitionism and narcissism' (Tabor, 2001:125).

Whereas in the Panopticon the disciplinary practices are rather rigid, in cities control is always *contextual*. What is acceptable in a particular time and place varies. What at daytime might be a perfectly acceptable behaviour for a woman may be regarded as reckless at night. What may be tolerated behaviour for the youth on a schoolyard may be disapproved in city centre. What might be accepted behaviour among sexual minorities in the semi-public space they regard as 'their own' is regulated by (often inarticulated) social norms in public 'heterosexual space' (Valentine, 1996). The norms vary according to gender, sexuality and age etc. On the other hand, a city can be seen as a possibility, a space of manifold activity, leisure and lust, a space of spectacle, as well as surveillance. People 'enter' it of their own free will and often enjoy being in it. Surveillance can create 'planned, controlled, ordered space' (Mitchell, 1995: 115) but the other side of urban life still remains. A city is not a punishment.

Whereas imprisonment as a punishment is part of an established juridical system, the forces that maintain urban discipline are not exclusively extensions of state but rather the opposite. Characteristic to surveillance is that 'myriad agencies now trace and track mundane activities for a plethora of purposes' (Lyon, 2002: 13). Cameras run by private market forces outnumber those used by the authorities: the authorities actually have very little control on how and where surveillance is used. There is no Big Brother, in Orwellian sense. As Whitaker (1999: 134) has stated: 'Ironically, the one-way transparency sought by the Orwellian state has been realized much more effectively in the private than in the public sector'. This is not to deny that part of surveillance is used to sustain the power of the state and reinforce the central government – an element that can be called '*the political geography of surveillance*' (Koskela, 2000a: 245).

'A machine in which everyone is caught'

One doesn't have here a power which is wholly in the hands of one person who can exercise it alone and totally over the others. It's a machine in which everyone is caught, those who exercise power just as much as those over whom it is exercised. (Foucault, 1980: 156).

As the inmate of the panoptic prison, the public in urban space is often unaware of who is responsible for surveillance. Moreover, the control does not depend on who is responsible of it. It does not matter who is controlling: 'it could be a computer' (Cohen, 1985: 221) – as it quite often, indeed, is. Characteristic to new forms of surveillance is that the control is 'wholly or partly automated' (Marx, 2002: 28). This *anonymity* has a backward consequence: it is a common reason for mistrust. An official aim of surveillance is to

increase safety but, eventually, the effect may be rather on the contrary. It is not surprising that the urban authorities have ever increasing difficulty in 'maintaining credibility' (Hannah 1997a: 175; see also Oc and Tiesdell, 1997).

The architecture of surveillance is ensuring anonymity. Its forms are transparent from other side and opaque from other. While everything (and everybody) under vigilance is becoming more visible, the forces (and potential helpers) behind this are becoming less visible. Furthermore, the panoptic nature of surveillance is implying the anonymity of power itself (Koskela, 2000a: 253). The guards are mere mediators of power – simultaneously exercising and undergoing power. Power is present but difficult to grasp. 'Power is not possessed, given, seized, captured, relinquished, or exchanged. Rather, it is exercised. It exists only in actions' (Grosz, 1990: 87). 'Power' is a verb (Koskela, 2000b: 173).

Anonymity, from another point of view, can be understood as a positive urban value, even essential to the idea of urbanity. A 'society of strangers' is the classical Simmelian interpretation of the urban condition. In contrast to small communities where informal social control can make people feel repressed – in terms of expressing their identities – urban anonymity equates with freedom. In urban space people actually *expect* to remain anonymous (Taylor, 2002: 74).

Panoptic surveillance is also claimed to ensure that there is no need for physical intervention. The '*absence of force*' (Cohen, 1985: 221) is one of the panoptic principles present in cities. Nevertheless, how 'force' is interpreted is contextual. Being under surveillance makes different people react differently. The ones who are 'out of control' – or in the margins – understand it differently than the ones who are 'in control'. It has been argued that the 'militarisation' of urban space is increasing (Davis, 1990; Mitchell, 1995; Flusty, 1994). While urban space becomes segregated, the signs of exclusions come ever more important. Surveillance cameras are among these signs. They are part of the 'architecture of fortification' which 'braces the structures from the threat of a supposedly violent other' (Epstein, 1997: 139). Metaphorically, a surveillance camera is 'a gun' (Tabor, 2001: 132).

Via segregation, purification and exclusion of particular groups, surveillance *encourages conflict*. The urge for security 'has generated a defensive arms race' (Flusty, 1994: 49). In a more concrete sense, it is worth noting that much of the innovation in surveillance technology has been fostered by the military apparatus (Whitaker, 1999: 44; see also Dandeker, 1990; Levin, 2002). There is a clear military connection. Further, seemingly harmless surveillance technology is used in non-democratic regimes and used to police undesirable groups and movements. China, where surveillance images were used to identify the student leaders of the Tiananmen Square demonstration, provides an example of this (Levin, 2002: 579). The 'absence of force' creates the force of our times.

'Documentary accumulation'

As Foucault has argued, an important dimension of the penal system which the Panopticon was part of is 'a system of intense registration and of documentary accumulation' (1977: 189). What was crucial to the Panopticon was 'the connection between bodies, space, power, *and knowledge*' (Dreyfus and Rabinow, 1982: 192, italics added). Gathering knowledge is a form of maintaining control. Surveillance – by definition – involves the quest for information (Marx, 2002: 17).

Although contemporary surveillance systems are not all-inclusive, there are several overlapping registration systems which work from public urban space to cyberspace: the everyday life of an individual includes more registration than ever before (see e.g. Lyon, 1994; Hannah, 1997b; Graham, 1998). The control of activity, time and space is intense. In urban space, thousands and thousands of surveillance cameras record, constantly 24 hours a day. It is difficult to understand the amount of the material collected each day. Hence, most of the tapes are 'useless': '[t]he sheer mass of the data would be impossible to handle' (Lyon, 2001: 52). This is not to deny that the potential for use – or misuse – of the material always remains.

Documentation is used to maintain order among the inmates in the Panopticon, and accordingly, among the public in urban space. The power of documentary accumulation depends fundamentally on the ability to make *classifications*. 'A key trend of today's surveillance is the use of searchable databases to process personal data for various purposes' (Lyon, 2002: 14). However, this applies more to other forms of electronic control than traditional video surveillance. Video – in its analogical form – is not the best possible equipment for categorisation. Unlike in the panoptic prison, in urban space most of those who are seen remain unidentified and therefore cannot be linked to information which could be used for codification and classification. 'While more may be seen, less may be known' (Norris, 2002: 256).

The crucial change comes with the '*digital turn*'. Digitalisation makes it possible to use and organise the enormous mass of the data and enables 'social sorting'. By computerisation 'the social power of information is reinforced' (Lyon, 2002: 22). More important than documentary accumulation as such is 'the ability to store, sort, classify, retrieve and match which is all important' (Norris and Armstrong, 1999: 219). Surveillance becomes 'algorithmic' (Norris *et al.*, 1998). Digital material 'allows deviant identities to be "stored" in electronic spaces' (McCahill, 1998: 44). Face recognition systems are the final link between the registers and individuals walking on the street. While these systems are thus far mainly used for access control (which is actually already a relevant mode of exclusion in semi-public spaces) when the technology becomes more effective the potential to use them also in public open space increases. Hence, as Norris (2002: 278) states 'it is the computer – not the camera – that heralds the panopticonization of urban space. Anonymous bodies can be transformed into digital subjects, identified and linked to their digital personae residing in electronic databases.'

Another crucial change compared to the panoptic order is that the roles of documentation have been multiplied. Real – and manipulated – images from the surveillance system are

been circulated easily and effectively locally and globally, both in television and via the Internet. The amount of the visual representations expands as surveillance cameras produce 'real-time simulations of the city' (Graham, 1999: 143) and 'turn everyday life into a theatrical spectacle' (Hiller, 1996: 102). The intensity of the surveillance camera material circulation has led to the situation where '[n]ews is packaged as entertainment and entertainment is news' (Whitaker, 1999: 156; see also Greinacher, 1997; Pinck, 2000). Dramatised representations are populistically spread around the world, creating a condition where, described by Bauman (2000: 215), '[f]ighting crime, like crime itself [...] makes an excellent, exiting, eminently watchable show'. The 'nightsun' helicopters policing ghettos are accompanied with the 'TV skycams' distributing televisual imagery of the 'real life' (Pinck, 2000: 60).

Visual images are loaded 'with the promise of reality' (Groombridge, 2002: 38). We are seduced by the idea that what we see is 'real' – perhaps even more real than our own lives. 'Real time', as Virilio (2002: 108) has argued, 'has recently abolished the historical primacy of local time'. The value of an image is overrated. However, it is clear that the 'reality' of a videotape – a surveillance camera tape – is a social product rather than a mere description. The jury discussing the Rodney King case, ended up arguing whether the parts of the video which were 'out of focus' could be used as an evidence or not. '[S]urveillance does not find knowledge, but creates it' (Allen, 1994: 144). Furthermore, surveillance is increasingly focusing on the future, trying to predict what will happen. According to Bogard (1996: 66), information that is gathered is increasingly integrated into *simulated* models of reality, to the point where 'sight and foresight, actual and virtual begin to merge'.

Surveillance systems are also used as part of the collective imagination by using the CCTV schemes in *place marketing*. Security has a growing market value. This is partly a question of 'real' security in terms of crime figures, or 'produced' security in terms of which places we perceive as, and expect to be, safe. A number of cities use campaigns such as '*See You in the City!*' (Allen, 1994), '*Citywatch*' (Fyfe and Bannister, 1996) or '*Leedswatch*' (Oc and Tiesdell, 2000) to promote their public image, as well as 'to attract and sustain commercial investment' (Williams *et al.*, 2000: 182).

As argued, when the bodily individual becomes intertwined with the 'digital individual', the control becomes more profound and this will be ever more widespread as the surveillance systems are increasingly combined with developed computer systems that are able to recognise a face from a crowd. Simultaneously, however, the individuals increasingly 'disappear' in the 'televisualisation' of their lives. The individual urban experience melts to the collective imagination of the urban. The endless (re-re-re-)representations of surveillance material blur the line between reality and fantasy, original and simulation. Hence, surveillance has become not only a practice of control but also 'part of the cultural repertoire' (Groombridge, 2002: 30). 'New technologies' as Whitaker (1999: 140) points out, 'render individuals "visible" in ways that Bentham could not even conceive, but they are visible to multiple gazes coming from many different directions looking for different things'. Arguably, CCTV is a bias: surveillance systems are presented as 'closed' but, eventually, are quite the opposite. In the age of collective

imagination, televisualisation and cyberspace distribution, surveillance systems end up being, rather than a closed circuit television, an *open circuit television* – OCTV.

Conclusions

In this article I have tried to use the mechanisms of the Panopticon to understand the surveillance of urban space. It must be acknowledged that there are important differences between this 'ideal prison' and urban space and their similarities should not be 'overdrawn' (Fyfe and Bannister, 1996: 39). Furthermore, as time has passed the ethos of mechanistic discipline has, undeniably, been replaced by flexible power structures and thus even the idea of 'ideal prison' or ideal mechanisms control have been changing. A telling example of this is the Panopticon-shaped Koepel prison in Arnhem, Netherlands (see Koolhaas, 2002) where the prisoners spend more time outside their cells than inside and the central control post – the ultimate symbol of all-seeing power – has become a canteen for the guards!

However, many of the seemingly 'old-fashioned' mechanisms of power, control and normalisation still work in a surprisingly similar manner which, arguably, is fruitful in understanding the contemporary urban condition. For most people, it is possible to *ignore* surveillance in their daily lives; to take it 'as part of the (street) furniture' (Groombridge, 2002: 30). Nevertheless, this does not undermine the power mechanisms embedded in surveillance.

What, however, is not possible to understand by analysing the Panopticon is the concept of space or, more precisely, *the social production of space*? For Foucault, space was 'a frame': a basis for the functioning of power. The concept of space needed in analysing the urban phenomena is different – emotional, experienced, social, represented and simulated. A city is, indeed, a space of endless encounters. Furthermore, urban space is increasingly combined with multiple representations of space, partly 'living their own lives', partly intertwined with material reality. If nothing else, the fusion of material urban space and cyberspace makes the point: it is not possible to understand the present forms of control, functions of power and dynamics of looking via architecture only. Space is not about architectural order, ranking and distribution but rather, fluid, mutable, unmapable and difficult to grasp – 'like a sparkling water'.

Urban space will always remain less knowable and, thus, less controllable than the restricted panoptic space. Control is never completely hegemonic. There is always an element of resistance. Surveillance can be turned to 'counter-surveillance', to a weapon for those who are oppressed. As Surveillance Camera Players – a theatre group from New York presenting for surveillance cameras – show, it is possible to 'play' with surveillance cameras; to make opposing and critical comments (Surveillance Camera Players, 2000). Webcams aiming at increasing visibility rather than hiding from the gazes can also be interpreted as a form of resistance. Lyon (2001) has pointed out, there is not much an individual could do to resist the multiple forms of surveillance. However, resistance may also take a form of 'a choreographed demonstration of cooperation' (Faith, 1994: 39). It is not homogenous but pluralized.

What we are facing right now is *'the cam era'* – an era of endless representations. Arguably, we have arrived at the point where 'we live in a society that prefers the sign to the thing, the image to the fact' (Weibel, 2002: 219). There is no way to escape it; we will just have to try to understand it. Eventually, it may be so that the multiplied representations work as a more effective form of resistance than the efforts to avoid the gaze(s).

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