Seija Ridell:

The cybercity as a medium

Public living and agency in the digitally shaped urban space

Abstract:

The digitalized urban environment is explored in the paper as a *medium* with several overlapping and interweaving spatial layers. The author suggests that it has grown increasingly complex in the multi-spaced and multiply scaled cybercities for people to share in public space. Moreover, the challenges of public living in contemporary urban settings emerge most intensely at the points of intersection of the invisible technostructure and the (mass) media saturated phenomenality of the city. At these intersections, one ethically and politically burning issue is how people through their ICT-related activities contribute to the 'automatic production of space'. More specifically, critical attention should be paid to people's active, but not necessarily self-reflexive, participation in the consolidation of the 'technological unconscious' that conditions their own public agency.

Agenda:

Author:

Prof. Dr. Seija Ridell:

- Department of Journalism and Mass Communication, Kalevantie 4, 33014 University of Tampere, Finland
- ☎ + 358 3 3551 6291 , ✉ seija.ridell@uta.fi
- Relevant publications:
  - *The Poetics and Politics of Public Space* (ed. together with Päivi Kymäläinen and Timo Nyyssönen). Tampere: TUP 2009, 407 p. (in Finnish)
  - Social media as a platform for agency. Audience, community and public in the analysis of *YouTube*. *Lähikuva* 21(2)2008, 27–43 (together with Veikko Pietilä; in Finnish)
  - *Grasping Media* (ed. together with Pasi Väliaho and Tanja Sihvonen). Tampere: Vastapaino 2006, 264 p. (in Finnish)
  - Playing land use games in the media space. *Yhdyskuntasuunnittelu* 43(1): 2005, 28–48. (Media city, city media!?? theme issue; in Finnish)
  - Mediating the web as a public space. A local experiment in the creation of online civic genres. *Nordicom Review* 24(2005):1, 31–48. http://www.nordicom.gu.se/common/publ_pdf/180_031-048.pdf (in English)
  - ICTs and the Communicative Conditions for Democracy: A Local Experiment with Web-Mediated Civic Publicness. In Mälkiä, Matti & Anttiroiko, Ari-Veikko & Savolainen, Reijo (eds., 2004) *eTransformation in Governance, New Directions in Government and Politics*. Hershey etc.: Idea Group Publishing, 85–108. (in English)
  - The Web as a Space for Local Agency. *Communications: The European Journal of Communication Research* 27(2002)2: 147–169. (in English)

In studying the relations between ICTs and the city, relatively little attention has so far been paid to the symbolic aspects of digitalized urban space. Yet people also lead their lives in the fibre optically networked, wirelessly connected and software supported cybercities in the midst of media representations, advertisements, signposts and other cultural artifacts. Their presence, in fact, has been augmented by the digital technologies and contributes to the constitution of the cybercity itself as an immensely complex spatial-temporal texture or a *medium,* which we simultaneously sense, experience and decode (cf. Mitchell 2005; McQuire 2008).

Obviously, the digitalized infrastructure conditions equally crucially as imperceptibly the phenomenal and symbolic dimensions of the present-day urban milieu. The material basis of cybercities and its entanglement in the networks of contemporary capitalism has been discussed at length by critical geographers (see, for instance, Graham & Marvin 1996 and 2001; Graham 2004b, 2004c; Thrift 2005; Crang & Graham 2007). Likewise, scholars have pointed out how the increasingly computerized production of space in cities becomes automatic as people accommodate the use of new technologies as part of their everyday routines. In this way they participate in the sinking of software beyond conscious recognition, as a self-evident background for daily existence (Thrift & French 2002; van Kranenburg 2008). One obvious reason for this easy development of a taken-for-granted attitude is, of course, that people lack access not only to the "mechanosphere" of the cybercity (Thrift & French 2002) but also to even a rudimentary knowledge of its structure and functioning.

In addition to the ways in which the computer code sorts and controls urban life independent of representation – so insightfully mapped by spatial theorists – I would suggest that we also need to shed light on the representational dimension of the "computable city" (Batty 1997). In fact, my contention is that this is especially pertinent when seeking an approach to the digitally shaped urban environment in terms of ethics and politics. There are, in my view, two major reasons for this.

To start with, it is not possible to tackle the city's "technological unconscious" (Thrift & French 2002) without first representationalizing it. Rendering perceptible the "values and ethical principles [inscribed] in the depths of the built information environment" (Star 1999, 379) requires that we are aware of its presence and recognize the ways it supports, guides and constrains our behaviour. This cannot be done without configuring the non-representational in the realm of discourse – without translating its mutely performative logic into systems of words and images. Hence, in order to get hold of the backstage technical machinery that makes things happen on the urban front stage, we need to give it a symbolic form (cf. Star 1999). More generally, as Mark Andrejevic (2009, 40) paraphrases Slavoj Žižek, the symbolic allows a distance between the code and what it defines thus acknowledging "the possibility that things might be otherwise than how they 'directly' seem". The importance of symbolic distance is in no way diminished, quite the contrary, by the fact, that along with digitalization, the infrastructure has not only spread from the background all around us but also become almost literally part of our bodies; moving with us when we travel in our cars, use our portable communication and media gadgets and carry in our bags the mundane consumer products tagged with an RFID chip.

In another sense, the representational dimension is indispensable if we want to ask how people lead their lives *together* in the digitally conditioned urban environment. This question frames the city as a public space and considers people in their role as public beings. To be *public* – both in the sense of visibility and of collectivity (Arendt 1958; Weintraub 1997) – our activities and interactions must take place on the symbolic dimension; they need to be performed visibly and/or audibly *in situ* or rendered otherwise (for example, through mass media representations) apparent to others.

In what follows, I do not, however, seek to prioritize the representational over the non-representational. Instead, my starting point is the pertinence of both in our attempts to understand our public living and agency in the digitalized city. We cannot grasp the "machine space" of cybercity (Thrift & French 2002) by merely analysing its symbolic dimension; nor is it possible to explain contemporary urban spatiality by focusing exclusively on its invisible infrastructure. More precisely, then, I will direct my attention at points at which the invisible materiality of infrastructure meets the symbolically loaded phenomenality of the city, as it seems to be at their intersections that the most intriguing ethical and political questions or, differently put, questions of post-hegemonic power emerge (see Lash 2007).

The doubly articulated media in urban space

Structured essentially by the digitalization and computerization of its infrastructure on the one hand and by the pervasive presence of media technologies and representations on the other, the contemporary urban environment can be seen to consist of overlapping and interweaving spatialities of at least three analytically different kinds. We are concerned with a multi-layered spatial-temporal texture or a medium[1] that is composed by the co-existence and constant interpenetration of physical, discursive and virtual dimensions. The nesting of several spatialities makes the cybercity one of the richest (if not the richest) media environments or media ecologies of all.[2]

The notion of urban spatiality I apply here has its inspirational starting point, among others, in Henri Lefebvre's (1974/1991) and Edward Soja's (1985, 1996) conception of space as inherently social and relational, as something that is constituted and becomes constantly reproduced in the processes of human activity and interaction. There are also closer affinities, notably with Lefebvre's trialectical way of conceiving space through physical, mental and lived aspects. However, compared to his sweeping historical view that seeks to include modes of producing and perceiving, imagining and experiencing space, the focus here is confined to the question of urban space as rearticulated by the development of communication and media technologies – a question that has only a minor role in both Lefebvre's and Soja's trialectics.[3] These technologies, as William J. Mitchell (2005, 16–17) points out, at the same time supplementing indirectly Lefebvre's (1991, 39) definition of representational space, "add a dynamic layer of electronic information to the mise-en-scène

established by an architectural setting and the meaningful objects and inscriptions that it contains". Another difference between Lefebvre's spatial triad and the conception of multilayered space employed in this article is that the latter also conceives of (media) representations in terms of space, incorporating their specific discursive spatiality.

While dwelling in and moving about the city, people shift continuously back and forth between the layers of the urban spatial constellation simultaneously also navigating between different spatial scales. Take a person who sits on a bench in a city park, connected wirelessly to the internet through her/his laptop. S/he senses at least subconsciously the physical environment, noticing in an equally absent-minded manner the front covers of evening papers (the 'porches' of discursive spatiality) on the nearby kiosk billboards, at the same time as s/he visits within minutes the premises of an online newspaper, updates her/his status on the platforms of *Facebook* and *Twitter* and then moves on to chat politics on a web forum. Indeed, people's presence in the city today is increasingly a hybrid experience of being around in many simultaneous spatial and social environments (cf. Mitchell 2005, 16; see also de Waal 2008).

One interesting question at the intersection between non-representational and representational in the "media metropolis" (de Waal 2008) concerns specifically scales. First of all, digital network technology has made it possible for individuals to interrelate their personal 'space bubbles' with various bigger and more or less remote groups of people and to do so while on the move. Often navigation between spaces involves negotiation with social norms and rules as mobile technologies have rearranged the traditional boundaries in the physical urban space between public and private territory and made it unclear how people should behave. In addition, portable ICTs may also serve as delivery channels for mass media representations such as news, which opens momentary and often moving micro spaces of globally oriented discursive publicness within the cityscape.

Second, the presence of mass media – both as technologies (screens, printed materials, loudspeakers, billboards, panels) and representations (the symbolic messages offered discursively on different media platforms) – in the city plays a major role in terms of scale. We can include here even the buildings of media houses, which not only furnish the local urban space but are organically connected to an invisible network of global technostructure – like

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[1] Medium is here understood in the philosophical sense defined by Aristotle (2000) as an ether, a gap or an interval that enables human perception, communication, experience and understanding to take place – each medium thus "giving us the world" in specific ways (Ridell & Väliaho 2006). This inherently spatial notion of medium is given one prominent articulation in Marshall McLuhan's (1964) medium theory (see also Strate 2008). One could also say that, in the McLuhanian sense, cybercity is the ultimate medium as it incorporates in itself each and every other medium.

[2] Cf. Friedrich Kittler (1996) for an information science inspired view of the city as a medium.

[3] But see Kirsch (1995) for a detailed discussion on applying Lefebvre's thinking in a technological context.

fungi with their rhizome. Likewise, the animated façades covering the entire surface of buildings as their outer skin grow out of the digitalized media machinery that produces and displays the moving images (cf. Krajina 2009, 406; also McQuire 2008, 126–127). Regarding distinct mass media technologies such as television, their specific feature is the ability to adapt scales between physically distant locales both technologically and discursively. A site-specific television set in a local pub, for example, can transmit live audiovisual narrative from the other side of the globe, thereby bringing together in one communicative presence the local 'here' and the distant 'there' (McCarthy 2001). The levels of non-representation and representation are both involved as neither television technology nor the televisual representation alone is able to accomplish this bridging of scales. Similarly, a television set in the home connects the household with the wider social life physically located outside its walls (Morley 1994).

One way to illustrate the scale-adapting presence of mass media in the cities is by extending the notion of double articulation, introduced in the study of domestic media consumption in the early 1990s. As pointed out by Roger Silverstone (1994), the media do not only carry symbolic messages, they are themselves – as material devices and objects – imbued with cultural meaning (see also Silverstone & Hirsch 1992). A unique feature of media as objects is precisely their liminality; they both mediate messages and act as intermediaries between different and differently scaled worlds. This intermediary position is a site of cultural struggle as through access to people's homes and urban spaces media corporations and other powerful agencies attempt to insinuate images and discourses both into the household's and the city's daily rhythms and routines.

In contemporary urban settings, the meaningful materiality (and the material meaningfulness) of both mass and personalized media forms a junction at which the digitalized technostructure and the phenomenality of the city interface with each other in multiple specific ways. Studying these intersecting articulations may afford insights into the conditioning efficacy of the urban infrastructure, and also help us grasp the ways in which the presence of media constitutes the cybercity itself as a medium.

Let it be noted that from a medium theoretical starting point, what we most essentially should focus on in the doubly mediating role of media is, in fact, *presentation* in the sense of those material

devices and displaying gestures that make things perceptible to others – thus enabling their public sharing – in urban space. In other words, it is through the presentational that the representational gains its existence in the first place. (Cf. Hirvi-Ijäs 2007, 10–15.)

Public living and agency in the cybercity

How should we then tackle the issue of ethics and politics in today's digitally shaped urban environment of multiply scaled and interlacing spatialities? As I indicated indirectly at the beginning, one way to approach the ethical and political dimension is in terms of public living and agency and, more precisely, through formulating a question of power over their conditioning in the cybercity – power that some have characterized as "post-hegemonic" (Lash 2007) and others as "posthuman" (see Hayles 2006; Gane, Couze & Hand 2007).

If we approach the contemporary city in medium theoretical terms, a central issue of power revolves around the rhetoric of non-representationally supported and presentationally staged public urban space. The cybercity as a medium interpellates the dwellers and *flâneurs* to specific subject positions at all layers of the spatial constellation making it particularly pertinent to ask what forms and strategies the hailing assumes at points where the infrastructure and the phenomenal-symbolic dimension of the city intersect. At these intersections one urgent question is how software regulates and controls the kinds of public agency rhetorically on offer in contemporary urban milieus. Another important question concerns the ethical and political implications of the doubly articulated presence of mass media. It can be suggested that the rhetoric of the cybercity is at its most persuasive at sites where mass communication technologies – as digitally embedded presentational objects – furnish urban spaces and simultaneously put on public display specific symbolic messages. Anna McCarthy remarks, for example, that the positioning of television screens in urban spaces is carefully planned in order to standardize certain patterns of perception for users who pass through those locations. At the same time, commercial practices that guide the production of texts and programme forms to be circulated work to "commodify the spectator's position in space for sale to advertisers". (McCarthy 2001, 11–12.)

The doubly articulated pervasiveness of commercial mass media and above all the ubiquitous presence of advertising constitute the present-day urban environment itself much like a mass medium with its one-way patterns of communication. Most clearly this can be observed in shopping malls which not only have television screens scattered all over but which mimic television as a medium in that "the shopper strolls through experiences as he or she might scan through TV channels" (Goss 1993, 39). Leif Dahlberg (2006, 41) argues critically that "mediated discourse in (physical) public places in contemporary western society to a large extent has been monopolized by an advertising monologue that *shuts out* other public discourses" and speaks to us "as consumers". As Anne Cronin (2006a, 627) importantly points out, the persuasive textuality of the commercialized city space is not simply 'readable' but embodied, as "advertising attempts to target and inhabit everyday commuting and shopping routes and become part of the fabric of people's urban experience" (see also Krajina 2009, 410, 415).

It should be noted, however, that space as such is not an external frame for human action but people's activities and interactions contribute to the production and maintenance of space and its specific characteristics. In terms of power, then, it is not enough to analyse how and as what kind of subjects the mass media dominated urban rhetoric addresses us but, equally importantly, how the interpellation is actually received. Do people accept the position of spectator audience offered them or can we find acts and practices of aberrant and resisting decodings (Hall 1980)? Or, to paraphrase Jon Goss (1993), McCarthy (2001) and Cronin (2006a), who apply Michel de Certeau's (1984) famous distinction, how do the strategies of the spatially powerful encounter the tactics of ordinary city dwellers?

Subsequently, the question that arises regarding the role of ICT-related activities in contemporary cities concerns the ways people's personalized media use relates to the city medium's mode of address and how these activities mold the city as a spatial constellation.[4] Recent studies on the use of portable communication and media devices such as headphones and music players (mp3s, iPods), laptops and the increasingly multi-functional mobile phones in the city report that these technologies tend to separate people who share physical urban space. For example, in their study on wireless internet use in paid and free wi-fi cafes Keith Hampton and Neeti Gupta (2008) observed similarities between the use of mobile phones and laptops in that both are often employed as "portable involvement shields" to avoid contact with co-located strangers for socializing instead with remote but already familiar people and groups (see also Ito, Okabe & Anderson 2009; Hampton, Livio & Sessions 2009). As a whole, mobile technologies help to construct individualized space capsules or bubbles, or "telecocoons" with invisible barricades around them that co-exist in their separation on the urban stage constructed by the overwhelming presence of mass media. These technologies can even be described as "territory machines", which seize and appropriate urban space temporarily but repeatedly for personal purposes. Be the uses of portable communication and media devices "defensive or offensive postures" (de Waal 2008; Ito, Okabe & Anderson 2009), in both cases they strengthen a tendency that Michael Bull (2004, 278) calls "public privacy" and Hampton and Gupta (2008, 835) "public privatism" in the physical urban space.

Contemporary urban environment is without doubt public in the first sense of Hannah Arendt's (1958) dual definition, as people in their telecocoons are visible and audible to each other – sometimes exposing their most intimate thoughts and deeds and exhibiting their community networks to an embarrassing extent. However, being perceptible to others and witnessing others' performances in a space does not automatically make that space public in the collective sense. A collectively public space is not merely a platform of appearance but refers simultaneously to a space which provides opportunities to address previously unknown and not necessarily like-minded others on matters of public concern (Barnett 2004, 406–407). Or, as Marcel Hénaff and Tracy Strong (2001, 1) formulate the collective aspect slightly differently, we can call public any space "in which human beings encounter each other with the intention of determining how their lives in common should be lived".

In light of recent research, it definitely seems that the use of mobile technologies in urban space

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4   A distinct – a more representation oriented – set of research questions could be formulated by focusing on the forms and practices of audiencing the "media city" (McQuire 2008; on audiencing as an activity in the domestic context, see Fiske 1994). As Zlatan Krajina (2009, 410, 415) points out, in the present-day urban space people are surrounded by a myriad of mediated elements, and the strategic hailing by the broadcasting and commercial display screens and panels is mixed with the

almost inescapable distractions coming from other people's use of personalized media, such as mobile phone conversations.

discourages encountering physically co-present strangers and initiating discussions with them on issues that exceed the individual's personal or in-group aspirations. There may be publicly oriented activities involved but these tend to take place online instead of the physical layer of urban environment, where users more often seem to occupy the position of audience on the one hand, and that of a community member on the other. However, there are also occasions – as in the case of Hampton and Gupta's (2008) "placemakers" with their laptops – when people use personal media devices to initiate rather than shut out interaction with unfamiliar others around them. This calls for further empirical study in urban locations with wireless internet access to explore whether and how mobile ICTs, compared to more traditional portable media such as newspapers or books, serve as facilitators of not only community oriented interpersonal communication but also of interactive engagements between people as publics (see Hampton, Livio & Sessions 2009).

Contesting post-hegemonic power?

The mass media saturation of contemporary cities suggests that the dominant mode of address in urban settings is not – and perhaps even cannot – be challenged. We may wonder, for example, whether alternative decodings are possible in thoroughly commercial spaces like shopping malls, where all forms of interpretation, including the resistant ones, have been anticipated and assimilated as parts of the seamlessly seductive urban phenomenality (cf. Allen 2006).

In fact, it is fairly easy to imagine ways of politicizing and countering the consumerist rhetoric of the city medium at the level of representation. This is exactly what interventionist urban art projects, critical consumer campaigns and other "subvertising" activities attempt to do (see Dahlberg 2006; Cronin 2006a, 2006b). The trickier question, however, concerns the practices of use of both mass and personalized media in the urban setting. How to render problematic their taken-for-grantedness and the way it contributes to the fragmentation of city space at the same time as it confirms the infrastructural conditions of people's public activities and interactions?

If we are to accept Scott Lash's (2007) view of post-hegemonic power, it is indeed not possible to chal-

lenge the conditioning of urban public living and agency that occurs at the level of non-representation. This is because the routines involved are firmly located on the ontological level, residing in the "algorithmic, *generative* rules"... which "we do not encounter … in the same way that we encounter constitutive and regulative rules" (Lash 2007, 71). Generative rules pervade our entire social and cultural life, but as they "have to do with the thing-itself that is never encountered" (ibid.), their critical reflection seems to be out of reach. Hence, the implication is that in the context of the sinister post-hegemonic power, resistance is not only impossible and futile but also irrelevant. In fact, as domination now constitutes us from the inside (ibid., 61), grasping "us in our very being" (ibid., 75) and having made the brain "immanent in the system itself" (ibid., 60), we have become our own (post)hegemons, which leaves destructive self-revolt as the only option for resistance.

In contrast to this paralysing scenario, I wish to suggest that there are ways to challenge and resist the post-hegemonic dynamics of spatial power at the level of routinized action. Paradoxically enough, digital technologies themselves offer abundant and unexplored opportunities for venturing into the elusive urban infrastructure and, subsequently, for reflecting on our 'conspiratorial' involvement in its performativity. Embryonic forms of such ventures can be found here and there – in mobile gaming that explores and plays with the "seams" in the wireless network system design, planned sousveillant activities and disclosing attacks by "street-level internet crackers", to name a few examples (see Chalmers et al. 2005; Mann, Nolan & Wellman 2003; Graham 2004a).

Tactics of rendering discernible and problematizing the routinely unrecognized in the contemporary urban setting require treatment beyond the scope of this article. What is important to note in this connection, however, is the pivotal role of the symbolic dimension as a prerequisite for and an essential part of subversive action. To start with, in order to take a stance towards the functioning of the digitalized infrastructure and to ponder critically the nature of our compliance with it, we need to recognize where and how that structure exists.[5] Once we do so, the

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gestures themselves that politicize and disrupt the ways in which the infrastructural system works both independently of and through people's ICT-related activities are plentiful and some of them even trivial.[6]

In other words, configuring the digital infrastructure in the realm of representation is the necessary first step in the process of coming to grips with it in terms of power. A central part of sousveillant activities, for example, is to uncover the disappearance of digital technologies into the fabric of buildings, objects and bodies and make their surveilling role known to others by means of photographing, videotaping or evoking counter-performances (Mann, Nolan & Wellman 2003). Urban internet crackers for their part, with laptops in their hands track "points from which they can enter the local, broadband wireless networks of corporations". Once connected to these hotspots of network coverage the "street-level activists mark up their boundaries with chalk so that these hidden infrastructures can be publicly consumed". (Graham 2004a, 16.) One more example are critical RFID activists' attempts to expose the use and future potential of "spychips" as a corporate and governmental surveillance tool by public boycotts and protests both offline and online.[7]

Obviously, politicizing and challenging the dynamics of post-hegemonic power in the urban context also entails ventures into the embodied spatial texture of cybercities in which private space bubbles exist and move about in close proximity yet ignoring one another's presence in more or less calculated manner. Embarrassing the self-evident separation of telecocoons and rendering problematic their offensive variants would make palpable and raise questions about the colonization of urban space by domesticating and customizing desires.[8] This, again, would open up opportunities for countering the forces that work to deprive urban public space of its

collective significance. What actual forms such interventions – and their research – might take remains an urgent topic for further ethically and politically informed discussion.

To close my ponderings on a more theoretical note, a crucial question to be posed is whether it would make any difference regarding digitally reconfigured posthuman subjectivity if people were more aware of the ubiquitous "cognisphere" that invisibly surrounds them in the contemporary urban environment and, furthermore, if they realized how they themselves contribute to it through their ICT-related activities (cf. Ratto 2007; Gane, Couze & Hand 2007; Hayles 2006). As, for example, RFID activist Katherine Albrecht emphasizes, in order for people to agree to bear RFID-tagged clothes and actively submit to being tracked, they must first be aware that these tags exist (Albrecht 2005; see also Albrecht & McIntyre 2005). Subsequently, if people have no idea, for example, that their everyday objects and devices contain an RFID chip and especially what this implies, how can they think – and even less do – something about the ways these tags are connected to databases and other 'sorting software'?

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and enables, how it formulates hierarchies, shapes the things people encounter, and so on". See also Ratto (2007, 24–25).

6   The vulnerability of the technosystem, along with the huge economic interests that drive its development and maintenance, is, of course, one of the main reasons for keeping it hidden from the majority of people.

7   See http://www.spychips.com/

8   It should be remembered here, as emphasized by Lyn H. Lofland (1989, 462) that courteously acknowledging other people's presence but simultaneously declining interaction with them – civil inattention in Erving Goffman's (1963) sense – is, in fact, "the absolute sine qua non of city life". Otherwise we could not sensibly manage the constant flow of fleeting encounters with large numbers of unknown persons and groups.

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