

title: Mobilities (a working paper)

authors:

Moises Montenegro (moemonty@gmail.com) and Mark Deuze (mdeuze@indiana.edu)

please do not cite this work without permission of the authors

draft date: 20 September 2009

word count: 4408

In his 2007 book, *Mobilities*, John Urry sounds a rallying cry for a “mobility turn” in social scientific research. Urry proposes that social science should be approached and conducted via a mobile lens, one that “connects the analysis of different forms of travel, transport, and communications” (Urry, 2007: 6). This paradigmatic shift should unearth what “a-mobile” scientific research missed, and thus “enable the ‘social world’ to be theorized as a wide array of economic, social, and political practices, infrastructures and ideologies that all involve, entail or curtail various kinds of movement of people, or ideas, or information or objects” (ibid, 43). By integrating the extensive overlap and fragmentation of ideas, theories and evidence relating to mobility, as laid out in *Mobilities*, Urry aims to move toward paradigmatic consolidation. Lyrically put, Urry seeks to unify the many disciplinary “fragments from their cage and enable them to fly” (ibid, 18). Urry’s project ultimately aims to re-evaluate current social research, propose a new mobile paradigm complete with mobile methods, and reveal new phenomena left behind by ‘static’ social scientific research.

For the scope of this essay, the suggested *mobilities* paradigm serves as the basis for an exploration into key recent book-length manuscripts on mobile communication and society.

Mobile devices exist as only one component within the entire new *mobilities* paradigm, yet their

pervasiveness and ubiquitousness make them an unavoidable and thus empirically rich object of study within the larger mobilities framework.

Nokia predicts that by 2015, two-thirds of the world owns a mobile device (ibid, 171). Access to mobiles has become so widespread that the device has been called the “real world’s internet” (Katz, YEAR: 434). Mobile penetration rates are higher than those of traditional internet connections. Traditional anxieties regarding the digital divide and a participation gap seem less prevalent in mobile contexts. As mobile phones become more widespread, they are also increasingly indispensable. “A mobile digital divide remains a concern, despite the fact that [...] the digital divide for mobiles is far less severe than it is from the Internet” (ibid, 434). Several barriers stand in the way of near-universal mobile penetration. Issues related to poverty, lack of infrastructure, physical handicaps, and lack of education all contribute to non-adoption. Some religious orders, “explicitly forbid its members to have mobile phones under any circumstances” (ibid, 424). Yet in general one cannot be but astounded at the adoption rate of mobile communication and networks across geographical and economical boundaries. According to a 2009 report by the International Telecommunications Union, “by the end of 2008, the world ha[s] reached unprecedented ICT levels: over 4 billion mobile cellular subscriptions, 1.3 billion fixed telephone lines and close to a quarter of the world’s population using the Internet” (71).

By setting various scholarly works on mobile communication against Urry's framework for analysis, we aim to explore the extent to which the mobilities paradigm opens up new ways of understanding the relationships between media and everyday life. Our analysis of the seven books under investigation - [TITLES, AUTHORS, DATES] - focuses on three themes central to mobile communication and society: the structure and consequences of constant communication; the complexity of public/private dialectics; and the management of access/control issues.

Constant Communication (or: Always There)

It's always there. The mobile phone enables constant communication between its user and many others. Paradoxically, this also burdens users, making them instantly accessible. Scholars have focused on many varying elements concerning mobile technology and its effects on society. Though disparately cited, the various threads of discourse surrounding constant communication all tie together.

This constant channel of communication has been intensified by technology's switch from land-line based communication, to person-to-person communication. It would be difficult to walk around in an average American city or on a college campus without seeing dozens of people holding a cell-phone, seemingly grafted to their hands.

Perpetual Contact:

James E. Katz and Mark Aakhus developed a theoretical frame termed *Apparatgeist*, that examines how society relates to its personal communication devices through a logic of "perpetual contact." (Katz, Campbell pg 156). The *Apparatgeist* theory examines the "common human orientation toward PCT and coherent trends in adoption, use, and social transformations" (Katz 156). *Perpetual contact* is the "sociologic" that examines the "collective sense-making" that is made in regards to how people "judge, invent, and use communication technologies." Perpetual contact's "core assumption" is one of "pure communication," which is the "prospect of sharing one's mind with another, like the talk of angels that occurs without the constraints of the body" (Peters, Katz, pg 156). This is one of several terms that describe the mobile phone's role in providing constant communication.

Teledensity:

A 2008 Rutgers University study, tracked levels of “teledensity” over two years. These levels measured the percentage of people visibly carrying a mobile phone (Katz, Lever, & Chen – pg?). As mobile *teledensity* rates increase, it’s probable that societal expectations concerning their use are liable to change. Viewed through Urry’s *mobility* lens, mobile phones are “not ‘extravagant’ and ‘frivolous’ but ‘necessary evils’, naturally interwoven with the human body and always at-hand” (Urry, pg 178). Serving as “lifelines” for young adults, the loss of a cell-phone could throw a person into “a no-man’s land of nonconnectivity” (Urry, 178). Similarly, forgetting a cell-phone at home has become an anxiety-inducing experience (Gumpert & Drucker, 2007 pg?). Social connection is a basic human need, and because of this, the emerging literature on mobile communications has explored varying notions of *perpetual contact* mentioned earlier.

Absent Presence and Ghost Participants:

Beyond affecting the way mobile phone users interact with those, “at-a-distance,” (Urry, 2007) the mobile phone has invariably affected the way in which users interact with proximal others in public spaces. Conversations held between two or more people in co-present situations can now be affected by distant others, “ghost participants,” (Caron & Caronia, 2007). “People are increasingly ‘face-to-face-to-mobile-phone’ as the mobile phone is brought along even when people meet socially” (Katz, Aakhus 2002 – *Mobilities* pg 177). The intrusion of the mobile phone raises great concerns for the way in which people relate to each other. Lisa Kleinman’s concept of “absent presence” investigates pervasive technology’s effect on “social trust, decision-making ability, and learning” within the classroom. More immediately, her theoretical aims raise question of how we directly interact with those physically present others.

Technology’s ubiquity thus has the potential to make people “an *absent presence* to the group --- removing themselves from the context of shared group behaviors to become involved in a virtual

world that is not available to those around them” (Kleinman article on USB). (Describe Absent Presence and embellish analysis here.)

Double Front-Stages:

Torn between attending to physically present others, and “perpetually connected” others, mobile phone users now have to contend with two “front-stages” of communication (Ling, 2007, 64 - 63). Goffman’s notions of deference and demeanor serve as the foundation for what he calls the front and back-stages of self-presentation. Deference refers to the “right not to know that we’re not loved,” and demeanor refers to how we “comport” ourselves. “The use of the device (mobile phone) means that we are presenting ourselves on two front-stages simultaneously, and we are left to juggle between the sensibilities of our two audiences.” (Ling 63). Mobile mediated communication thus functions as a type of secondary engagement for main co-present conversations. Every time a call intrudes into the main social act, a conversation, the ritual is “put to a test ... The alternatives of taking the call or not taking it are a concrete check on the status of the engagement” (Ling, pg 102).

This complex interaction between co-present and mediated audience brings up issues of “absent-presence”, and the potential for a pre-occupied conversational partner. In the extreme case, a person with an avoidant attachment style might not be able to deal with both a co-present front-stage and a mediated front-stage. By communicating via “cell phone, rather than face-to-face, (they) might end up feeling better.”(Ling, 2007) Technology can be used to keep others away, but also to bring them closer.

Ritual Failures:

Viewed in the frame of ritual interactions, as studied by Erving Goffman, composing a text-message while in the midst of a conversation could be considered a “minor ritual failure.” Ritual interactions are generally agreed upon constructs that safeguard against such failures. This is because “interaction rituals produce emotional energy, the gathering of which is a central motivating force for individuals. . . We seek emotional energy the way that felines seek catnip – it gives us a buzz” (Ling, 79). Answering a mobile phone call would likely cause a major ritual failure, and end halt, if not end a conversation all together. In larger groups of people, taking a call usually causes a thinning-out of dialogue. Other participants would likely engage in “civil inattention” by speaking in longer intervals and at a slower pace until the pre-occupied member returned to the conversation (Ling, 2007).

Minor ritual failures, while breaking the flow of conversation, serve their purpose in the maintenance of social interaction. Ling points out that the mobile phones, aside from inviting “distant-others” into the conversation, function as a type of conversation piece and crutch. Discussions on a new phone or distinguishing aspect of a mobile device can “bridge” awkward moments in conversation. Having the mobile on-hand can provide a pause or “break” in the conversation. “It is a breach in the mutual engagement and thus marks a minor ritual failure. However . . . the device can become a prop in the ongoing obligation to maintain the specific mood of a social interaction” (Ling, pg 96-97).

Randall Collins’, who was informed by Erving Goffman’s work on ritual, theorized that “failed rituals” occur only in co-present situations (Ling, 73 -83). While Collins firmly posits that co-presence is a requirement for ritual interaction and social solidarity, Richard Ling points out in *New Tech, New Ties* that the mobile phone does play a role in maintaining social solidarity by

organizing co-presence, and reproducing pre-established social connections during mediated conversations. (Ling,2007).

Micro-coordination:

The mobile phone's ubiquity enables microcoordination through "perpetual contact". This term refers to "the real-time coordination of upcoming activities through direct contact among participants using mobile communications" (Kleinman, 2007). Social meetings no longer remain pre-planned activities, but can be confirmed as the time approaches, by "zooming in" on specifics, and schedules can be "softened" as they are changed on the fly. "Mobile 'phonespaces' afford fluid and instantaneous meeting cultures where venue, time, group and agenda can be negotiated with the next call or text" (Urry, pg 174). The ease with which others can be reached instantaneously changes the way society interacts with technology and each other.

"Research further shows that people may be bolder in whom they invite to events if they can hide behind the informal and/or collective nature of emails and text messages. Mobile phones, with their multi-destination messages, multiple contacts and informality, are effective at distributing casual invitations to 'join in', and information about 'happening' places to many 'weak ties'" (Urry, 2007, pg 174).

This increased flexibility, coupled with the ability to be reached at any time, by any one, creates problems for co-present conversations; there is always the potential of being reached. With the freedom that comes with mobile phones, comes the responsibility associated with this constant connection. "Mobilities are often also about duties, about the obligations to see the other, to return the call, to visit the ageing relative" (Urry, 11).

Intimate Connections:

Mobile phone technologies allow tighter cohesion between intimates due to the specificity of the communication. Increasing portions of the American and world population are now able to contact one another directly, person-to-person, instead of location-to-location. “More than other forms of mediated interaction, mobile communication favors contact with those with whom we are close – family members, friends, colleagues. Since we are always accessible, we have the ability to play on and develop these relationships, perhaps at the expense of weak ties” (Ling, pg 4). The mobile tends to increase social cohesion between intimate others, while potentially distancing us from peripheral others.

In the case of intimate romantic relationships, the mobile phone provides constant contact, particularly when lovers are not in close proximity. “While physical co-presence is often a key element at various points in the development of a romantic relationship, mediated interaction also been a discrete aspect of what he (Collins) calls linking in the courting process” (Ling, pg 123). The physicality of relationships doesn’t translate well over the phone, but the emotional realm does. Text messages are often sent before and after a physical meeting between lovers to develop an “afterglow” effect that allows partners to reminisce about the recent encounter (Ling, 127). The mobile phone is instrumental in arranging these “augmented flesh meets” (Ling, 127, Ito and Okabe).

Mobile use between close friends follows a similar pattern, in what is called “connected presence.” (Ling, 171). In *connected presence*, contact is made readily and frequently, usually between a group of teens and adolescents via their mobile phones. This frequent contact differs from traditional, landline telephonic conversations that occurred in the past. Not long ago, calls between friends were arranged ahead of time. Catching up would be a lengthier process, forcing participants to recall events that had occurred further back in time. Similar to the notion of *ghost*

participants, people that carry mobiles are able to “maintain the feeling of permanent connection, an impression that the link can be activated at any time and that one can thus experience the other’s engagement in the relationship at any time” (Ling 171). Though convenient, the ability to reach anyone, any time, can be troubling.

Effects of Perpetual Contact:

By walking the middle-path between autonomy and dependence, mobile phone users have the potential to use the technology positively or negatively. “In terms of the autonomy-connectedness dialectic, perpetual contact gives priority to connectedness to the detriment of autonomy” (Katz, 442). In her article, Sherry Turkle examines the concept of a tethered child. A “tethered” (Katz, Turkle, pg 128) person is one who has become increasingly dependent on new technology, such as the cell phone.

Similar to the concept of an “electronic leash,” (Caron & Caronia) a child’s possession of a mobile now allows constant parental control. This enables and conditions children to seek constant validation. Turkle traces a dependent spiral toward a situation in which feelings would require “validation to become established”(Katz, Turkle, pg 128). “As we become accustomed to cell calls, e-mail, and social Web sites, certain styles of relating self to other feel more natural. The validation (of a feeling already felt) and enabling (of a feeling that cannot be felt without outside validation) are becoming commonplace rather than marked as childlike or pathological” (Katz, Turkle, pg 128). Turkle explores narcissism and how it relates to *perpetual contact*. She notes “how some people, in their fragility, turn other persons into ‘self-objects’ to shore up their fragile sense of self” (Katz, Turkle, 128). Mobile phones expand the number of “self-objects”

people can tap into. The contacts may be so numerous, that self-reflection could be postponed indefinitely.

Increased In-group cohesion:

While *perpetual contact*, or *connected presence* can entail certain and psychological risks, the positive outcomes are equally substantial. For in-groups, such as family and close friends, social cohesion increases with the use of mobile phones. “The small group of friends is contacting one another with more frequency and the family is better able to monitor one another’s needs” (Ling, 186). Because contact is frequent, and often in short bursts, it doesn’t take much to check-in with family members or close friends. In conjunction with voice communication, the use of discreet, asynchronous text messages further integrates families and friends. In fact, “a preference for texting corresponds to a preference for smaller tighter social groups” (Ling, 166). Though tightening of internal bonds could cause the group to turn inward, this strengthening of communication has “not necessarily (been) at the expense of involvement in the broader social flux of activity” (Ling, pg 186). The in-group is able to integrate the “social flotsam and jetsam” from external sources via the internet, and from groups that offer a “low threshold for communication” (Ling, 187). Groups who use the mobile phone for ritual interactions usually have a pre-established rapport created in co-presence that is “modified and even strengthened” (Ling, 155) by these mediated means. Individuals are able to stay up to date and carry the common mood of their close social circle, even while composing a text message from a café in some physically distant city.

Public/Private Dialectics

The portable and indispensable nature of the mobile cell phone has been reshaping society's conduct in public. The affordances of safety and security provided by the mobile phone are causing people to blur distinctions between public and private behavior. Private conversations in public are becoming annoyingly audible to those in proximity. Because of this, people have become "unwilling participants" (Caron and Caronia, Ch1) to mobile conversations. This problem has been compounded by the use of handsets in public, making people appear to be talking to themselves. Behavioral expectations in the public space have been turned on their head. They're problematic because "the person speaking on the phone is not providing the others who are co-present with the appropriate visual and audio cues" (Ling, pg 104). "A neighborhood walk reveals a world of madmen and women, talking to themselves, little concerned with what is around them, happy to intimate conversations in public spaces" (Katz, Turkle, pg 122). Much research has suggested that mobile phones have pulled people from public spaces into their personal "soundscapes" (Katz, chp27).

Atomized Users:

Mobile technologies "atomize" users in public spaces, cutting them off from their surroundings (Ling, 2007). Carrying a mobile phone in public produces implicit requests for "civil inattention," our phones "can be raised at any time to give ourselves or others an excuse for not initiating contact" (Urry, Goffman, pg 106). These "psychological disconnections" from the public space occur as wired individuals bridge their virtual networks with physical presence (Gumpert et al, 2007). While public spaces once served as areas for social interaction, mobile communication are increasingly diverting psychological resources away from their physical selves in the public. Paradoxically, these same technologies also function to weave more tightly into the urban landscape.

Mobile Gaming:

Specific kinds of mobile gaming have been shown to bring people together in public spaces. By altering the way in which people interact with their phones, technology can be used to refocus psychological attention outward. Games like *BotFighters* utilize mobile phones by enabling players to interact with other players virtually, by physically moving around in the same location, such as a city. By using location-aware technology and the short message system, players wander the city's concrete landscape, searching for other virtual players to shoot (WIRED). This has created new ways in which people interact with their architectural surroundings. The problem, however, is that not everyone is in the psychological-know of those operating on the virtual/physical realms.

Architecture and Control:

As was shown with mobile gaming, phone use in the public “increases the number of people who can psychologically inhabit a space, but also decreases the number of people who can effectively communicate in that same space without creating noise” (Gumpert et al, 2007). This has created challenges for city planners to design spaces conducive to physical presence and mediated presence. Public mobile usage not only isolates people into “disembodied private space”, but also acoustical space (Klein, Gumpert pg 13).

Auditory Aggression:

When acoustical space is been breached, people are subjected to “auditory aggression.” (Gumpert & Drucker, 2007). Cell phone use in public often violates the levels of sound people will tolerate. To take a personal observation, a young woman was carrying out a full conversation on a designated quiet floor of the Indiana University Herman B. Welles library. She

was eventually reprimanded by a visibly frustrated, male library patron. Corroborating this annoyance, a 2006 study reported that 70% of the American public was disturbed by public mobile cell phone usage (Katz, Ling, pg 446). In light of these disturbances, different control mechanisms have been employed to combat nuisance-causing mobile usage. Of the tactics used to curb public cell phone use, there have prohibitive signs, public address announcements, fines for mobile use during cultural performances, and technological “jamming” of phones. (Katz, Ling?). Notions of control are important not only for the discussion on mobile phone usage, but also for the larger context provided by John Urry’s analysis of systems and their government of *mobilities*.

Access and Control

As mobile technologies have increasingly enabled disparate groups of people to communicate “at-a-distance,” the potential for rapid shifts in action and power have increased, prompting governing bodies to seek control while mitigating access; this has fueled the mobile masses’ need to seek access, while circumnavigating the systems of control. Using Urry’s framework of the *mobilities* paradigm, an examination of political, social, and economic control can be undertaken.

Political Control:

In his book, *Cell Phone Culture*, Gerard Goggin examines the role of the cell phone in the overthrow of Philippine president Joseph Estrada in January 2001. The Philippine people were coined “generation text” for using text messages for political activism. However, Goggin is quick to note that the event was stripped of the discussion concerning the interplay between society and technology. Talk of the event quickly digressed into techno-fetishism. The will of the

Philippine people over their political situation was undermined. Revisiting this “coup d’text” usually “strips the Filipinos who struggled against the Estrada government of their agency and gives it to the cell phone” (Goggin, 79). Mobile phones allow mobs to form instantly at the drop of a text.

Howard Rheingold’s analysis of “flash mobs,” (Urry, pg 178) details the characteristics found in rapid social formations like the Philippines *coup d’text*. Similar events, like the critical mass bike rallies around the United States, and most recently *T-Mobile*’s London train station flash dance video (reference), are all precipitated through the “instantaneous responsiveness of the communications on the move” where “very large numbers of people can tip into a smart mob, a moving swarm of people walking, running, cycling, driving, flying, and so on” (Urry, 178).

Governments have tried to dam the waters of dissent by employing measures that safely divert meandering flows of its populations. One of the central features of the *mobilities* paradigm deals with the effects of distance on “governmentality” (Urry, 49). Michel Foucault saw governing as a relationship between territories and subjects, but “from the early nineteenth century onwards governmentality involves(d) not just a territory with fixed populations but mobile populations moving in, across and beyond ‘territory’ ”(Urry, 49). For the “apparatuses of security” to adequately provide for the security of increasingly mobile populations, “complex control systems of recording, measuring, and assessing” had to be imposed “upon the rapidly moving, the restless, and the furtive” (Urry, 50). The *mobilities*’ paradigm’s discussion on systems represents control and access that is contingent on political, social, and economic factors.

Economic Control:

Access, as framed by the *mobilities* paradigm, refers to physical, temporal, organizational, and economic access. Complex mobility systems, such as airports, are comprised of hardware, software, and personnel that grant, deny, or impede access. Paralleling the digital divide, the mobility divide stratifies people economically. As Urry points out, most systems or forms of mobility require some type of economic access – even shoes requires monetary expenditure (Urry, pg191). So, those with economic means are better off in a mobile society, and profit from the affordances of these mobility systems. “More over, automated software for sorting travelers as they pass through automatic surveillance systems, such as iris-recognition for *Privium* passengers at Schiphol, reinforces the ‘kinetic elite’ whose ease of mobility differentiates them from a low-speed, low mobility mass” (Urry, Wood, pg 152). *Privium* is a premium air travel service, and certainly not something all can afford. Access comes at a price.

Total Control:

If the economic, social, and political life of a people within a system are all subjected to control, those people no longer truly have access control; this is Urry’s final point in *Mobilities*. His paradigm slowly ties together the disparate fields of transport, sociology, economic, politics, architecture and many others into one terrifying, but eye-opening end. *Mobilities* ends in a dramatic precipice between two dystopian futures, one “a barbarism of unregulated climate change” and the other a “digital Orwell-ization of self and society” (Urry, pg 289). These extremes highlight the “Faustian bargain” current society has struck with the machines it uses; we are “locked-in” on a “path dependent pattern” that has lead us to these two possible bleak futures (Urry, pg 275). The problem can be ignored, and people can fend for themselves in a post-apocalyptic, *Fallout 3* – like wasteland, or be completely controlled by Orwellian technology with “no-one beyond the panopticon” (Urry, pg 15).

Discussion

Urry's *new mobilities* doesn't "desert the paradigm" (Kuhn, pg 34) that currently exists in social scientific research. Instead, his paradigm attempts to unify concepts across disciplines and employ mobile methods that include observations of "people's movement, of bodies strolling, driving, leaning, running, climbing, lying on the ground, photographing and so on" (Urry, 40). These methods seek to uncover phenomena that have hid from traditional, static social scientific research. Urry's theoretical frame also advocates employing "participation in patterns of movement while simultaneously conducting ethnographic research" (Urry, 40). The methods that are employed must "be able to follow around objects" (Urry, pg 41) whether they are people or data.

As applied to the study of mobile phone technologies, John Urry's *new mobilities* paradigm serves as an excellent frame for which to conduct social scientific research where people are: in the public, in the home, in airports, at concerts, at music festivals, in motion. The scope of this paradigm stretches far beyond the topic of mobile phones to issues of world-wide environmental sustainability. And so, the paradigm seems more reconciliatory than revolutionary. It is difficult to consider Urry's *paradigm* a revolution. "The decision to reject one paradigm is always simultaneously the decision to accept another, and the judgment leading to that decision involves the comparison of both paradigms with nature *and* with each other" (Kuhn, 77). There doesn't seem to be a mobile social paradigm to reject, or for which to compare with the *new mobilities* paradigm.

References

Campbell, Scott (2008). Mobile technology and the body: Apparategeist, fashion, and function .

In James E Katz (Ed.), *Handbook of Mobile Communication Studies*. (pp. 153-164).

Cambridge, MA: MIT.

Caron, H. Andre & Caronia, Letizia (2007). *Moving cultures*. Montreal: MQUP.

Usa to pass 100% mobile penetration level by 2013 - Report. *Cellular News*. (2007, August 24).

Retrieved April 19, 2009, from <http://www.cellular-news.com/story/25628.php>

Fallout 3 pip-boy 3000. *Planet fallout*. (2008, August 8). Retrieved April 19, 2009, from

http://planetfallout.gamespy.com/wiki/history/Fallout_3_Pip-boy_3000

Gumpert, Gary & Drucker, J. Susan (2007). Mobile communication in the twenty-first century or

“everybody, everywhere, at any time.” In Sharon Kleinman (Ed.), *Displacing place:*

Mobile communication in the twenty-first century. (pp. 16). New York, NY: Peter Lang.

Goggin, Gerard (2006). *Cell Phone Culture*. London: Routledge.

Hickman, Leo. *Is it ok...to use a mobile phone?* (2006, June 27). Retrieved May 5, 2009 from

[http://www.guardian.co.uk/money/2006/jun/27/ethicalmoney.leohickmanonethicalliving#
article_continue](http://www.guardian.co.uk/money/2006/jun/27/ethicalmoney.leohickmanonethicalliving#article_continue)

Katz, E. James (ed.) (2008). *Handbook of Mobile Communication Studies*. Cambridge, MA:

MIT.

- Katz, E. James, Lever, M. Katie, & Chen, Yi-Fan (2008). Mobile Music as Environmental Control and Prosocial Entertainment . In James E Katz (Ed.), *Handbook of Mobile Communication Studies*. (pp. 367-376). Cambridge, MA: MIT.
- Kleinman, L. (2004). Connecting with the absent presence: Individual technology use and effects on community. *CHI '04 Extended Abstracts on Human Factors in Computing Systems*. (April 24-29, 2004, Vienna), New York: ACM Press.
- Kleinman, Sharon (ed.) (2007). *Displacing place: Mobile communication in the twenty-first century*. New York, NY: Peter Lang.
- Kuhn, Thomas S. (1996). *The Structure of Scientific Revolutions*. U of C Press, Chicago.
- Ling, Richard (2008). *New Tech, New Ties*. Cambridge, MA: MIT Press.
- Ling, Richard, Donner, Jonathan (2009). *Mobile communication*. Cambridge: Polity Press.
- Stroud, Michael (2002). Have cell phone, will shoot. *Wired*. (2002, February 8). Retrieved April 19, 2009, from <http://www.wired.com/gadgets/wireless/news/2002/02/50205>
- The t-mobile flash dance*. (2009, January 16). Retrieved May 5, 2009 from <http://www.youtube.com/watch?v=VQ3d3KigPQM>
- Turkle, Sherry (2008). Always-on/always-on-you: The tethered self . In James E Katz (Ed.), *Handbook of Mobile Communication Studies*. (pp. 121-137). Cambridge, MA: MIT.
- Urry, John (2007). *Mobilities*. Cambridge, UK: Polity.