

Changing Urban Spaces: Mobile Phones on Trains

Marsha Berry & Margaret Hamilton

To cite this article: Marsha Berry & Margaret Hamilton (2010) Changing Urban Spaces: Mobile Phones on Trains, *Mobilities*, 5:1, 111-129, DOI: [10.1080/17450100903435078](https://doi.org/10.1080/17450100903435078)

To link to this article: <http://dx.doi.org/10.1080/17450100903435078>



Published online: 17 Dec 2009.



Submit your article to this journal [↗](#)



Article views: 2124



View related articles [↗](#)



Citing articles: 16 View citing articles [↗](#)

Changing Urban Spaces: Mobile Phones on Trains

MARSHA BERRY* & MARGARET HAMILTON**

**School of Media and Communication, RMIT University, Melbourne, Australia; **School of Computer Science and IT, RMIT University, Melbourne, Australia*

ABSTRACT *Mobility is changing the ways people routinely behave in public places. Since the appearance of digital mobile phone networks, mobile phones have become part of suburban and urban landscapes globally. Both the use of public transport and mobile telecommunications are integral for daily life and self-presentation in most large cities such as London and Tokyo. Public places and spaces are being transformed into hybrid geographies through the introduction of new spatial infrastructure. In this paper, we present our analysis of the responses of our survey sample of commuters concerning their use of mobile phones on trains.*

KEY WORDS: mobility, mobile phones, urban, space, place, self-presentation, urban technology, place-making

Introduction

The spirit of the machine in our mobile age of neo-liberal globalization is not a phantasm to be wished away but deeply embedded already in routine social practices and relationships. (McGuigan, 2005, p. 55)

Mobility is a dominant discourse of the twenty-first century that reframes the ways we understand notions of place, space and movement. In this paper, we conceptualise mobility as encompassing the everyday use of transport, specifically trains, mobile telecommunications and movement through local urban and suburban public spaces. The mobile phone facilitates mobility and flexibility creating hybrid geographies where telecommunications infrastructures overlay public and private places that are technosocial spaces. Self-presentation on the move in public raises issues about emerging social rituals and routines. We seek to analyse how people perceive public places and spaces and how in turn, their perceptions influence their interactions, connections

Correspondence Address: Marsha Berry, School of Media and Communication, RMIT University, Melbourne, Victoria, Australia. Email: marsha.berry@rmit.edu

1745-0101 Print/1745-011X Online/10/010111-19 © 2010 Taylor & Francis

DOI: 10.1080/17450100903435078

and self-presentation (Goffman, 1959). In particular, we consider technosocial public spaces, where mobile phones and their networked availability intersect with the physical confines of the train, and the impact this has on the people in this space.

Much of the early research into mobile phones exposes the ways in which mobile phones penetrate everyday social interactions and rituals. Plant (2002) discusses the way in which the popularity of the mobile phone surprised computer science researchers who did not imagine that people would engage with such small screens. Instead their research finds that mobile phone users regard their phone almost as an extension of themselves. Their work forms a foundation for much current research into mobile phones, portable technologies along with Plant's groundbreaking global study into mobile phone use in everyday contexts and settings using ethnographic techniques. Plant argues that mobile temporality is an emerging phenomenon, which is connected to existing social practices that are bound by time such as work time, clock time and family time. Social activities and rituals are without doubt, time based, however, our focus is on how places as socially produced spaces are being transformed through the use of mobile phone technology, and so we do not delve into mobile temporality issues in depth. Time is a consideration only so far as the duration of time spent on the train may influence the kinds of activities and interactions that may take place within the space.

Ito and Okabe (2005) regard mobile phones as a technology that changes the way people perceive public spaces and interact with each other. They argue that previous definitions of social situations need to be reframed to include technosocial dimensions. Ling (2004), an established theorist in the use of mobile phones, argues in a recent book that mobile phones are reconfiguring social rituals and facilitate social cohesion. Our study contributes to understandings about how boundaries of place and identity are being redrawn and how norms of acceptable social interactions and rituals including place-making in public places are being reframed through the use of mobile phones.

Perceptions of public places are changing because of mobile communications infrastructure. Hybrid geographies of humans and objects are being generated through pervasive computing. Urban cityscapes and places are augmented through technosocial devices such as mobile phones. Place is sensed through the corporeal body and has an affective dimension (Plant, 2002). How mobile phones transform the way 'taken for granted' everyday public places and spaces are perceived and, in turn, the ways people interact and present themselves in public is the primary research direction we address in this paper.

The impacts of mobile communications infrastructures on the train are emerging as mobile phones 'are woven into the daily routines of urban inhabitants' (Townsend, 2000, p. 85). Mobile telecommunications have been peripheral as a city planning issue and as mobile phones become increasing poly-functional the issues surrounding their transformative effect on public spaces become more complex. The coverage of mobile networks is constantly improving and extends to most of the suburban train system in Melbourne enabling mobile phones to slip into the daily routines and rituals of commuters.

For most people, travelling on public transport is a kind of 'in-between' time that occurs in places and spaces that are also perceived as being 'in-between' (Berry, 2007). Tacit conventions regarding appropriate self-presentation (Goffman, 1959) enter a grey zone that is also in-between. It is neither leisure nor work time, and people are not as free in their self-presentation as they might be at home, or as

restricted as they might be at work. They are constrained by the dictates of the public nature of sharing their carriage with other commuters, some of whom may be regularly encountered strangers. However, they are free to think for themselves, for despite the physical constrictions, and time limitations, the travelling space and time may be considered as their own personal space and time. They are also free to engage in making a place for themselves where they can ease the ambiguities of codes of self-presentation and interaction through the use of portable networked devices to communicate with others or to consume media.

In post-industrial cities, our ideas about the boundaries between public and private spaces are undergoing change. Mobile communications create an ability to contact work, friends and family constantly so that private concerns spill over into public places. This aspect of mobile phone use is taken up by Hjorth (2007) who proposes that mobile media operate to push and pull us, 'setting us free to roam and yet attaching us to a perpetual leash'. This 'perpetual leash' causes tensions in human interactions and self-presentation in public places. Lasen (2004) proposes 'mobile phone use facilitates the redefinition of codes of human inter-action, the renegotiation of the norms governing social and emotional relationships and the display of emotions in public contexts'. The mobile phone is multifunctional and offers different types of social activities that may be undertaken while in transit that in turn can reconfigure public places and spaces.

In order to explore the distinction between space and place, we refer to the work of de Certeau, an anthropologist and influential critical theorist, who defines place as a distinct geographic location with coordinates and space as a 'practiced place' (De Certeau, 1984, p. 117). He provides the example of a street defined by town planners and maps, as a place that becomes a space through human activity such as walking. Spaces, then, are constituted through human activity. We can use mobility and movement, to help define space. To unpack the distinction of space and place further we refer to Lefebvre who proposed a notion of 'social space', which is a social construct as well as physical. Lefebvre's definition accounts for the social production of space. If we add Lefebvre's argument, trains are both places and spaces that can be regarded as 'relatively fixed points, movements and flows, and waves – some interpenetrating' (Lefebvre, 1991, p. 88). Massey (2004) suggests that places should be re-imagined and unhitched from notions of location: "'place" must be distinguishable from simple locatedness', (Massey, 2004, p. 8). We do not need to re-imagine trains to unhitch them as places from specific geographic coordinates. In Massey's terms they are already distinguishable from a location. Nevertheless trains have materiality and exist somewhere even when in-between locations and are part of urban and suburban landscapes. They are also sites where the boundaries between public and private space are slippery.

The contemporary desire to micro-manage and micro-schedule using a mobile phone while in transit further blurs ideas about how one should conduct oneself when in public.

Townsend (2000) identifies the profound effect mobile technologies including mobile phones are having on mainstream ideas of public and private space. Furthermore he argues that the 'use of mobile phones offers an ever-finer level of identifying and exploiting minute variations in conditions between locations, the micromanagement of space as a result of the micromanagement of time and the always-accessible individual' (Townsend, 2000, p. 102).

Public spaces are laid over with invisible networks that enable the kinds of micro-managements of time and space discussed above. Castells *et al.* (2007) refer to these invisible networks as the ‘space of flows’ which is ‘the material organisation of simultaneous social interaction at a distance by networking communication, with the technological support of telecommunications, interactive communication systems, and fast transportation technologies’ (Castells *et al.*, 2007, p. 171). The space of flows is embedded within trains. Our conceptualisation of trains as public spaces incorporates a space of flows that enables mobile telecommunications.

Berry (2007) conceptualises trains as transitional spaces where the mobile phone may ‘create a third place where both here and there are grounded in one place providing comfort and easing the sense of being betwixt’ (Berry, 2007, p. 144). Presence in transitional spaces such as trains is ambiguous and can be uneasy. Personal objects such as books, newspapers, rugs, knitting and thermos flasks have long been used in transitional spaces such as trains and train stations as place-making devices, a way of helping oneself feel at ease. One of the author’s grandmothers always travelled with a kettle in her journeys through the USSR in the 1920s to alleviate her sense of unease. When the train would stop she would run to get hot water to make tea to share with fellow travellers. She used the kettle as a place-making technology to ease her discomfort of being in between places to create a nomadic sense of being ‘at home’. We do not claim that place-making is new, rather we seek to expose how mobile phones participate in place-making in transitional places and how this practice is transforming norms of self-presentation in public.

Ito *et al.* (2005) define mobile phones as a form of ‘cocooning’ technology because they enable users to experience personalised media ecology that is carried around by the person rather than being attached to a physical place. Within train carriages people are co-present with fellow passengers and at the same time are potentially connected with others who are not geographically present if they are carrying a mobile phone. At any moment they may be contacted and be engaged in intimate conversations. So how does one present one-self in transitional technosocial spaces when one is using the mobile phone as a place-making technology?

Methodology: From Observations to Survey

Our goal is to find out how commuters in Melbourne are using their mobile phones to create their own spaces in public and how they engage with trains as public spaces. We began by observing the use of mobile devices on trains in an informal way in 2006 as a way of grounding our research in the everyday. We found that our observations tallied with key research. For example, Plant (2002), completed a large-scale ethnography in which she identified types of mobile phone users. We saw these types operating in real life on trains in Melbourne. We recorded our observations in the form of informal field notes. At the same time we investigated undergraduate students’ use of mobile phones while in transit on public transport, see (Berry & Hamilton 2006a; 2006b; Hamilton & Berry, 2007). They all used their phones to text message people while travelling. Around 70 percent used their mobile phones to produce images and videos. Mobile devices, including phones, participate in the production of spaces that are disconnected spatially and temporally in the same physical place. We used our previous research comprising our field notes and this study of

undergraduate design students as a basis for our survey questions designed to expose what people report they actually do with their mobile phones on trains.

We obtained permission from Connex, the train provider in Melbourne to approach people at the Flinders St Station, to administer the survey, at various times of the day in the first three weeks November 2007. Flinders St Station is one of Melbourne's busiest stations, see Figure 1, a photograph taken at evening peak time by one of the authors. The concourse is spacious and many use it as a meeting place. On their website, Connex has a section for mobile users, giving access to timetables and updates by SMS. The fast facts section in the website gives some overall statistics of train travel in Melbourne where a fleet of 329 trains operates over 1900 services carrying 616,000 passengers each weekday. In 2007 187.4 million passenger trips were made.¹ This represents a myriad of opportunities for people to place-make on trains and to encounter the various tensions associated with self-presentation in public.

People were approached randomly to participate in the survey. Many women declined the opportunity to participate. This is a phenomenon worthy of further investigation but lies outside of the scope of this study. We were interested in how mobile phones were being used on trains so only those with mobile phones were recruited as participants. Of the 61 participants who agreed to be interviewed, only 40 percent were women. Participants were asked to indicate their age range, from 18 to 25, 26 to 40, 41 to 60 and 61+ so we could identify trends, possibly related to age groups. The



Figure 1. Flinders street station concourse at evening peak.

survey interviews took place in the first three weeks of November 2007. The sample met our requirements of providing us with a cross-section of generations.

We designed a series of closed questions that could be answered as a yes or no; or a number on a scale of 1 to 5. Some of the data presented in is the mode, or most frequently selected option, for that age group. We have used the mode, since the data are Likert data, (discrete data with values of 1,2,3,4,5 only) which are not continuous and finding the mean does not give a good summary of it. For instance, the mean value can average out any differences, as in a hypothetical case when for a sample of 10 people, 5 might say they are very unhappy and give a score of 1 on the scale of 1 to 5 and the other 5 may be very happy and give a score of 5. Such a case would give two modes of 1 and 5, while the mean would be 3. A value of 3 is usually interpreted to be that the people either don't know or don't care, or are neither happy nor unhappy. However, the two modes in this example reflect a truer understanding of the responses which are really polarised. For the yes or no option questions percentages answering each were calculated.

Results

In this section, we report on the survey responses. At times we refer to our field notes to provide illustrative material and specific examples. In the following subsections, we explore and expose social interactions with regard to place-making, communication, consumption and production of media, privacy and integrity, and security.

Place-Making on Suburban Commuter Trains

Melbourne's train carriages are open with no obstacles to view above seat height. The seats are low, fixed, padded and reasonably comfortable. The seats are arranged for people to face each other, either in groups of four or six. Near the doors are seats facing inwards to the train, and leaving wider aisle space for passengers to stand when no seats are available, or to be with prams and bikes. Passengers in wheelchairs use the first carriage, as a ramp is provided there to bridge the gap between platform and carriage. At peak times at either end of the day, from 7 to 9 am, and 5 to 7 pm, all seats are full, and passengers stand all through the aisles and cram into the areas in front of the opening and closing doors. During peak times all seats are taken and people stand in the aisles. Place-making in aisles is without doubt difficult yet many people do so with mobile technology and printed materials. The observations recorded in authors' field notes indicate that whether or not one has a seat has little bearing on place-making activities such as reading, listening to music and using mobile phones to text or for conversations.

Afternoon train – 6:10pm South Yarra to Armadale (within Zone 1)

Of the people around me eight are seated – one is texting, four read the newspaper, one reads a book. The aisles are full – four stand reading the newspaper, three are listening to music (ear buds and wires visible). Man in his 50s who was reading a newspaper receives a call on a Blackberry – we are going through a zone that has patchy network coverage. The line drops out. He looked at the missed call and sends a text. (Field notes, May 2007)

Figure 2 below shows the context within which the various place-making activities with mobile phones took place. It shows that while one person may be quite oblivious to others whilst engaged in a private phone conversation, another is certainly observing her with interest. And this has implications for self-presentation.

People can stay connected through mobile phones wherever they are through the use of mobile phones, including on trains. Choo and Mokhtarian link telecommunications and travel in a direct relationship so that ‘as telecommunications demand increases, travel demand increases, and vice versa’ (Choo & Mokhtarian, 2007, p. 4). According to media reports travel demand has increased by 18% since 2005 on Melbourne’s suburban train network.² We asked participants how often they commuted by train, and how far they travelled, as indicated by the number of train stops. This was to ascertain whether frequent travel might lead to participants making more use of mobile phones as a place-making device to make them comfortable. Based on our previous observations, we believed people would be more likely to engage in place-making activities such as consuming or producing media using their mobile phones if they were frequent travellers and/or spending considerable amounts of time travelling.

We found that 68.85 percent of participants surveyed travelled on the train several times per week. The frequency of train travel was greatest in the 26–40 age group and decreased with increasing age. 75.86 percent of 18–26-year olds travelled on the train several times per week, while 91.67 percent of 26–40-year olds did the same. Only 57.14 percent of 41–60-year olds travelled this frequently, while 16.67 percent of

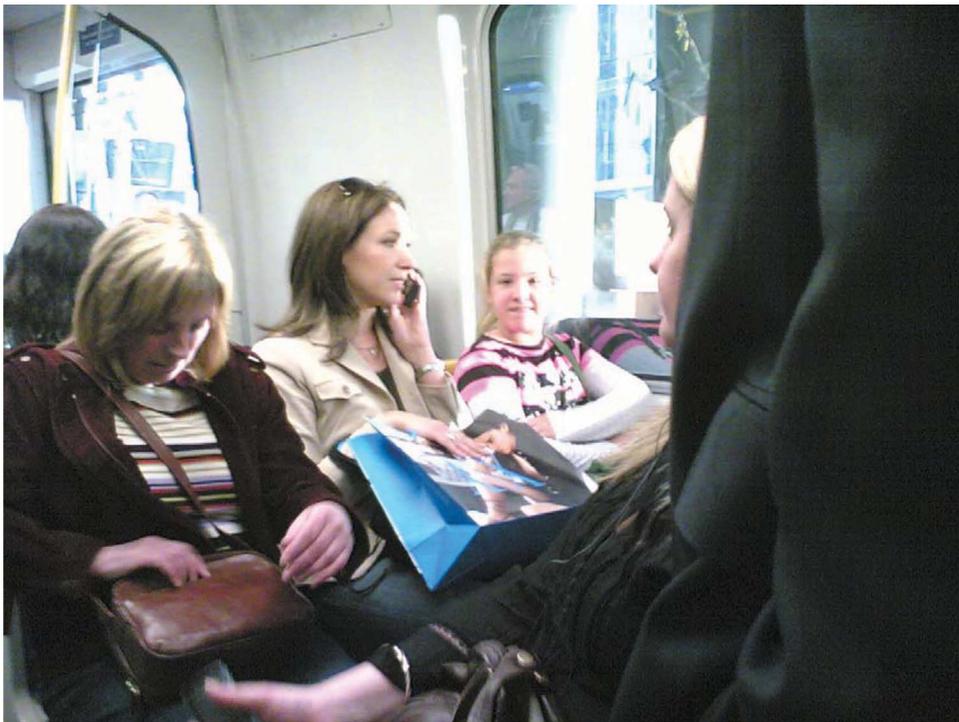


Figure 2. Place-making and self-presentation on a Melbourne Suburban Train.

those aged 61+ travelled several times per week on the trains. Of the participants, the majority 59 percent travelled the shortest distance in Zone 1, leaving only 26 percent travelling from Zone 2, and 15 percent from Zone 1 and 2 (between 10 and 15 stops). Hence a majority of participants are regular commuters travelling locally for relatively short distances. This meant our sample of participants had ample opportunity and motivation to place-make.

In their study of British rail travellers, Lyons and Urry reported that through the use of mobile technologies ‘a substantial if not overwhelming incidence of positive utility of travel time use is revealed, especially for business travel but also for commuting and leisure travel’ (Lyons & Urry, 2005). Even though our Australian participants may be only travelling relatively short distances, we were interested in the use they are making of technology while they travel, as a measure of how connected they are and feel they need to be. To gain data about this point, participants were asked how frequently they use their mobile phone on the train or on the platform while waiting for the train using a Likert scale. The responses indicate that mobile phones are being used as place-making devices to mitigate the ambiguities of transitional spaces.

We asked our participants to rate on a scale of 1 to 5 where 1 means very little and 5 means a great deal, how does having a mobile device improve their experience of Melbourne’s train system. This was to establish the importance of the mobile phone as a place-making technology. The modal data show that the use of mobile phones by our sample population while travelling has a positive effect on younger peoples’ experiences and that there are generational differences. The modes were 4 for the 18–25; 5 for the 26–40; 3 for the 41–60 and 1, 3 for the 61+ age groups, respectively.

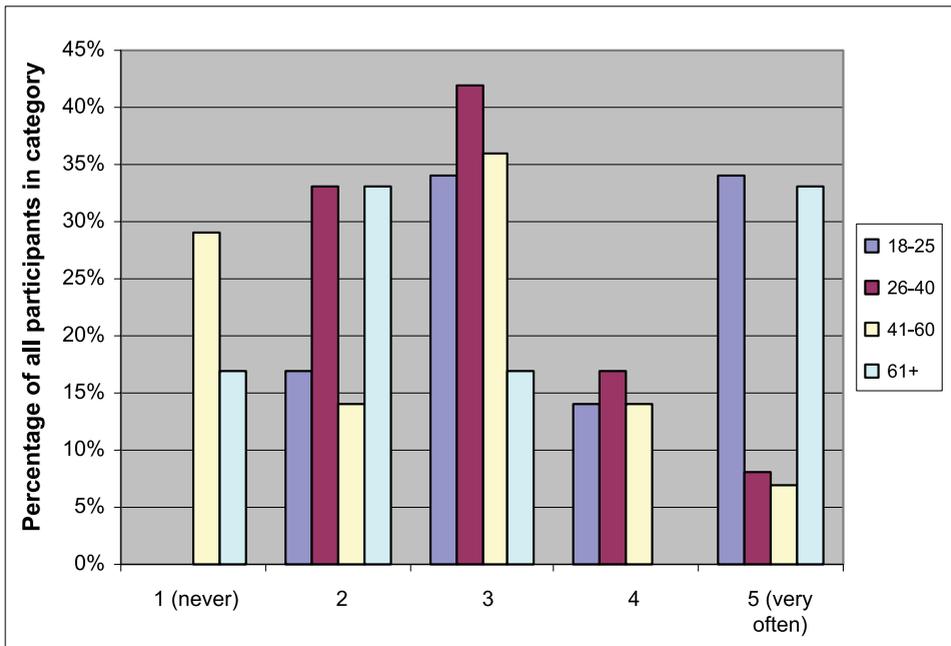


Figure 3. Frequency of mobile phone use, by age, on trains and on platform while waiting for train.

Habit would appear to play a role in the use of mobile phones for place-making as a way of improving one's experience of the Melbourne suburban train system.

From the background questions designed to elicit information about how people perceived train travel on Melbourne's suburban trains we established that the participants in the 18–25-year-old age group were mostly happy with the train system, even though they consider their plans are often upset by trains being delayed, they are not really worried or threatened, and they reported using mobiles on trains and platforms very frequently. For the 26–40-year-old age group, the participants were primarily happy with the train system, but complained the most about their plans being upset by trains that are late/broken/too crowded to use (mode of 4, on the scale of 1 to 5). Of all the age groups, they were also the most worried or threatened by suburban train travel, but none of the participants we questioned answered higher than 3 out of our scale from 1 to 5 where 5 is the highest. The 41–60-year-old age group were also mostly happy with the train system, not worried about train delays, not worried or threatened by train travel. They were primarily male, and reported using their mobile devices on the train or platform the least of any age group. The group aged 61+ was the unhappiest with the train system, was not particularly annoyed by delays and did not report using mobile phones on the train or platform often.

Communication on Trains

Waiting is an activity that tends to be associated with travel. Waiting is also an activity that tends to be associated with place-making. We have conceptualised the train as a technosocial public space that can be penetrated from outside by people using communications networks. Bissell (2007, p. 277) notes that the 'event of waiting' is an aspect of mobility that is overlooked in much of the literature dealing with mobility. He observes that spaces and places of travel are changing through the increased use of communications technology devices and that this is a deliberate strategy to encourage the more productive use of time spent in public transport places. Time spent waiting can be transformed into work time through mobile telephony. There is increasing pressure to remain constantly connected and available for communications that may be deeply personal or commercially confidential in public technosocial spaces while on the move.

Inkinen (2006) undertook a large-scale empirical study of Tampere in Finland in which he focused on the city as a national context and its citizens as participants in a local information society. His aim was to examine how ICTs were integrated into everyday lives and whether people felt more stressed through the addition of networked ICTs into their daily lives. He found that 95.1 percent of his study population were using mobiles and concluded that '... the study of mobile communications has also yielded socially interesting findings, including the expectation of constant accessibility' (Inkinen, 2006, p. 71). He found that 'mobile communication has had the strongest impact on daily life' (Inkinen, 2006, p. 66) and that 89 percent of his sample population agreed that mobile phones are helpful in everyday life. The benefits clearly outweigh the costs of rethinking norms of self-presentation.

The use of travel time has economic implications. Lyons and Urry (2005) hypothesise that the 'cost' of travel time is decreased if it is turned into activity time. We argue that micro-scheduling while travelling is a tactic that is becoming common as a

response to time pressures. Micro-scheduling has become a place-making activity on trains. Expectations that this social practice should be undertaken in public technosocial spaces are on the increase, however, travellers faced with this pressure are also developing tactical ways of protecting their travel time given the blurs between home, travelling and work.³ This pressure has also resulted in deception which we discuss later.

We asked the participants what sorts of things they do with their mobile devices while they are on, or waiting for a train to gain insight into the popularity of various place-making activities with regard to communication. We used the functionalities of mobile phones to determine these. We identified micro-scheduling, texting and voice calls as key communication practices that we used as indicators of place-making.

The most frequent activity was to look at the clock on the phone (80 percent). Clearly a sense of time is an important aspect of the way people experience trains as public spaces. Trains run along a network of tracks according to a predetermined timetable. In a perfect universe the timetable would be strictly adhered to but we do not live in a perfect universe in Melbourne. Trains can be late. There is always an element of uncertainty – will the train be on time or late? We suggest that this is the one reason why people look at clocks so often while travelling on public transport systems. This activity enables micro-scheduling through the mobile phone as a place-making device.

Movement can happen in different ways on trains. Trains transport bodies and things between locations and if the passenger has a connected mobile phone, ideas and information may move between locations. Kaplan (2006) distinguishes between ‘the literal movement of bodies or things’ and ‘the movement of information and ideas’. Passengers can coordinate their movement through micro-scheduling using their mobile phones. Commuters anticipate what awaits them at journey’s end at home. We asked our survey population whether they text or ring their destination to update them about arrival times. We found that approximately half (50.81 percent) of participants updated their destination with news about their arrival times. This was consistent across all age groups except those aged 61+ where only 33.33 percent updated their destination about arrival times. We asked whether the participants use their mobile devices to ring someone to pick them up and found that almost three quarters (72.13 percent) of participants used their mobile device to micro-schedule. This was consistent across all age groups surveyed. To illuminate this finding further, we refer to an entry in our field notes:

5:55pm - Pulling into Caulfield station the woman sitting reading the newspaper next to me answers her phone. The ring tone is Pump It:

“ Yeah, what’s up?

Yeah, he slept all day.

What are you doing, are you leaving work?

Can you get bread, multigrain or wholemeal?

Yeah, multigrain or wholemeal

Yeah, just get some nice stuff we can have for dinner. Some cool stuff.

See you at home, Love you, bye.” (Field Notes, December, 2006)

The passengers in the vicinity were privy to this somewhat mundane yet intimate conversation that is an example of micro-scheduling while place-making on a train.

Notions of self-presentation norms stretch to fit the need to express private concerns in a public space through the agency of a mobile phone.

To explore the importance of the need to manage time asked our participants whether they use Connex's text messaging system to tell whether trains are being rescheduled. This service has been put in place as an initiative to improve customer satisfaction. We found that 21.31 percent of participants used Connex's text message service and this was consistent across all age groups except those aged 26–40 where none used the service. Some participants were curious to know exactly what the Connex text messaging service was, as they did not know of its availability, and this suggests that the service has not been promoted widely.⁴ We found this interesting, as we had assumed that given people's predilection to micro-schedule that we had already observed and documented in our field notes, more people would be using this service. However, it seems that micro-scheduling is not just about time management, it is also an activity that may well have place-making as its motivation and notions of acceptable self-presentation in public spaces adapt to accommodate.

After checking the clock, the next most frequent activity using mobile phones reported by our sample was text messaging (79 percent), then making or receiving voice calls (67 percent). This identifies communication as still being the primary reason for use of the mobile device despite the recent introduction of third generation networks in Melbourne. We found that there was evidence of generational differences in the use of text messaging. In the 18–25-year-old age group, the majority use their mobile phones for text messages, followed by making or receiving phone calls. A closer look at the data reveals that 82 percent of the 18–25 age group used text messaging, 75 percent of those aged between 26 and 40 and 71 percent of those aged between 41 and 60 years. There was not a substantial difference between the latter two. However, when we looked at the 61+ age group, we found that only 66 percent were using text messaging. Text messaging is a place-making activity that has very little impact on others present in the train. Fellow passengers are not afforded the opportunity to eavesdrop on personal or commercially confidential matters. Texting is form of place-making that preserves a public face and places no expectations on others to 'ignore' an event that has just taken place or to assume a mask of not listening.

Townsend (2000) noted that the 'character of activities being conducted between the home, office, automobile and street are increasingly blurred'. We found that of our sample population who made voice calls on trains (67.21 percent), 13.44 percent of these reported making calls to work colleagues. We asked also about calling friends and family and found that 78.05 percent called friends and 63.41 percent called family. When we analysed the data according to age groups we found that there were clear differences. A summary of our findings is presented in Table 2. (The category 'Total' refers to the percentage of the sample population that used their mobile phones to make voice calls.)

Clearly, the space of the train is an extension of the workplace for many as suggested by Lyons and Urry (2005), however, it is also a space to contact friends and family. These activities bring private and semi-private social spaces such as the home into the space of the train. Indeed, the connections to friends and family exceed the calls made to work colleagues in all age groups. The tendency to call home increases with age – as does the tendency to call work colleagues. On the other hand, the tendency to call friends decreases with age. Different generational groups have different habits using

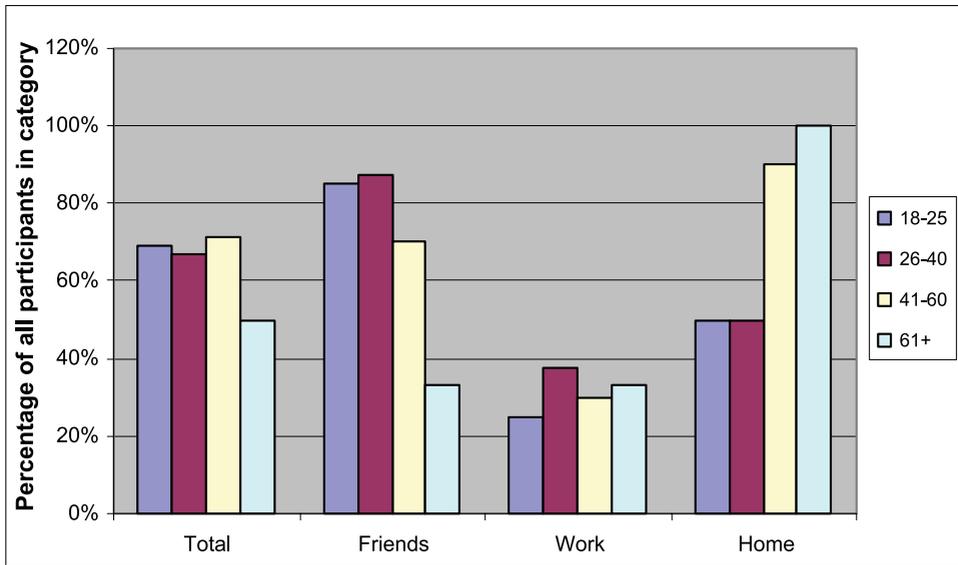


Figure 4. Phone calls made on mobile devices during train travel, by age. The Total category refers to the percentage of the sample population that used their mobile phones to make voice calls.

mobile phones. Interestingly, the differences in using the train as a workspace are relatively consistent across all age groups. The boundary between train space and work space is fluid. In turn, fellow passengers are exposed to the minutiae of other people's everyday workplace communication. Self-presentation norms stretch accordingly in response to changing social activities and technologies. We discuss the implications of privacy issues for self-presentation in a later section.

Media Consumption and Production on Trains

Activities we term media production in this study include taking photographs, shooting videos and writing, in other words, creating media. All other activities such as voice calls, texting, playing games, listening to music, we have termed consumption. The mobile phone camera has come under increasing scrutiny in Melbourne after the scandal at the Australian Open Tennis Tournament 2007 where a person was arrested for taking photos up women's skirts.⁵ Castells *et al.* identify three categories for the unscrupulous use of camera phones: secret shots up women's skirts; 'digital shoplifting'; and, bullying and coercion (Castells *et al.*, 2007, p. 118). Hence, the use of camera phones in public spaces like trains is problematic with high degrees of suspicion and public sensitivity. In some places in the public transport system such as Melbourne Central Station it is forbidden to use cameras due to security considerations and in other parts a permit is required.⁶ Nevertheless, it is possible to observe more innocent uses of camera phones such as friends taking shots of each other on less crowded trains and platforms in Melbourne.

In terms of media consumption on trains, our informal field notes indicated that this is a way in which the space of the train has been transformed. We have asked people

about the ways they pass the time on the train, whether they use mobile phones to improve their comfort or ‘kill time’. We found that listening to music is a popular activity (41 percent), however, numerous participants indicated that the reason that they do not listen to music or radio on their phones is because they own an iPod, so it is possible that if the survey had included iPod, PDA, walkman or other device use, the response to this question would have been higher. When we analyse the data according to age we find that 58.62 percent of participants aged 18–21 listen to music using their phones whereas none of those aged 61+ use their phones for this purpose. The data are presented in Figure 5 below, and we argue that this represents a trend where younger people listen to music in public spaces thereby changing the patterns of self-presentation in public.

Playing computer games used to be an activity restricted to private homes and games arcades. This is no longer the case in Melbourne. We find that 34 percent of participants reported playing games using mobile phones on trains. A breakdown by age groups reveals that 44.83 percent of 18–25 age group played games. The next two age groups are similar with 25 percent of 26–40 age group and 28.57 percent of 41–60 playing games on their mobile phones while travelling on trains. In the over 60 age group 16.67 percent play computer games on their phones. Again the distinction between public and private spaces blurs through the use of mobile phones.

Third generation mobile phones enable other previously home or work based activities requiring connection to fixed landline telecommunication to be performed while mobile. We wanted to know the extent to which people are taking advantage of the space of flows to create their own places. We find that 23 percent of our sample population is accessing the internet. A breakdown of age groups shows that 41.37 percent of 18–25 age group are accessing the internet with their phones. In the older age groups there are significantly fewer participants who report that they surf the web

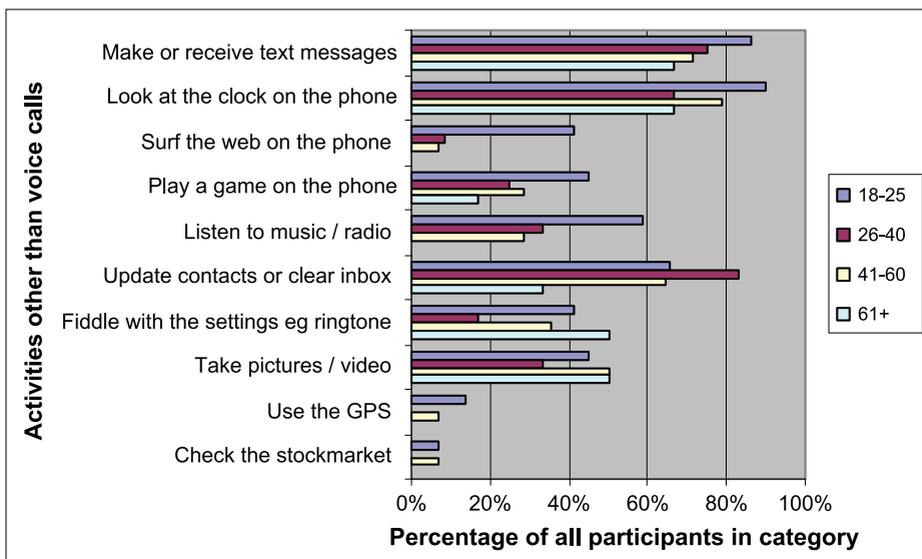


Figure 5. Mobile phone use, other than voice calls, by age category.

using their phones. Only 8.33 percent of those aged between 26 and 40 years and only 7.14 percent of those aged between 41 and 60 use their phones to access the internet. No one over 61 reported using their phones for this purpose.

Personalising mobile phones is related to media consumption and production. Ringtones, screensavers and wallpapers may be downloaded; contacts and inboxes can be updated while travelling. These activities are akin to tidying a workspace or the home and may be viewed as an indicator that more place-making is happening on public transport again raising self-presentation issues. We find that all age groups report engaging in such activities while travelling. Overall, 36 percent fiddle with the settings on their phones, for example, changing the ring tone, and 66 percent update contacts or clean up the inbox on their phones. We found 26–40-year olds were the highest percentage (83.33 percent) of people who use time on trains or waiting for trains to update contacts and clean out their inbox.⁷

Privacy and Integrity in Public Places

In this section, we analyse some of the impacts changing behaviour on trains through the use of mobile phones have had of people's perceptions about security, privacy, etiquette and integrity in public places. One of the issues we could see is the extent to which users allow the private to become public, and how much they feel their privacy is being invaded by other people's phone conversations.

As a measure of the extent to which commuters are relying on their mobile phones while travelling we asked them the following question: on a scale of 1 to 5 where 1 means very little and 5 means a great deal, what difference does having a mobile phone make for your train travel? In the table below, we plot the modes of the scores given by our participants given in response to this question. The participants in the age groups 26–40 and 61+ found that having a mobile phone makes a great deal of difference to their sense of security.⁸ However, for those in the 61+ age group, having a mobile phone made little or no difference as a distraction⁹ from whatever the train/platform situation may be. We note that both the youngest group and the eldest group

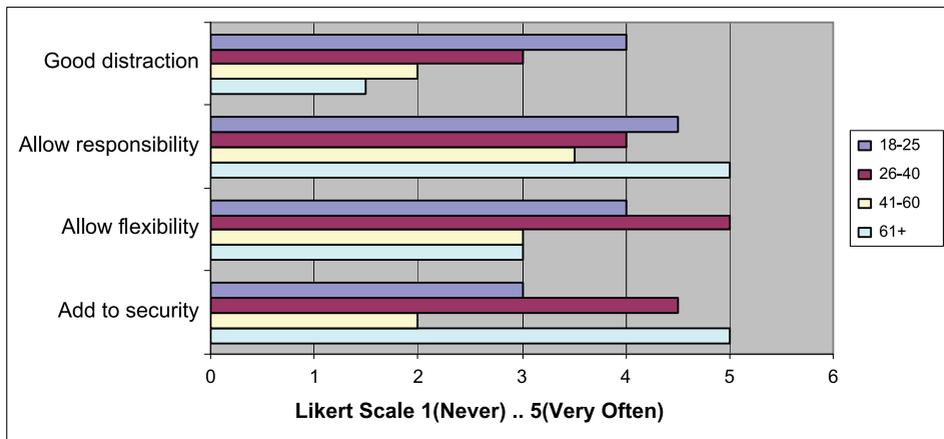


Figure 6. Some reasons for mobile phone use during train travel.

more readily agree that having a mobile phone allows them to be responsible in their dealings with others. The two younger age groups indicated that having a mobile phone allows for flexibility in that they can provide destinations with updates. Again this is evidence that people are using public spaces for micromanagement of time and space with activities such as micro-scheduling.

As our perceptions of and engagement with public places are transformed through technosocial devices like mobile phones, our ideas about socially acceptable behaviours in public places are also changed. In their research into phone mediated interaction, Terrades and Bona (2007) suggest that the interaction between the person and the machine fluctuates enormously, and with their definition of a *keitaisha*, a mobile person, they discuss the many ways in which mobile phones extend the normal conventional ideas about people and connectedness and interaction. So, when connecting with the world outside one's 'cocoon' in technosocial heterotopias like trains, how should we present ourselves? How truthful does a person have to be? What do people regard as polite behaviour? How do people feel about holding private or personal conversations in public spaces?

Conventions governing politeness can take a while to develop in response to technologies like mobile phones. We believe that the unfettered use of phones on trains can be a source of annoyance to other passengers. There are certain carriages on trains in England and Japan in particular, where mobile phones must be turned off (Terrades & Bona, 2007); (Ito *et al.*, forthcoming). This is not yet the case on Melbourne's suburban trains. To find out whether or not mobile phones are a source of annoyance we devised a set of statements and asked participants to rate them on a scale of 1 to 5 where 1 means very little and 5 means a great deal. The modes of responses are given in Figure 7 below.

The young and older age groups were not very concerned about privacy issues, while the other two in between age groups were. However, they were annoyed more from a

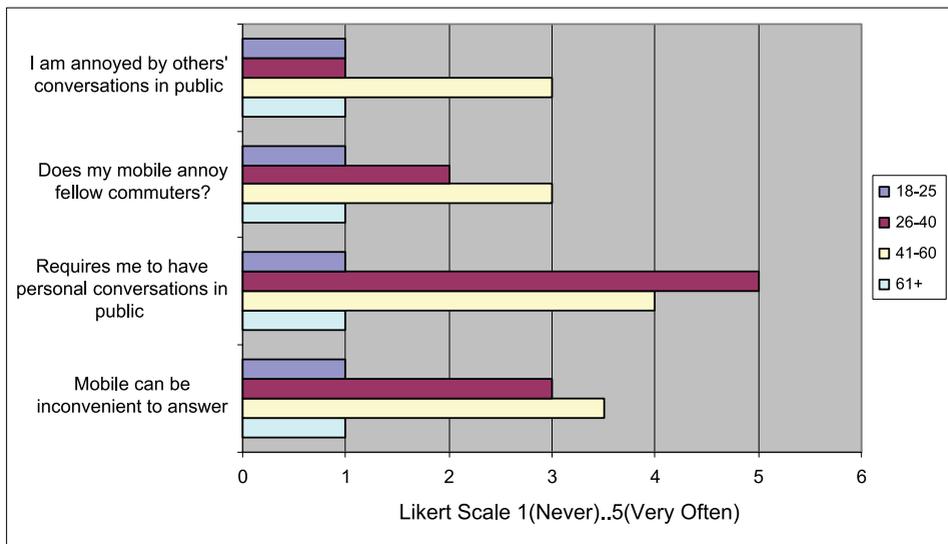


Figure 7. Privacy concerns about mobile phone conversations on the train, by age category.

personal perspective about their conversations being made public, rather than being concerned by the conversations of others. The issue here is about self-presentation and being overheard rather than being unwilling eavesdroppers to someone else's conversation. This fits with the findings of Terrades and Bona who noted that their participants (12–18 years old) preferred to use their phones at home, rather than in other spaces, like the train where they 'don't feel relaxed'.

When asked whether they would like to add anything, we find that mobile phone etiquette is a common issue raised. Some participants suggest that there needs to be an education campaign run to ensure that people know how to use their mobile devices in a polite way that doesn't impact on those surrounding them on the train. One participant suggests that a carriage be set-aside for people who want to make voice calls to go to so that no one else on the carriages has to listen to it. This is the case in Japan (Terrades & Bona, 2007). The people who add etiquette as an issue for comment are passionate about not wanting to hear other passengers' conversations.

Conversations can reveal much about a person. In trains people are generally anonymous to each other yet norms of acceptable behaviour govern their self-presentation. In our preliminary observations, we noticed that people were using train cancellation as an excuse for tardiness when no trains had been cancelled. Sometimes this led to smirks from those who had overheard. At other times it led to copycat calls. Our participants were asked the following question: have you ever phoned your destination and told them that you are late because the train is late, when that is not exactly true? We found that 42.62 percent of participants admitted that they had lied about their train being late. Eighteen to 25-year olds had the largest percentage of people who owned up to telling lies, with 55.17 percent of them having used the train being late as an excuse. The 26–40 age group and the 41–60 age group tended to be closer to the overall average of 42.62 owning up to falsely using the train as an excuse, and only 16.67 percent of those aged 61+ admitted to having lied about the train being late.¹⁰

Mobile Phones and Security

Behaviour in public spaces is generally characterised by a tacit awareness of the other where individuals are not generally acknowledged, however, if someone is in obvious trouble or danger others will drop their assumed indifference and help. Our participants were asked whether they would ring authorities to report an incident on public transport while it is happening and found an overwhelming majority would, despite the fact that this could involve them in the incident. Eighty percent of participants surveyed would use their mobile device to report an incident on public transport via a voice call while it was happening. Seventy-two percent of 18–25-year olds indicated that they would call authorities. All of those aged 61+, said they would report an incident on public transport via a voice call.

We had anticipated that people might be more worried about making their presence known and might have preferred to text authorities to report an incident on public transport while it is happening. However, we find that when asked this question only 37.7 percent of participants surveyed would use their mobile device to report an incident on public transport via a text message while it was happening. This is fairly standard across all the age groups, except for 26–40-year olds where

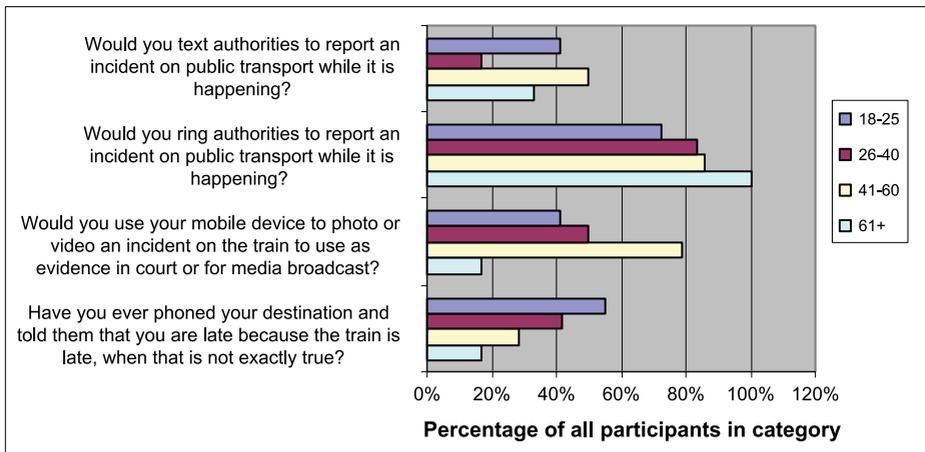


Figure 8. Mobile phone use for security.

only 16.67 percent would inform authorities in this way. Some participants note that they would prefer to alert authorities in this way if they are given a choice, because making a phone call might alert the perpetrator of the incident and cause them to refocus their attention on the person making the phone call. However, most participants seem to think that ringing the authorities is far more sensible and direct.

Recently, news footage of events such as the London bombings was recorded on mobile phone cameras. We want to know if Melbourne commuters would use their phone cameras in this way. We asked whether they would use their mobile device to photo or video an incident on the train to use as evidence in a court case or for media broadcast. The survey results show that 49.18 percent of participants surveyed would use their mobile devices to photo or video an incident on the train. Those aged between 41 and 60 years are much more likely to than the average with 78.57 percent of those surveyed in this age group answering yes to the question.

The responses indicate that people are prepared to intervene in incidents that threaten personal or public safety using their mobile phones. This appears to support the notion that mobile phones improve personal security while on the move. People are aware that should untoward incidents occur others might seek help from appropriate services such as ambulance and police.

Conclusions: Self-Presentation on the Move

Travelling in trains has evolved into a different experience over the past 10 to 15 years since the advent of the mobile phone. Previously suburban trains in Melbourne were relatively quiet places where people would have conversations in hushed tones, akin to the vocal tones used in public libraries. Now trains are relatively noisy. Roosters crow and random voices and tunes shout out of pockets and bags. As passengers, we are privy to one-sided private conversations. We can alert our destination if we are running late, we can call work and blatantly lie saying that the train is late. No longer do we have to suffer boredom and a sense of disconnectedness. The space of flows is

a double-edged. While a mobile phone on a train can provide entertainment for the bored and connection to a friend for the lonely, it also demands choices about self-presentation when it rings.

Changing perceptions of public spaces on trains along with place-making activities has changed how people spend their time in public as well. Weight (2007) in her paper exploring ‘heterotechnologies’ and notions of time proposes ‘that the mobile phone is a heterotechnology—capable of changing the nature of spacetime, and of inserting different potential meanings into pre-existing structures’. Having a mobile phone on public transport alters the train as a practiced place, a social space and allows the penetration of a myriad of potential communications.

Transformation of space causes tensions. The conventions governing the presentation of the self in public spaces like trains are changing. The ways in which we present ourselves in public spaces have been transformed through the use of mobile telecommunications. No longer do we pointedly ignore people talking to themselves, rather we look for ear plugs and wires that signify the person is using a mobile phone to converse with someone else. People’s activities and interactions in public spaces are imagined in new ways.

The use of mobile phones on trains has allowed new social practices to evolve with regard to proximity and connectivity and this changes the ways in which people perceive public spaces. Self-presentation and sense of place are entwined. This, in turn has had an impact on culturally shared conventions governing how we should behave in public places. The heterotopic space of the train allows people to slip between public and private activities through the introduction of social technology as embodied in mobile phones. A mobile phone increases a sense of connectedness and interaction, and transforms the travelling experience from the ‘in-between’ feeling of being neither here nor there, to one of connectedness and belonging. On the other hand, it can be switched off.

References

- Berry, M. (2007) ‘Mobile phones, networked selves, media ecologies.’ Paper presented to Mobile Media 2007, Proceedings of an international conference on social and cultural aspects of mobile phones, convergent media and wireless technologies, University of Sydney, July 2–4, 2007.
- Berry, M. & Hamilton, M. (2006a) ‘Generational computing tastes: Tablet PCs in the communicative ecology of multimedia design students.’ Paper presented to Association for the Advancement of Computing in Education, E-Learn 2006 - World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Hawaii, USA, October 13–17, 2006.
- Berry, M. & Hamilton, M. (2006b) ‘Mobile computing, visual diaries, learning and communication: Changes to the communicative ecology of design students through mobile computing.’ *Conferences in Research in Practice in Information Technology*, 52, pp. 35–44.
- Bissell, D. (2007) ‘Animating suspension: Waiting for mobilities’, *Mobilities*, 2(2), pp. 227–298.
- Castells, M., Fernandez-Ardevol, M. & Qie, J. (2007) *Mobile Communication and Society: A Global Perspective* (Cambridge, MA: MIT Press).
- Choo, S. & Mokhtarian, P. (2007) ‘Telecommunications and travel demand and supply: Aggregate structural equation models for the US’, *Transportation Research Part A*, 41, pp. 4–18.
- De Certeau, M. (1984) *The Practice of Everyday Life* (Berkeley: University of California Press).
- Goffman, E. (1959) *The Presentation of Self in Everyday Life* (New York: Penguin).
- Hamilton, M. & Berry, M. (2007) ‘Mobile computing, games and online communities: Changes to the communicative ecology of multimedia design students through mobile computing, Part 2.’ *Conferences in Research in Practice in Information Technology*, 66, pp. 55–61.

- Hjorth, L. (2007) 'Domesticating new media: A discussion on locating mobile media'. Paper presented to Mobile Media 2007, Proceedings of an international conference on social and cultural aspects of mobile phones, convergent media and wireless technologies, University of Sydney.
- Inkinen, T. (2006) 'The social construction of the urban use of information technology: The case of Tampere, Finland', *Journal of Urban Technology*, 13(3), pp. 49–75.
- Ito, M. & Okabe, D. (2003) 'Mobile Phones, Japanese youth and the re-placement of social contact'. Paper presented to Conference Front Stage - Back Stage: Mobile Communication and the Renegotiation of the Public Sphere, Grimstad, Norway.
- Ito, M., Okabe, D. & Matsuda, M. (Eds) (2005) *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Cambridge, MA: MIT Press.
- Ito, M., Okabe, D. & Anderson, K. (2008) Portable Objects in Three Global Cities: The Personalization of Urban Places, in R. Ling. & S. Campbell (Eds) *The Mobile Communication Research Annual Volume 1: The Reconstruction of Space and Time Through Mobile Communication* (New Jersey: Transaction Books). The Mobile Communication Research, Sydney, University.
- Kaplan, C. (2006) 'Mobility at war: The cosmic view of US 'air power'', *Environment and Planning A*, 38(2), pp. 395–407.
- Lasen, A. (2004) 'Affective mobile phones: An insight into how mobile phones mediate emotions', Paper presented at the 5th Wireless World Conference, 'Managing Wireless Communications, 15–16, July 2004. DWRC, University of Surrey, Guildford.
- Lefebvre, H. (1991) *The Production of Space*, (Oxford and Cambridge, MA: Blackwell).
- Ling, R. (2004) *The Mobile Connection: The Cell Phone's Impact on Society* (San Francisco, CA: Morgan Kaufman).
- Lyons, G. & Urry, J. (2005) 'Travel time use in the information age', *Transportation Research Part A*, 39, pp. 257–276.
- Massey, D. (2004) 'Geographies of responsibility', *Geografiska Annaler Series B*, 86(1), pp. 5–18.
- McGuigan, J. (2005) 'Towards a sociology of the mobile phone', *Human Technology: An Interdisciplinary Journal on Humans in ICT Environments*, 1(1), pp. 45–57.
- Plant, S. (2002) *On the mobile, the effects of mobile telephones on social and individual life*. Available at (http://www.motorola.com/mot/doc/0/234_MotDoc.pdf)(accessed 16 March 2008).
- Terrades, M. & Bona, Y. (2007) 'Mobile phone-mediated interaction: Techno-affectivity, mobile subject and urban space'. Paper presented to Mobile Media 2007: Proceedings of an international conference on social and cultural aspects of mobile phones, convergent media and wireless technologies.
- Townsend, A. (2000) 'Life in the real-time city: Mobile telephones and urban metabolism', *Journal of Urban Technology*, 7(2), pp. 85–104.
- Weight, J. (2007) 'Living for the moment: Transience, identity and the mobile device'. Paper presented to Mobile Media 2007, Proceedings of an international conference on social and cultural aspects of mobile phones, convergent media and wireless technologies.