Phones and trains: How to subvert industrial time

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Abstract

Transportation and communication technologies are complementary technologies – increases or decreases in the use of one are likely to result in a similar change in the other. This paper explores this nexus via a case study of mobile phone use on Melbourne’s suburban train network. It synthesises survey data with personal observation, content analysis and theoretical reflection to suggest that users tactically invent ways to combine different technologies.

Melbourne’s suburban train network is publicly perceived to be undergoing considerable stress, compared with, for example, the Tokyo metro. This stress results in public transport users inventing ‘work-arounds’ which involve their mobile devices.

This day-to-day co-option of complementary technologies allows people to reconfigure the spatial and temporal relationships they have inherited from earlier phases in the technical and cultural history of spatio-temporal organisation. Public transport is an artefact of industrialisation. It structures user behaviour by forcing users to organise their time according to service regularity and trip duration. Among other things, mobile phones enable a post-industrial relationship with time – fluid, always available and spontaneous.

Mobile phones are ultimately a heterotechnology, in that they permit users to operate in both industrial and post-industrial time. As a result, users can express multiple relationships to the capitalistic, industrial cityscape: on the one hand, as consumers, workers, students and other ‘responsible’, reliable roles. On the other hand, through mobile phones, users are empowered to resist industrial time and its structures. This range of behaviours is daily played out on Melbourne’s public transport.

Many researchers have focused on the impact of one technology on daily life (including Katz, 2006; Ito, 2005; Okabe & Ito, 2006; Ling, 2004). This paper focuses on one way that people combine technologies, and some of the reasons why they might be doing it. In unpacking these inventive combinations of technologies, people either implicitly or explicitly design time and space to meet desires or needs that are not necessarily supported by the dominant ways in which our cities have been organised. This paper grounds reflections on the way our behaviour with technologies impacts on experiences of space and time in a specific case study.
Public transport in Melbourne

Melbourne, a city of roughly four million people, sits at the south-eastern end of mainland Australia. Generally less glamorous and less internationally recognised than Sydney, nevertheless, over the last 25 years Melbourne has undergone urban renewal and is a contemporary city with its own personality and diverse local population. While lacking Sydney’s grandeur, it is not without culture, wealth and landmarks, and is considered highly liveable (The Economist, 2007).

With a population growth of over one percent per annum, Melbourne nevertheless maintains a city centre in which people work, shop, and seek entertainment, promoted by a business-oriented city council. Transport to and from the outer suburbs is therefore pivotal. Controversies surrounding the use, misuse, strengths and weaknesses of private cars and public transport abound.

Public policy discussions about transport in Melbourne popularly centre around two issues: firstly, is it appropriate to continue to develop Melbourne’s road network, thus privileging the use of the private car? Or should available resources instead be focused on improving public transport? A secondary issue about infrastructure support for cyclists has repercussions for both road and public transport networks.

The suburban train network is often described in the media and by the Public Transport Users’ Association (http://www.ptua.org.au/) as under stress. Perhaps partly as a result of that stress, even residents in areas of Melbourne with good public transport (up to eight kilometres from the city) more frequently use their cars to go to work (Australian Bureau of Statistics, 2003, p.63). Meanwhile, lower income groups who are disproportionately located in outer suburbs where services such as public transport are poor, may be further economically deprived because of their high-cost car dependence (ibid, pp. 60-63).

Apart from such issues of equity, other reasons for supporting and expanding public transport include sustainability, social costs from obesity, to traffic accidents (Newman, 2006, p. 8), and time saving. However, because of poor public transport infrastructure, many Melburnians do not currently live within the commuting-time comfort-zone of one hour total per day (known as Marchetti’s Constant), and the arguments in support of public transport therefore fall on deaf ears.
The poor state of Melbourne’s train network is receives much attention in the popular media and other publications. For example, one report suggests an increase in crime associated with the train network (Houlihan, 2006), which was denied by both Connex and the State Government. An independent report counters that “…fear, rather than crime itself … is affecting public transport usage” (Village Well, 2006, p. 19). Other issues such as overcrowding, vandalism, faulty trains, safety, ticket pricing, ticket enforcement, infrastructure and rolling stock problems all feature in the local media, particularly in the free publication MX (published by the Herald and Weekly Times group), available at every train station on weekdays and aimed at a young adult audience.

The watershed event for my own train use occurred with the brake failure of the Siemens trains in early 2007, during which many of the rolling stock were inoperable, and services drastically cut (see, for example Cowan, 2007). As a result, I now cycle to work. However, given Marchetti’s Constant, the cycling option is not available to everyone. What other ‘survival tactics’ might ameliorate the trip to/from town? Do people have strategies to deal with train lateness, breakdown, overcrowding, etc? Is safety a concern, and how do individuals try to assuage their impression of personal risk?

From my unsystematic observation of commuter behaviour in Melbourne I surmised that commuters were using one type of technology, mobile phones, to ameliorate the perceived faults of another, the trains. My impression of this complementary relationship was strengthened by the content of MX. In the unremarkable edition of December 14 2007, four of the 28 paid advertisements concerned telecommunications; the letters to the editor page was almost entirely done by text message (the encouraged mode of transmission) and the letter of the day concerned mobile device etiquette on public transport. Two other stories mentioned mobile devices, and many more concerned advances in personal technology. Anecdotally, there did appear to be evidence that travel and communications technologies were complementing each other in Melbourne.

Other research suggests that use of both travel and communications technologies is increasing. In the September 2000 quarter, mobile use in Australia increased 9.1
percent (Cellular, 2000). Budde (2008) reports that there are just over 20 million users and a penetration level above 99 percent in Australia in 2007, and that the saturation point of phone ownership will shortly be reached (although the quantity of communication activities may still increase).

At the same time, coverage in the popular media and statistics from Melbourne’s suburban train provider Connex suggest growing use of public transport, in particular trains. The actual research presents a less clear picture. A 1999 Australian Institute of Urban Studies report found that in Melbourne:

- two percent of all trips are by bicycle;
- there was an eight percent increase in the number of passenger journeys on public transport between 1993/94 and 1997/98;
- 75 percent of all trips are by car.

However, more recent findings suggest that car usage in Melbourne is little changed, with 73 percent of Melburnians driving to work in 2007 (Sydney Morning Herald, 2007). Perhaps the explanation is that there has been a general increase in the total number of journeys undertaken, while the proportion of types of journey is constant. The increase in total number of journeys undertaken in Melbourne may not be wholly accounted for by population increase. Recent international research suggests that increase in travel may be a function of increase in telecommunications use (and vice versa). Brown, Balepur & Mokhtarian (2005, p.72) point to the interconnectedness of transportation and communications. Choo and Mokhtarian (2007, p. 4) argue that “[t]ransportation and telecommunications have in common the characteristic that both are means of sharing information among people, and for that reason they are also closely interrelated with each other”. They postulate that telecommunications and transportation are complementary. “That is, as telecommunications demand increases, travel demand increases, and vice versa” (Choo & Mokhtarian 2007, p. 17). An interesting implication is that the more you travel, the more phone calls you make, and it would be naive to stimulate one without being prepared for more demand for the other.

Correlations between transport and telecommunications use may seem counter-intuitive. The pro-technology rhetoric of the 1990s, for example, often declared that
there would be a reduced need for travel because of computing and telecommunications. However, more recent international research suggests that the advent of flexible working practices has not resulted in less travel (Gillespie and Richardson, 2004). While people may work away from the office, Ito, Okabe & Anderson (forthcoming) report that the preferred alternative work environment is more likely to be a café, and we can wonder whether that in itself requires further travel. Furthermore, Inkinen (2006, p. 67) reports that few of his survey participants use mobile devices to blur the boundaries between work and home – people seem to prefer to have separate spaces for these separate parts of their lives. Thus, those who feared that more versatile telecommunications would mean more (communications) speed but less (bodily) movement (Virilio, 2004, pp. 78-80) seem alarmist: people like to take their bodies to different locations, even if they don’t have to.

I will argue that mobile phones complement commuter train travel, and this positive interaction partially explains the increased use of both. This is despite (and indeed, partly because) trains and phones communicate different concepts of time, which I will define as ‘industrial’ and ‘post-industrial’. These technological combinations exemplify ways in which ordinary people create ‘work-arounds’ for the disjunctions and aporias encountered at this social and technological moment in Melbourne.

**Survey Data**

According to Ezzy (2002, p. 157), “[w]riting qualitative research involves participating in an ongoing dialogue. This dialogue is necessarily political, ethical and moral”. As such, this paper takes a rather quizzical attitude towards data collection: its findings are the result of an dialectical interrogation of my own behaviour, unsystematic observation, a reading of media coverage, and the survey data, in the hope that such a many-faceted approach can engage productively in an hermeneutic cycle which recognises that “theories are shaped by data, but can never adequately reflect the complex political realities of peoples’ lives” (Ezzy, 2002, p. 23). I have tried to create an interpretation of the ‘text’ which comprises the suburban train system in Melbourne, mobile devices and human behaviour in late 2007.

At various times in the first three weeks of November 2007, 61 commuters were surveyed at Flinders Street Station, the central commuter station in downtown
Melbourne, by our research assistant Hugh Macdonald. Criteria for participation were 18 years old or older; in the process of using public transport, and being the owner of a mobile device. Effort was made to ensure that surveying was carried out at various times of day, including rush hour and evenings, to determine whether attitudes to train and mobile use were time-sensitive.

Twenty-four women and 37 men participated. More women were approached, but they were generally less enthusiastic about participating. The age breakdown of participants was: 47.54 percent between 18-25; 19.72 percent between 26-40; 23.95 percent between 41-60 and 9.84 percent over 60. More older individuals were approached but they could not participate because they did not own a mobile. Further research on the telecommunications decisions of older people is indicated.

A total of 68.5 percent of participants travelled on the train several times a week. The frequency of train travel was greatest in the 26-40 age group and declined with increasing age. (Of course, a majority of Melburnians never travel on the trains at all, which contrasts with many Asian and European cities.) Of those surveyed, 59 percent limit their train travel to the inner zone.

At train stations people are generally in a hurry. A discursive, interview-style approach is therefore not particularly appropriate. The survey, which allowed for participants to express a more nuanced opinion by adding comments, was a compromise. Another issue we faced was our inability to survey those under the age of 18 without parental consent, difficult to obtain when people are out without their parents. Thus, a demographic which may have revealed very interesting trends had to be overlooked. Finally, because women were less willing to participate, the survey results may favour the male point of view. A gender breakdown of the results is therefore included. What follows only partially reproduces the survey data. A more complete analysis of the survey data is available in a sister paper by Hamilton and Berry (forthcoming).
Frequency and types of mobile usage

In Melbourne, telecommunications network coverage on trains is not a major problem, and high frequency of usage occurs. It is highest in the youngest age group and decreases with age.

Our survey revealed that the phone is deeply integrated in the lives of young adults, and is used as a media device as well as a communications device (for more details, see Hamilton and Berry, forthcoming). Older people generally limit their use to communications with family members, and may report that they carry it begrudgingly. Younger users communicate more with friends while older users communicate more with family. All users reported that communication with work colleagues is at most, a secondary usage.

Approximately 79 percent of all users send text messages, with only a slight decrease in older age groups. This compares favourably with the 69 percent of Australians who were using text messages in the overall population in 2006 (Department of Broadband, Communications and the Digital Economy, 2008). Media consumption via mobile devices was significant, and the most popular activity was listening to music, particularly among younger people. Tuan speculates that the use of music frees "people from the demands of purposeful goal-directed life, allowing them to live briefly in what Erwin Strauss calls 'presentic' unoriented space”' (Tuan, 1977, p. 129). Another quite popular activity was taking pictures or video with the phone. Other types of functionality such as GPS were little used, but many participants reported that their phone did not offer these features.

My impression is that Melbourne’s public transport users use their mobile devices in very different ways from what may be witnessed on, for example, Tokyo’s metro. Unsystematic observations on Tokyo’s metro in 2008 suggest that not only do young adults use their mobiles much more frequently and for longer periods, but they are doing different things. Media consumption is more apparent, especially going online and playing games. People are writing longer emails compared with text messages (also see Satchell and Singh 2005). There is no doubt many reasons for the different behaviour, including the possibility that Japanese telecommunications companies make media consumption more viable. In Australia, we prefer home, school or office, where a bigger screen and greater privacy awaits, to go online.
Ameliorating train problems

The surveyed train users were not as disturbed by problems with Melbourne’s commuter trains as I expected, or as the popular press would have us believe. Most participants indicated a reasonably high level of satisfaction with the train service, and were forgiving of its faults. This was constant across age groups. However participants did acknowledge that they occasionally suffered from delays and breakdowns. Perceptions of delays were higher amongst younger users, and highest in the 26-40 age group.

Participants clearly used their mobile phone to surmount train-derived inconveniences. Just over half of all participants habitually text or phone their destination to update them about arrival times, illustrating how important time management is to public transport users. Younger participants seemed slightly more interested in the potential for flexibility on the go than older participants, who are possibly more interested in sticking to pre-arranged schedules. This may suggest an age-sensitive transition from industrial to post-industrial time management, which I will explore further shortly. All age groups agree that mobile phones permit a higher level of responsibility in dealings with others.

A high 72 percent of total participants ring ahead to be picked up from their train. That this figure is considerably higher than the proportion of people who update their destination about arrival times suggests that people being picked up are often reconfirming prior arrangements rather than announcing a change of plan. ‘Plan-changers’ demonstrate a different sense of responsibility that ‘plan-reconfirmers’, and both ways of behaving indicate different ways that people understand time; plan-changers understand time as flexible and open to negotiation, while plan-reconfirmers accept pre-arranged temporal structures to their daily activities.

One way in which mobiles are used to ameliorate train delays is for distraction. Just under half of the participants reported consciously using their phone to distract themselves. Younger participants more readily agree that the mobile device provides a good distraction from the platform or train environment. More specifically, 66.5 percent of total participants updated their contacts or cleaned up their phone inbox, while 36 percent of total participants reported fiddling with the settings, such as the
ringtone (presumably not all inbox cleaners consider this behaviour a distraction). Ito et al. (forthcoming) find such uses for mobile devices very common on public transport in London and Tokyo.

Finally, the combination of mobile phones and transportation technologies enables new behaviours. In Melbourne, public perceptions of train unreliability coupled with mobile phone use has led to a new range of excuses for tardiness. 42.6 percent of participants have used their phones to say the train is the cause of their lateness rather than the real reason. 18-25 year-olds are the biggest offenders here, with 55.2 percent having used train lateness as an excuse compared with only 16.7 percent of those over 60. This is a more specific instance of Chihara’s (2000) anecdotal impressions. Mobile enhanced lying is not new. For example, Katz (2006, p. 11) reports on people pretending to use their mobiles to ward off perceived threats.

In sum, our survey reveals age-sensitive trends emerging regarding use of phones in conjunction with travel.

**Train safety**

We asked survey participants how frequently they felt worried or threatened by suburban train travel. No age group reported a high degree of worry, although the 26-40 and 41-60 age groups reported slightly more concern. To some degree, these age groups correlate with those who were travelling in the evening by themselves from work (discussed below). It also appears that fear of train-related terrorism has eased in the last couple of years.

When asked the more specific question about whether having the phone adds to a sense of personal security on the trains, the modal analysis indicates some agreement, although it varies with age. Clearer was the general response to questions surrounding what participants would do if they witnessed an incident while using public transport. 49 percent of participants would use their phone to photograph or video an incident; 80 percent would make a voice call to report an incident while it was in progress, while 37.7 percent would send a text message. Older participants were more enthusiastic about making a voice call to report incidents. Some participants noted that they would prefer to alert authorities by text message, because making a phone call might alert the perpetrator of the incident.
When broken down into specific groups, safety, security and connectivity themes become clearer. Seven out of 61 of our participants were surveyed after 7pm. While this is a small group, and an expanded survey would be more conclusive, it would appear that safety is of greater concern to night-time travellers, and consequently they profess a greater reliance on their phones to feel secure. All of our evening travellers update their destination about their arrival time. 86 percent of evening travellers use their mobile to kill time compared with 48 percent overall. Evening travellers are somewhat more likely to use their mobile to get picked up than daytime travellers. Evening travellers were slightly more likely to feel that the mobile added to their sense of security in the face of an uncertain train system. They were also slightly more likely to view the device as a way of reporting incidents to authorities. Overall, evening travellers were significantly more of the opinion that that having a mobile phone improved their experience of public transport.

Only two of the seven evening participants were women, so it can be assumed that male night travellers also feel the greater sense of security offered by a mobile phone.

Another sub-group which might have a higher interest in security and personal safety are women. Inkinen (2006, p. 66) reports that security was an important motivator for mobile phone use, particularly for women. Do Melburnian women confirm this finding?

Women commuters are significantly more likely to agree that broken, overcrowded or late trains upset their plans; they are also more likely to feel worried or threatened by suburban train travel. Specific types of mobile device usage differ on gender lines.

Our limited evidence suggests that women are more likely to use the service provider’s text messaging service to update themselves about train scheduling issues. Men and women express a similar level of feeling that the mobile device enhances a sense of security in the face of an uncertain train system, and that the phone allows them to be more flexible about appointments. Overall, women agree slightly more than men that having a mobile phone improved their experience of public transport, although this doesn’t translate into greater phone use.
No significant gender difference exists between men and women concerning the extent to which they use their mobile to kill time, but women are somewhat more likely to agree that the phone is a good distraction from the platform or the train situation. Perhaps counter-intuitively, men are more likely to ring someone to pick them up upon disembarkation.

**Manipulating time**

According to Clapp (2007, p. 97-8), the history of mechanisation is a history of the “mechanization of time” which altered the appearance of the city itself:

The ebb and flow of activities in the industrial city’s streets took on a distinctive tempo as the movements of workers, the openings and closings of shops, the swelling and thinning of traffic became regulated to a synchronous schedule. The urbanite became acutely conscious of clock time – the time required to get to work, the rate of pay per hour, the arrival of the 5:05, the time it took to process information.

I am calling this ‘industrial time’: timetabled, scheduled, rhythmic, routinised as the nine-to-five working day, five-day working week. It is the time of predictable routines and fixed locations. Public transport timetabling and infrastructure developed in response to the demands of industrial time. Its prime directive is to get workers to and from work. Its peaks and troughs of use match the working day, and its resources are focused around meeting those needs. Its discontents are anonymity, ennui, alienation and waiting.

The industrial function flavours and structures other uses of public transport, like recreation or shopping. Regardless of purpose, users must temporally conform to service regularity and trip duration. Industrial time makes both time and space monolithic, to be obeyed rather than manipulated.

One reason why trains and mobiles complement each other is because of the different concept of time that informs mobile phone use. Because public transport makes space-time so structured, the most common thing people do with their phones on the train is check the time. 80 percent of our survey participants used the phone clock, slightly higher than the 79 percent of participants who sent text messages, while using public
transport. Presumably this behaviour is derived from the need to conform to timetables and deadlines which are the basis of mass transport systems. In this regard, the mobile phone is used to facilitate industrial time, and is therefore a technology co-opted by capitalism.

However because they are mobile communications devices as well, mobile phones also encourage users to invent a different relationship with time: fluid, always available, spontaneous (Weight, 2007). This is a post-industrial attitude to time: flexible, anti-routine, and anti-fixed location. Its signifiers include the 24-hour clock of Internet shopping, multitasking, and asynchronous communications like text messaging. The impact of the mobile on time and space sometimes seems positive; however there may also be a new range of obligations.

The fragmented “just-in-time” mentality of the post-industrial mindset demands a high degree of time-consciousness, because industrial time remains normative for business, school and public transport. Individuals use their mobile phones to ‘barter’ temporalities: some deadlines can be renegotiated; others can be made to work through multitasking, or by converting formerly ‘down-time’ space like trains into places where specific and personal activities can comfortably occur. Because the phone handles both types of time, it is used as a ‘temporal translator’.

There is some evidence that younger adults are more likely to use the phone in this post-industrial way. The two youngest age-groups in our survey were more likely to see the phone as a device that increases their flexibility. Developing Deleuze and Guttari’s ideal of the nomad, Satchell and Singh (2005), in their study of 35 young adults in Melbourne, identified the vast majority of them as belonging to the ‘nomadic’ type:

… characterized by always being on the move between different groups and activities. Furthermore … unlike previous generations, they did not have centralized meeting places where they could get together. They were disconnected physically, leading fragmented lifestyles … and were often without a consistent home base. However, because they are connected virtually via their mobile phone handsets and networks, they can seamlessly map their own journeys through a continual series of activities and events. … For these users, the handset becomes like a surrogate home base or virtual lounge room from where
the nomad can maintain a continual virtual presence, summoning, or joining real and virtual groups at will. This is significant because it represents a paradigm shift in urban mobility, not seen since the car liberated a generation of teenagers on the 50s. (n.p.)

Phones thus change the politics of space as well as time. Phones have always been inherently spatial technologies, as can be seen from the impact of landlines on architecture and cities (Townsend, 2000, p. 97; de Sola Pool, 2004 pp. 47-49). The mobile phone converts any (empty, impersonal, meaningless) space into (personalised, meaningful, temporarily owned) place: “Place is security, space is freedom: we are attached to the one and long for the other”, suggests Tuan (1977, p. 3). When the phone enters the train, the neutral, meaningless nature of train space becomes a more meaningful, but also more constrained, place, where personally significant activities can take place. The heterotopian nature of public transport is diminished when it is colonised by communications and media. On trains, we are no longer out of range – and therefore, in some ways, we are also no longer free. We not only can be responsible; perhaps indeed, we must be. Perhaps the greater use of phones by young people indicates a sense of obligation, rather than a lifestyle choice.

In other words, it is too simplistic to say that mobiles increase a user’s freedom. By creating a greater range of communicative possibilities, the mobile might be facilitating a new range of responsibilities. We are not ringing our destinations about arrival times simply because we want to: perhaps we feel that we must.

Post-industrial time may present new responsibilities, but it also suggests new forms of resistance against industrial time. Thus it is sometimes irresistible to send a text message during class or in a meeting, even if it’s not necessary. On the train, we can subvert the tyranny of the schedule by converting industrial time to post-industrial time with voice and text and media. It’s a small act of personal resistance against the monolithic spatiotemporal structures that we remain embedded within. Thus, we can describe mobile phones as heterotechnologies – technologies that can be co-opted for many, perhaps competing purposes – because they communicate so many different relationships to time.
What, then, are we to make of predictions such as “[t]he mobile phone might lead to a
dramatic increase in the size of the city, not necessarily in a physical sense, but in
terms of activity and productivity” resulting in “the intensification of urban activity –
the speeding up of urban metabolism” (Townsend, 2000, p. 101)? Are we doing more,
are we doing more faster, are we doing several things simultaneously? Phones and
public transport are being used more, but it is not clear what is therefore being
achieved. Perhaps the post-industrial mindset entails a collective engagement in ‘busy
work’ writ large upon the city, much of it surrounding shopping, entertainment and
friendship. Young adults seem particularly engaged in a collective dance of
consumerism, distraction and chit-chat, but perhaps the perceived quickened pace of
urban life is a dust storm obscuring inertia.

Meanwhile, the changing patterns of phone use as people get older may be read not as
older people’s discomfort with the phone, but as evidence that the ‘busy work’ of
younger people is unsustainable. A further study comparing the understanding of time
of retirees and youth is suggested: both have more ‘play-time’, but they may have
very different understandings of and uses for it.

Trains have been described by Berry as “transitional liminal physical sites” for which
the mobile phone can “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) . Inserting a heterotechnology like a mobile phone within public transport space-
time alters its meaning, and our behaviour – it is no longer a space of anonymity,
ennui, alienation and waiting. However, there is a less romantic aspect: when we
convert space to place via our mobiles we may eschew the possibilities of freedom
and exploration that are inherent in undefined space. According to our survey results,
only older people seem to mourn the loss of anonymous ‘empty’ space. Younger
people thrill at the always-connected promise of mobile phone marketing. Solitude is
not for them; and so they make everywhere a somewhere, and down-time into up-
time, via their phones.

**Conclusion**
The mobile phone allows people to partially overcome the limitations of the public
transport network in Melbourne. Suburban train networks are a remnant of the more
rigid, hierarchicalised, industrial city, whereas the mobile phone is a technology of post-industrial flexibility. Nevertheless, this paper has argued that these two technologies complement each other.

Public transport is an odd combination of moving vehicles (trains) and stationary structures (platforms, tunnels, tracks). Train users perform a complex set of continuously evolving physical relationships with its various parts, embedded in its moving and stationary parts at the same time as they themselves are moving. Having a communications device when you are on public transport changes your relationship to the industrial space-time expressed by public transport. By inserting post-industrial temporality into the system, the emptiness public transport space-time is co-opted as a personal place. As a result of our case study, I have argued that the mobile phone is a heterotechnology – capable of changing the nature of space-time, and of inserting different potential meanings into pre-existing structures.

Whether for psychological, recreational or practical reasons, use of transport and telecommunications reinforce each other. This is particularly clear in a city such as Melbourne, where the public transport is under stress. Commuters use their phones and other mobile devices to augment or ameliorate the public transport experience, and in general they recognise the usefulness of mobile phones in this situation.

At the Tokyo Train Station, there is a cavernous underground area between routes that was probably designed for shops and stalls, but no one has taken it up. It is, however, heated, and old men sleep there, with open umbrellas shading their eyes from the overhead neon lights. These people have no phones, and they have no trains either. Doubly disenfranchised, they seem like an alien species to the commuter; they have converted ‘space’ to ‘place’ not via telecommunications technology, but out of a poverty of choices.

For wealthier citizens, being on a train, or at a train station, is never a real destination; rather it is a temporal bridge across excess space. Such territory is ambiguous: neither home nor away. However, we have learnt to co-opt public transport, via our mobile devices, into some sort of temporary place.
Converting space to place implies both gains and losses, and our use of the mobile phone is implicated in both the gains and the losses. While its use is open to Deleuze’s (2004) critiques of stifling capitalism and its systems, it is also a subtle and playful form of resistance against the prevailing ways in which contemporary late capitalism is organised.

References


MX (2007 Friday December 14), *Herald and Weekly Times*.


**Appendix A: survey data**

Surveys were carried out in November 2007 at Flinders Street train station, Melbourne. This is a partial summary of our data. Unless otherwise stated, the data indicates the mode.

**Demographic information about participants**

<table>
<thead>
<tr>
<th>Age distribution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>47.54%</td>
</tr>
<tr>
<td>26-40</td>
<td>19.72%</td>
</tr>
<tr>
<td>41-60</td>
<td>22.95%</td>
</tr>
<tr>
<td>61+</td>
<td>9.84%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender distribution</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>male</td>
<td>60.66%</td>
</tr>
<tr>
<td>female</td>
<td>39.34%</td>
</tr>
</tbody>
</table>

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Our Research Assistant reported that many individuals who may have been aged 61+ were approached and responded that they did not own a mobile phone. These people were not surveyed. Our Research Assistant reported that women appeared to be less enthusiastic to participate in the survey, as many were approached and declined the opportunity.

**Phone ownership**

All participants owned a mobile phone. If it was found that they did not, their participation in the survey was terminated, and we cannot comment on their circumstances.

**Experience of Melbourne’s trains**

<table>
<thead>
<tr>
<th></th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td>On a scale of 1 to 5, where 5 means very happy and 1 means very unhappy, how happy are you with Melbourne’s suburban train system?</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>On a scale of 1 to 5, where 5 means very often and 1 means never, how frequently are your plans upset because the trains are late / broken / too crowded to use?</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>On a scale of 1 to 5, where 5 means very often and 1 means never, how frequently do you feel worried or threatened by suburban train travel?</td>
<td>1</td>
<td>2</td>
<td>1,2</td>
<td>1</td>
</tr>
</tbody>
</table>

The data reported in the table above is the mode, or most frequently selected option, for that age group. Since this data is Likert data (on a scale of 1 to 5, where 5 means very happy and 1 means very unhappy), it is not continuous, and finding the mean value of such data does not give a good summary of it. For
instance, the mean value can average out any differences, as in a hypothetical case where there might be a sample of 10 people, where 5 might say they are very unhappy and give a score of 1 on the scale of 1 to 5, and the other 5 are really 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 case reflect a truer understanding of the responses that are really polarised.

**Frequency of phone use**

**Activities the phone is used for on trains or train platforms**

<table>
<thead>
<tr>
<th>Voice calls to….</th>
<th>Total*</th>
<th>Friends</th>
<th>Work</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>68.97%</td>
<td>85%</td>
<td>25%</td>
<td>50%</td>
</tr>
<tr>
<td>26-40</td>
<td>66.67%</td>
<td>87.5%</td>
<td>37.5%</td>
<td>50%</td>
</tr>
<tr>
<td>41-60</td>
<td>71.43%</td>
<td>70%</td>
<td>30%</td>
<td>90%</td>
</tr>
<tr>
<td>61+</td>
<td>50%</td>
<td>33.3%</td>
<td>33.3%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Refers to the percentage of the sample population that used their mobile phones to make voice calls.

<table>
<thead>
<tr>
<th>Activities other than voice calls</th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make or receive text messages</td>
<td>86.2%</td>
<td>75%</td>
<td>71.4%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Look at the clock on the phone</td>
<td>89.7%</td>
<td>66.7%</td>
<td>78.6%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Surf the web on the phone</td>
<td>41.4%</td>
<td>8.3%</td>
<td>7.1%</td>
<td>0</td>
</tr>
<tr>
<td>Play a game on the phone</td>
<td>44.8%</td>
<td>25%</td>
<td>28.6%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Listen to music/radio on the phone</td>
<td>58.6%</td>
<td>33.3%</td>
<td>28.6%</td>
<td>0</td>
</tr>
<tr>
<td>Update contacts or clean up the inbox on your phone</td>
<td>65.5%</td>
<td>83.3%</td>
<td>64.3%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Fiddle with the settings on your phone, for example, the ringtone</td>
<td>41.4%</td>
<td>16.7%</td>
<td>35.7%</td>
<td>50%</td>
</tr>
<tr>
<td>Mobile Device Use</td>
<td>18-25</td>
<td>26-40</td>
<td>41-60</td>
<td>61+</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>Take pictures/video with the phone</td>
<td>44.8%</td>
<td>33.3%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Use the GPS</td>
<td>13.8%</td>
<td>0</td>
<td>7.1%</td>
<td>0</td>
</tr>
<tr>
<td>Check the stock market</td>
<td>6.9%</td>
<td>0</td>
<td>7.1%</td>
<td>0</td>
</tr>
</tbody>
</table>

### Using mobile devices in response to train delay

<table>
<thead>
<tr>
<th>Response to Train Delay</th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td>...use Connex’s text messaging system to tell me whether trains are being rescheduled</td>
<td>27.6%</td>
<td>0</td>
<td>28.6%</td>
<td>16.7%</td>
</tr>
<tr>
<td>...text/ring my destination to update them about my arrival times</td>
<td>51.7%</td>
<td>58.3%</td>
<td>50%</td>
<td>33.3%</td>
</tr>
<tr>
<td>...use my mobile device to ‘kill time’</td>
<td>51.7%</td>
<td>66.7%</td>
<td>35.7%</td>
<td>16.7%</td>
</tr>
<tr>
<td>...use my mobile device to ring someone to pick me up</td>
<td>79.3%</td>
<td>66.7%</td>
<td>64.3%</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

### Why the phone is important to me during train travel

<table>
<thead>
<tr>
<th>Importance to Train Travel</th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td>...adds to sense of security</td>
<td>3</td>
<td>4,5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>...allows flexibility</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>...allows responsibility in dealing with others</td>
<td>4,5</td>
<td>4</td>
<td>3,4</td>
<td>5</td>
</tr>
<tr>
<td>...is a good distraction from train/platform situation</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1,2</td>
</tr>
</tbody>
</table>

### Is the mobile an annoyance during commuting?

<table>
<thead>
<tr>
<th>Annoyance During Commuting</th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be inconvenient to answer while travelling</td>
<td>1</td>
<td>3</td>
<td>3,4</td>
<td>1</td>
</tr>
<tr>
<td>Requires me to have personal conversations in public spaces</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Annoys fellow commuters</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>I am annoyed by others</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

### Using the phone to lie

<table>
<thead>
<tr>
<th>Have you ever phoned your destination and told them that you are late because the train is late, when that is not exactly true?</th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55.2%*</td>
<td>41.7%</td>
<td>28.6%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

*Figures are the percentage who answered ‘yes’ to the question.

### Mobile phone use for security / law enforcement

<table>
<thead>
<tr>
<th>Would you use your mobile device to photo or video an incident on the train to use as evidence in a court case or for media broadcast?</th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>41.4%*</td>
<td>50%</td>
<td>78.6%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Would you ring authorities to report an incident on public transport while it is happening?</td>
<td>72.4%</td>
<td>83.3%</td>
<td>85.7%</td>
<td>100%</td>
</tr>
<tr>
<td>Would you text authorities to report an incident on public transport while it is happening?</td>
<td>1.4%</td>
<td>16.7%</td>
<td>50%</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

*Figures are the percentage who answered ‘yes’ to the question.

### Summary

<table>
<thead>
<tr>
<th>How greatly does having a mobile device improve your experience of Melbourne’s train system?</th>
<th>18-25</th>
<th>26-40</th>
<th>41-60</th>
<th>61+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>1,3</td>
</tr>
</tbody>
</table>
Other comments received, sorted by age group

61+
- Mobile phones are overused.
- Just another part of life
- People should be more respectful when using mobile phones

41-60
- Doesn’t think cameras are useful on phones for office people – PDAs are better
- Connex is doing good job
- WiFi access [needed] for YouTube, etc
- More likely to access net on iPhone-type device
- There is a need for education in basic courtesy – a public place is not your private space. Extremely rude.
- A designated space could be provided on public [trains] but essential (if such exists) [for] use away from others.

26-40
- People fiddling with ringtones is annoying, but overall a mobile phone is a useful device to have on public transport

18-25
- Security at stations is an issue – drunk people, etc – mobile phone adds to safety
- Theft of mobiles is an issue on unsafe lines.
- Mobile is a great device – makes life easier – saves time
- People should put their phones on silent on public transport – signage
- Mobile phones are useful for coordinating events and communications and people don’t have time to be using them for other things.
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