Hanging on the Mobile Phone: Experiencing Work and Spatial Flexibility

By

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Abstract

The role of technology and flexibility in work and employment has sparked much debate, with optimistic accounts on the one hand and with more negative views on the other. Technology however is of course not homogenous in its uses or in its impacts. While work technologies such as the internet and email have been critically studied, the way(s) in which the mobile phone may shape work and workers' experiences has largely avoided scholarly attention. Indeed, there appears to be a tendency to ignore the impact of mobile technologies on the 'unspectacular' or pedestrian aspects of every day life, including everyday work-life. Three key questions guided this enquiry: First, how may the work mobile phone, as a communication tool which potentially minimises time constraints to overcome organisational spatial constraints, shape the way work is organised and performed? Secondly, how may the mobile phone shape the experience of work? Thirdly, how does the mobile phone shape the boundaries between public (work) and private domain, and how are these boundaries negotiated? Against this backdrop of questions, and drawing on the work of Gidden's (1991), we aimed to also explore the role of work mobile phones in the construction of a sense of ontological security through the routinised narrative afforded through mobile communication. In other words, we aimed to unmask the way events in the external world of the organization were sorted into an ongoing story of the self, via the communication technology of the mobile phone and how this sense of self may differ in the work and non-work domain. This study involved in depth interviews with 20 workers from different occupational and organisational settings. A consistent theme in each narrative was the notion of the work mobile phone as a 'double-edged' sword, a sword which served to define and bind identity through the continuity of spatial networks, but which also evoked identity anxiety by invasion into the private domain.

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Introduction

Beginning with the first industrial revolution that saw sustained economic growth following the application of inorganic sources of power to the production process, understanding technological development and its application in the economic and social sphere has long been central to academic analysis. Continuing apace, the advent of new and more portable technological devices and their dissemination throughout the economic and social sphere has again come to invoke investigation and new theorizing about the role of new technologies and its association with 'flexible working' in the contemporary period.

Indeed, the role of technology in work and employment has sparked much debate in recent years, with optimistic accounts on the one hand (for example flexibility, customer and supply chain responsiveness, and an increased skill premium for workers) and with more negative views on the other (for example work intensification, a blurring of work/life boundaries and a deskilling of workers). Technology however is of course not homogenous in its uses or in its impacts. A large body of literature exists and is still emerging regarding technologies such as the internet and email and their impact on workers and the organization of work (see for example Hipple and Kosanovisch, 2003; Castells, 1996; Skinner and Jack, 2004; Bimber, 2000; Grigsby and Sanders, 1998; Groen, Barry and Scaller, 1998; Shortclife, 1998). However, literature is only just starting to emerge which explores broad social issues surrounding the mobile phone (see for example Bianchi and Phillips 2005; Hurme, 2005; Truch and Hulme, 2004; Ling and Haddon, 2001; Sorenson 2004; Kakihara and Sorenson, 2002). Given the ubiquitous nature of mobile telephony, it is surprising that the work mobile phone has largely avoided scholarly attention. Indeed it is often noted that there is a tendency to ignore the impact of mobile technologies on the 'unspectacular' or pedestrian aspects of every day life, including everyday work-life (Geser, 2004:4).

This paper presents preliminary findings of a research project that sought to explore how the mobile phone has impacted on the experience of work. Three key questions guided this enquiry: First, how may the work mobile phone, as a communication tool which potentially minimises time constraints to overcome organisational spatial constraints, shape the way work is organised and performed? Secondly, how may the mobile phone shape the experience of work? Thirdly, how does the mobile phone shape the boundaries between public (work) and private domain, and how are these boundaries negotiated?

While this study is concerned with the impact of the mobile phone in workplaces, the underlying assumption is not one of technological determinism. Guiding the project is the notion that while technology may have various effects or impacts; technology itself is shaped by social and economic forces (Mackenzie and Wacman, 1985) and as such cannot be investigated in isolation. As Sorenson and Pica (2003:1) observe:

*The mobile revolution is not only a matter of people moving around carrying mobile technologies, it is also the radical mobilisation of interaction and socialisation processes. This mobilisation of interaction radically influences temporal, spatial and contextual aspects of interaction. We move from a strict linear sense of time defined by the clock towards "social time" where the social context defines our sense of time. In turn, mobile technologies offer technical possibilities of rendering interaction with people and corporate information services flui*d.

The role of the mobile phone within organisations is likely to be complex. For example, in an attempt to unravel the geographical impact of telecommunications, Graham and Marvin (1996) discuss the complexities and ambiguity surrounding telecommunications and cities. They present a parallel formulation of the respective functions of cities and telecommunications by proposing that while both are technologies of communication, cities minimise space constraints to overcome time constraints, while telecommunications do the reverse. Borrowing from Graham and Marvin (1996), it can be similarly argued that like cities, organisations are also technologies of communication. Organisations make communications easier by minimising space constraints to overcome time constraints; while mobile phones make communication easier by minimising time constraints to overcome space constraints. From this vantage, a number of potential issues related to the use of mobile phones in the workplace can be identified. These are discussed below.

The construction and management of identity while at work

Mobile phones are personal technologies, and when a person engages with personal technologies on a regular daily basis, the technologies assume much importance. Mobile phones are also social technologies, since they provide networked access to people and organisational resources (Sorenson and Pica, 2003). As discussed above, mobile telephony involves spatial and temporal aspects, the former implying we engage in interaction while being on the move, and the latter inferring that our perception of time is somehow altered. The mobile phone thus introduces a radical change in the context for interacting with others. Of interest here, is the question of identity construction and maintenance in the workplace, given the fluidity of interaction and context.

Giddens (1991) uses the concept of ontological security to refer to the security and order that people feel in their lives which is likely to be felt most through an enduring sense of personal identity. From this perspective, there may be a construction of a sense of ontological security through the routinised narrative afforded through mobile communication in the workplace. In other words, events in the external world of the organization are sorted into an ongoing story of the self, via the communication technology of the mobile phone. Types of codified 'front stage' communication may provide and consolidate a sense of *work* identity. Thus, a manager may feel secure in their work identity as 'manager' knowing that they can contact their workers at all times, employees may feel more secure in their work roles knowing they can contact other workers for the exchange of absent yet required knowledge. The work mobile phone becomes a

type of 'umbilical cord', nourishing a sense of identity through ongoing workplace interactions constrained neither by space or time.

A problem with Giddens formulation of ontological security however, is its assumption of a *single* identity. Ontological security assumes away the notion of a plurality of identities, ignoring the question of separate identities for say, work and home, and the more complex (and likely) scenario of multiple identities in both spheres. Goffman's (1971) notion of front- and backstage activity is perhaps a useful and complementary framework. For example, what happens when recipients of mobile phone calls are called at moments when they are engaged in *different* front stage performances, obliging them to participate in demanding (perhaps conflicting) simultaneous front stage activities? Consider the hypothetical scenario of dealing face to face with an important yet highly disgruntled and vocal customer, and in the midst of this interaction your manager calls you on your mobile to confirm that all is going perfectly well as you told her yesterday. In such cases, people are likely to become more absorbed by the difficult task of managing role conflicts and discrepant strategies of self-presentation at the same time. As Palen, Salzman and Young (2001) neatly articulate:

> *When mobile phone users are on the phone, they are simultaneously in two spaces: the space they physically occupy, and the virtual space of the conversation (the conversational space). When a phone call comes in the user decides, consciously or otherwise, what face takes precedence: the face that is consonant with one's physical environment, or that of the conversational space? The greater the conflict between the behavioural requirements of the two spaces, the more conscious, explicit, and difficult this decision might be.*

It could be argued then that the mobile phone provides a type of 'theatre' which provides a forum for identity construction and impression management. Plant (2000) comments on identity construction through "stage phoning", citing cases where callers use mobile phones to make a specific impression on bystanders. For example, callers may want to give the impression that they are acquainted with top management, that they are urgently needed for help or advice, or that they are in a position to make big business contracts, to give important orders or to make far-reaching final decisions.

Ling (1997) discusses the reverse strategy, whereby a person focuses exclusively on the phone call, so that the local audience (say in a meeting) is temporarily left suspended in an uneasy 'backstage' position. We now have the 'hanging bystander(s) who needs to engage in a (typically unproductive) waiting strategy during the call, and determine whether and how to continue the original interaction.

It is likely that the mobile phone facilitates the construction and management of flexible work identities in a range of different work contexts. It may be the case that this is caused in part by the way the mobile phone has contributed to the temporal and spatial re-shaping of new forms of work organisation and associated

expectations of work behaviour, both *in* the workplace and *away* from it. This issue is explored in the next section.

The 'tethering' of workers to their workplace

Townsend (2000) argues that the mobile phone leads to an acceleration of the urban metabolism, as workers accomplish their work while commuting or moving from place to place within a city. Extending this analogy it could be argued that the mobile phone leads to an acceleration in the *metabolism of the organisation*. Thus, the distribution of organisationally owned mobile phones to workers (including managers and non-managers) potentially serves to bind the efforts of workers even in non-work hours to the requirements of the organisation, effectively 'tethering' the worker to the organisation. This has led many theorists (see for example Baldry, 2002; Bain, Watson, Mulvey, Taylor and Gall, 2002; Felstead, Jewson, Phizacklea and Walters, 2002) to the view that technology such as mobile phones facilitates already escalating levels of work intensification. This is exacerbated by the move to 24/7 modes of operation, whereby workers in global industries are expected to be 'at work' around the clock. Mobile phones have thus been construed as a type of digital panopticon, where discipline based on time is replaced by continuous accessibility (Kopomaa, 2000). Other groups of workers may also be prone to the 'tethering' effect. Casual workers in particular, depending on the industry in which they are employed, are typically expected to be on call around the clock (Lowry, 2001; Lowry, 2002; Lowry, Simon and Kimberly, 2002). Prior to the mobile phone, workers could choose not to answer their landline if they suspected they would be called in to work with insufficient notice to make necessary arrangements, for example, arrangements related to child-care (Lowry and Wilcox, 2001). Many such workers are now given work-based mobile phones, and may be penalised if they do not answer each call. Penalties can involve being taken off subsequent work rosters, leading to lost income. Since casual workers typically experience high levels of income insecurity, the 'tethering' effect of the mobile phone may be exacerbated for this group of already disadvantaged workers.

The preservation of organisational roles and power structures

Associated with the heightened 'organisational metabolism' and levels of work intensification mentioned above, and alluded to in the notion of the 'digital panopticon' is the potential for increased managerial surveillance. Geser (2004:17) suggests that mobile phones may serve as a means to maintain 'pervasive roles' (roles which demand unlimited involvement). In other words, managers can preserve a traditional patriarchal leadership role which demands their availability around the clock. They thus inhibit processes of organisational differentiation by remaining themselves "on duty" all the time instead of delegating responsibility to subordinates.

This maintenance of strict organisational control may have detrimental effects for organisations. Geser (2004:34) argues that the mobile phone facilitates processes by which employees who are not trained or equipped to make decisions can easily contact their superiors and managers in order to obtain the necessary information

and advice. While legitimising the role of management, these sorts of 'just-in-time' consultations may substitute for traditional training and instructional courses, leading to deterioration in a wider skills base, in turn creating a type of 'under-skilled' worker.

Flexibility, customer and distributive supply chain responsiveness

While the mobile phone may lead to a 'virtual tethering' of some workers to their workplace resulting in an increased organisational metabolism and work intensification, other workers may welcome the ease of customer access and coordination that the mobile phone provides. Since it is no longer necessary to conduct communications from an office desk with a landline, customers can access workers regardless of the location. For self-employed workers without the infrastructure of a formal office, this ease of access is a crucial part of generating work and income, and scheduling work activities. Moreover, mobile phones increase the ability to coordinate activities in a flexible manner, especially across remote sites. It is not surprising then that trades people were enthusiastic early adopters. Carpenters and painters can order supplies and schedule new jobs from a ladder, while builders can schedule and reschedule the activities of their sub-contractors in responsive and flexible ways across remote locations.

The optimisation of the knowledge supply chain

It is not just the 'distribution supply chain' that is enhanced through the mobile phone. Sorenson (2004) has coined the term 'knowledge supply chain' to enable an understanding that a primary challenge for firms is to support and facilitate information work. Innovation processes, in addition to the supply of services, depend crucially on the management of organisational knowledge. For many firms, the arrangements and support of information or information workers is a primary concern.

Looking at the management of knowledge in terms of optimising a 'knowledge supply chain' is a useful metaphor, highlighting in turn the usefulness of the mobile phone. The knowledge supply chain shifts the focus from people sitting in the same office in the same building owned by the same organization. When people provide services, they need to engage in networking activities with a range of other persons potentially from a variety of locations. The knowledge supply chain signals that firms need to support people in negotiating mutual interdependencies and exchanging knowledge across organisational boundaries, not just with people in the same office. The knowledge supply chain ties together interdependent information workers in much the same way that the manufacturing supply chain links together parts and sub-assemblies into the final product. A point of difference however is that the manufacturing supply chain is 'fixed' through orders and forecasts, while much of the knowledge critical for innovation or services provision is emergent. Hence, Sorenson (2004) argues that the knowledge supply chain is typically characterised by an element of uncertainty, making the generation of new information essential. Optimising the knowledge supply chain therefore implies using information and communication technologies, such as the mobile phone, to allow people to work together and exchange knowledge no matter when and where they need to be. The mobile

phone potentially thus plays a *crucial* role in the knowledge supply chain and in resultant service delivery and innovation.

Method

Due to the lack of systematic research that looks at different workers' experiences of the use of mobile telephony in their work lives, an exploratory research design was required. While literature that explores possible implications of mobile telephony for work and workers is starting to emerge, it is highly speculative in nature. In an attempt to fill the gap evident in the existing literature and to explore some of the propositions in the preceding sections, we conducted a series of in depth interviews with workers from a variety of occupations and sectors and from different age and gender cohorts. A qualitative approach was crucial in order to access individual workers experiences and interpretations of the mobile phone in their everyday work life. Inline with our understanding of technology and its applications and uses being shaped by social and economic forces, it is our contention that we cannot understand the impact mobile phones have for work and workers without understanding the meaning that the participants themselves attribute to their actions and views. The aim was to discover the concepts and meaning that are grounded in the social actors 'everyday knowledge' and 'everyday sense making procedures', as they related to the use of the mobile phone at work.

Participants were selected on the basis that they used a mobile phone in their work. Variation in the age, sex and occupation in which participants worked was also sought. Fifteen participants were interviewed. Four participants worked in the real estate industry, two held management positions in the retail sector. Three participants were self-employed tradespersons and another four participants worked as ICT workers. One participant was a manager of an agricultural labour hire company and another was a vineyard manager. Interviews were conducted at a mutually agreed upon location and usually lasted for approximately one hour (in some cases longer). Interviews were conducted using a common set of semi-structured, open ended interview questions related to the workers' use of the mobile phone, their dislikes and likes of the mobile phone, and how they perceived it (if at all) to have changed their work life. These questions were used as baseline questioning only. Detailed probing and follow up question formed a major aspect of all interviews to further pursue all avenues of inquiry. One focus group was also conducted with a group of five people whose partners were identified as frequently using the mobile phone for work purposes both within and out of work hours.

Interviews and the focus group were tape recorded with the consent of the participant and transcribed. The transcripts were analysed by both researchers. Common themes and threads were identified and compared between the researchers.

Findings

It is important to note at the outset that while common themes were identified in the participants' narratives, the themes were highly interrelated with clear areas of overlap. For example, many of the participants narrated accounts of the work mobile phone being a source of intrusion into their personal and private time. While this is clearly identified in many of the participant's narratives, the intrusion of work into the private sphere can also be seen to be representative of the technology of mobile telephony 'tethering workers to the workplace' with organisations mandating their employees to be accessible around the clock. Thus we found that issues related to work-life balance were also intricately interwoven with issues related to new forms of work organisation. Ideally the emergent themes should not be interpreted in isolation but should be seen to encapsulate the dominant narrative in each participant's response[1].

Before going on to examine specific findings, some general observations deserve comment. On a purely descriptive level, we found that older workers were less dependent on mobile phones for work purposes. We also observed a tendency for some occupations to be more dependent on the work mobile phone (for example either during work hours or in exhibiting less agency in managing the boundary between public and private domains, this will be discussed shortly). Another observation relates to the *experience* of the interviews themselves. We observed that the majority of participants had some initial difficulty articulating responses to our questioning. The questions were not in themselves difficult, so this seemed somehow odd. What we gradually realised however was that at some point in the interview, reference was made to the mobile phone as though it was a type of *bodily appendage* or served a *bodily function*. The following comments from different participants are illustrative:

> *"I have my work mobile phone next to me at the dinner table,*
> *but I shouldn't. Its like part of my body. Blasted thing!"*

> *"I couldn't <u>live</u> without my mobile phone!"*

> *"My mobile phone makes me feel attached at the hip to work"*

> *"My mobile phone is just a part of me"*

> *"These newer small phones at work, we wear them round our*
> *neck, its like work has got you by the neck"*

> *"Its like having the world in your pocket"*

Participants who made such comments then proceeded to give lucid and insightful accounts, as though they had (maybe for the first time) 'bracketed' the mobile phone and were able to see it as an object distinct from themselves. It appears that for some people at least, the mobile phone generally is a taken for granted

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[1] While we present the findings under headings, we do so more to tease out some of themes in order to determine the 'fit' or otherwise with the current sparse and speculative literature, while at the same time taking care (as far as possible) not to let the existing literature determine the themes we detected.

instrument, in much the same way that (if fully physically able) we may take our right hand for granted.

Alongside this tacit acceptance of mobile telephony all participants in the study made the comment that the use of mobile phones for work purposes was increasing at a dramatic rate (often spilling into the private domain as discussed shortly), with some participants indicating that they no longer used land-lines at all for work purposes.

There also appears to be a cultural dimension to the use of mobile phones for work purposes. Two of the participants in our sample had recently migrated to Australia from Peru, one of them provided the following insight:

> *Work life in developing countries is very different. In Peru I was on call for work 24 hours a day, everyone where I worked was. There is very high unemployment, so you need to keep your job, and you're just always on call. You can't disconnect from work, the mobile phone made you a slave. The only way to escape was to leave the country by going on holiday. I needed to explicitly say to my boss ' I will be out of mobile range, in fact I'm going to Alaska'.*
>
> *(ICT Worker 4)*

The remainder of this section will present the main themes under a series of headings, as noted above however, in many areas the themes are interrelated with considerable overlap. Overall, we found that participants of the research narrated accounts that both confirmed and complicated the propositions put forth in the introduction of this paper.

Flexibility in Work Organisation

For the participants of this study the advent and dissemination of mobile telephony into the economic sphere has led to new and innovative ways in which their work is organised and carried out. Many of the participants described the variety of tasks the mobile phone was used for in their day-to-day work, broadly ranging from sales activity, contact with suppliers and customers, information sharing related to problem solving, and knowledge accumulation and application. For some it was simply a useful communication devise that overcame the temporal and spatial limitations of fixed landline telephones and the limitations of three way radio communications. One tradesperson commented:

> *It's handy, it's a work tool. I can communicate readily with other people. That's one of the biggest things we have to be able to do in our trade is to be able to communicate. The bigger the job the more important. A big building site with 10 – 15 people everyone has to be able to communicate easily. People need to have things organised to do their job. They need to have the supplies they've ordered. Communication is a big thing.*
>
> *(Tradesperson 1)*

When asked to elaborate why communication was so important in this type of work and why specifically the mobile phone facilitated this communication he elaborated.

> 'You need to realise that once you get into large building site you can't walk off so if you need to get in contact with someone you need to have a mobile. Even though you are in contact maybe by radio, a mobile is still very important and 90% of us use the mobile. You often need to get people who aren't on the radio. You might need to contact somebody in your crew who is ¾ km. away so there you have to use a mobile phone. You use your mobile all day long.

For other's however the mobile phone was utilised as a mobile office not only facilitating communication but also the organisation of work and the storage of work related information. One participant, a tradesperson and manager of an agricultural labour hire company, talks about his use of the mobile phone for work.

> Generally the mobile phone is very useful. It is a tool that is important in our business. The land-line can only be used at the office, but the mobile makes life so much easier in our type of work. Its easy to physically get around. Its easy to get in contact with my manager when I'm out in the field. Easy to get in contact with my clients. I can contact people quickly. Easy to keep a record of my schedule and also to keep a record of telephone numbers for my clients – employees and employers, and use this record to contact them at any time, even when I'm in the field.
>
> *(Tradesperson 2)*

Another tradesperson commented:

> It's not that I like it but it gives you the freedom of not being tied to an office or central place…. I use it for everything….I'm always in contact. If I didn't have a mobile it would affect productivity - I wouldn't have instant interaction in problem solving regarding materials that I might need at the time, or a problem with the job that I need to sort out with the client. There are many problems that can be fixed with a phone call. If I didn't have the mobile then I'd have to down tools and go and talk to someone face to face or on a land-line. Arranging time and work place and work locations would become much more difficult. The mobile phone has become a very useful tool and I'm lost without it.
>
> *(Tradesperson 3)*

Similarly, an electrician articulated his liking of the flexibility the work mobile phone afforded.

> It's essential, a necessity. If I was using the land-line it would cost me twice as much of my time. It's easier to be calling while I'm at the site looking at the problem. It's easier to keep a record of important numbers on the mobile and to make calls. People now are using blue tooth so that communication is easier again and you don't need to use your hand and can keep using two hands while talking on the mobile through the blue tooth technology.
>
> *(Tradesperson 1)*

ICT participants also indicated that the work mobile phone facilitated flexibility in the way work was carried out:

*We handle the IT for the assembly run at an automotive plant. If anything goes
wrong, we can send our guys straight to the line for diagnosis, they
communicate immediately with us and others on their mobile and we can get the
problem fixed very quickly that way. Before the mobile phone there would have
been pagers but they didn't work as well.*

<div align="right">

(ICT worker 1)

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Estate agent participants similarly indicated changes in work organisation:

*We don't have to run around so much these days, we have pictures of
available property on our mobiles, and if we are with clients anywhere,
we can simply show them pictures of other properties on the mobile.*

<div align="right">

(Estate agent 3)

</div>

A number of participants gave accounts of how the work mobile phone
facilitated productive use of 'dead-time', for example time spent in transit or
commuting. During such times the work mobile phone was used to arrange
meetings, schedule work for the next day, and generally organise other work
matters.

However, not all participants viewed the mobile phone at work as positively
impacting on the way work was organised or performed. A number of
participants relayed stories of meetings being interrupted by people answering
their mobiles and attending to other work matters. In these cases the mobile
was seen as disruptive:

*Sometimes in a meeting we would have five or six people sitting
in the room and three would be on the mobile phone and the
others would be waiting. You have maybe 10 mins waiting until
the phone call finishes.*

<div align="right">

(Focus group participant, previously an ICT Worker)

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Aside from this phenomenon of the passive 'hanging bystander', most of the
narratives indicated that the flexibility afforded by mobile communications is
linked to an increase in the productivity achieved in their work activities. There
was also a hint however that this productivity may come at a cost, particularly
when the mobile phone was perceived to veil traditional social norms associated
with front stage interactions, as well as blur the temporal and spatial boundaries
between what participants considered to be work and non-work time. These
issues are discussed below.

The Work Mobile Phone and Flexibility: A 'Double-edged Sword'
A complexity that emerged from the narratives lay in the fact that nearly all
participants indicated that what they liked most about work mobile phones was
precisely what they *disliked* most about work mobile phones – the ease of
accessibility and contact with others. When asked if there were any aspects of the
work mobile phone that he disliked, one participant responded with:

*Probably the same as the things I like about them. You can get calls at
inconvenient moments. You don't turn them off so you can get calls in the
middle of a meeting and you can't ignore them and you feel that you must
answer it.*

<div align="right">

(ICT worker 3)

</div>

The following comments further illustrate this paradox:

> *I can use the mobile in the car, so that's a big positive.... but they are such a nuisance, they're intrusive....*
>
> (Estate Agent 4)

> *I like the personal mobility while I'm on call, but then you're always contactable, no matter where you are, its really a double edged sword.*
>
> (ICT worker 1)

> *I use my work mobile 'cos its convenient...but I think it's a pain, people call me at all hours……*
>
> (Estate Agent 3)

Tethering Effects, the Work Life Balance, and Agency

Participants' narratives suggested both positive and negative impacts of the mobile phone on the work-life balance, depending on occupation and the degree of instrumental agency that participants expressed in regard to their management of the work mobile phone. The paradox of the work mobile phone was mainly manifest in the way that participants felt that their 'personal time' was invaded. This view was expressed particularly by the ICT and estate agent participants, occupations with either elements of formality or bureaucracy in their work environments (the ICT) workers, or elements of emotional labour in the course of their work (the estate agents). Narratives from both sets of participants suggested that the work mobile phone intruded into aspects of their home life, and that they were often rung at all hours of the night for work-related matters. For example, two of the four estate agents gave accounts of being rung at midnight or 5am in the morning with queries about properties. Just why they would leave their phones on at such times is interesting in itself. They gave various reasons, for example, using their mobile phone as an alarm clock. But why one would leave the mobile on when there was a known likelihood of being called is curious. The estate agents nearly all gave somewhat contradictory accounts of how they managed or 'mismanaged' the work mobile phone. On the one hand they stated they had certain rules, for example that they did not answer calls before 8am and after 10pm, but in the next breath gave accounts of answering calls at 7.15am or 11pm. The ICT workers, involved in 24/7 operations, were called at all hours of the night in the event of an assembly line stoppage apparently caused by their ICT systems. Both occupational groups indicated a high level of resentment of the intrusion into their home lives.. For both occupational groups the work mobile phone facilitated the entrance of the formality and emotional tone of their work into the backstage sphere of their home lives.

This intrusion of work into the home through the work mobile phone was not just felt by the workers. The narratives indicated some disharmony with other family members:

> *My wife hates my work mobile phone. She hates it ringing, its intrusiveness. You know when you sit down with your family and the kids always run after the phone and ask 'Dad, why are you on the phone again?'. That sort of stuff.*

> *I have a few hours in the afternoon with my six year old son, I won't turn my phone off but it depends what I'm doing whether I answer it. I usually do answer it, but it depends on my son's mood too. He sometimes gets grumpy, he'll say 'are you of the phone again?' He does get a bit upset about it because some properties are more popular than others and so you're getting more calls. So I have to say 'this is Mummy's job' and every now and then we have to have a little chat about me answering the mobile'*
>
> *(Estate Agent 3)*

The focus group participant (partners of the employees with work mobile phones) directly vocalised their concerns:

> *'... I do remember feeling very annoyed particularly about being disturbed at night as he often didn't wake up and I would be the one who would say would you answer that phone and he would take a while to wake up and he would take the call in the bedroom then have to get up and start the computer up and oh...*
>
> *(Partner 2)*

> *'It drives me nuts. He gets called on the mobile at all hours of the night, sometimes two or three times. He's fine at getting back to sleep, but I just lie there in bed awake for hours. I've just started seething about it all, its like his workplace has entered our bedroom. And the lack of sleep is affecting my own performance at work.'*
>
> *(Partner 1)*

The story is not entirely negative however. It was also the case that some of ICT and estate agent participants viewed the work mobile phone as a positive tool for facilitating a balance with work and home life. Some participants indicated that work mobile phones meant that you didn't have to sit around the house if you were on call. You could be out of the home, perhaps spending time with family outdoors and still be contactable:

> *It can help your family life too because if you've got a work mobile then you don't need to be physically at work. So it's a balance as to whether the benefits outweigh the disadvantages...*
>
> *(ICT Worker 3)*

> *A good thing about the mobile phone is that you can hide behind it, you can pretend you're somewhere when you're not. So, I used to be at work all the time, but now I know I can say no. The other week I went to my brothers down south for a few days. Clients rang me but I was able to say, well, I can see you day after tomorrow. Its taken me awhile, but I can do that now""*
>
> *(Estate Agent 3)*

Other participants relayed other 'creative' uses with a work mobile phone:

"Around here there's areas of poor reception, you just lose the line, it drops out. Nothing worse, although you can use it to your advantage. If you can't get rid of a client on the mobile phone you just click it off and pretend you dropped out"

(Estate Agent 1)

Some participants relayed the temporal and spatial benefits of work mobile phones over pagers. The following quote is illustrative:

'If you go back prior to mobile phones and you were on call, you had to hang around your own landline phone in case you got a call or you had a pager. If you had a pager it had to have reasonable range and you also had to be able to respond to that within a certain amount of time. For someone like me that likes the outdoors and likes walking it meant that I couldn't go too far from home because you had to be available to call back. With mobile phones it meant that you're no longer tied to home and that you can get out as long as you stay within range of the mobile coverage'.

(ICT Worker 3)

While the ICT and estate agents in the study held both negative and positive views on issues related to work-life balance, the tradespersons and retail workers were highly favourable of the mobile work phone and reported little if any intrusion into the private domain. Overall, this group of workers reported a much higher level of agency in the their usage of the mobile phone. Compared to the other participants, these workers had clear rules about when their work mobile phones were to be answered, indicating that the intrusion into their personal lives and time and home would be repudiated as "unpaid overtime". As one trades-person simply stated:

'...if the mobile interrupts my day, I turn it off'

(Tradesperson 3)

'Just in time' mobile telephony

Some of the narratives suggested that the mobile phone facilitates processes by which employees who are not trained or equipped to make decisions can easily contact their superiors and managers in order to obtain the necessary information and advice

Because you have a mobile phone you are very accessible and people may call me for silly things, things that are obvious. Co-workers and managers call you because somebody needs to make a decision about something - it doesn't matter what. And because you are accessible, instead of making their decision themselves, they ask for help. Instead of taking their own chances and options they ring someone else. So sometimes I don't like the mobile phone. Simple decisions are transferred to higher positions just because they are accessible'.

(Focus group participant, previously an ICT Worker)

For others participants in the study however, the experience was quite the opposite:

"I don't mind being on call. The only thing I don't like about being on call is that sometimes you don't know the answer and that causes some stress. If you were in a work situation you could have more people around you to help with the resolution of the problem. When you are on your own on the phone, you only have your own resources and quite often you don't have the resources that you would have at work because you don't have your computer or all the other documentation. Yet when you are on the mobile people still expect the same level of service. You can't provide that in some circumstances because you don't have all the necessary resources"

(ICT Worker 4)

Discussion

The explorative study reported here attempted to address three broad and interrelated issues: 1) the way in which the work mobile phone may shape the way work is organised and performed; 2) the way in which the mobile phone may shape the experience of work, and 3), the way in which the mobile phone may shape the boundaries between public (work) and private domain, and how are these boundaries may be negotiated and managed. The findings of the study reveal a complex web of interrelated issues, all set against the paradox of the work mobile phone being viewed as a 'double-edged' sword.

Taken together, the findings generally support much of the speculative assertions mentioned in the first section of this paper. In regard to how the work mobile phone has shaped the organization and performance or work, clear themes that emerged in the narratives was the way that work mobile phones facilitated a hastened organisational metabolism and heightened responsiveness both in terms of distributive supply chains and knowledge supply chains. Regardless of temporal or spatial constraints, workers are seemingly increasingly accessible and contactable. Even traditionally considered 'dead time' such as commuting in the car can be made into productive work time (middle stage, as distinct from front or backstage behaviour) with the use of hands free mobile telephony. And it appears that some workers are quite able to occupy two 'spaces', the physically occupied space and the conversational space, permitting a strange hybrid of virtual multitasking (albeit at the expense of the hanging bystander). The benefits to the organisation of such work organisation and performance of work seem clear.

But what of the benefits to workers? The participants in this study discussed many advantages associated with work mobile phones, notably the ability to spend time with family away from home while on call, as well as increased access to work colleagues when needed. For some of the participants in this study, the work mobile phone has impacted positively on the experience of work. Some workers indicated a heightened sense of worker identity by being able to effectively solve problems 'on the spot' through use of the work mobile phone. Managerial participants experience of work and their identity as effective managers was improved through being able to remain constantly in contact with their workers. In

this sense and for some workers at least, their sense of ontological security was facilitated by the work mobile.

However, some participants highlighted how the work mobile phone has shaped their experience of work more negatively. For some of the participants in this study, the work mobile phone has facilitated a transgression of the boundary between public and private domains. Implicit in these workers' narratives was a sense of identity dissonance and anxiety, whereby front stage work behaviour collided with the identities of being 'mother', 'father', 'partner', or 'friend'. This identity dissonance in cases extended to the spouses of some of the workers ('…its like his workplace has entered our bedroom').

Workers most prone to the work-life imbalance were those who did not articulate conscious and definite strategies for managing or negotiating the boundaries between public and private domain. Not surprisingly this was most evident in the estate agent participants. This occupation is characterised by processes of emotional labour subject to the whims of buyers, vendors, and managers, and remuneration is partly based on commission from sales. Against this backdrop it is not surprising that the estate agents in this study discussed feelings of being *'compelled'* to respond to their work mobile phones whenever or wherever they rang. Their response may be just to see which client (if known) called, but when this happens at midnight and you are not officially 'on call', it can be considered to be a crossing of the boundary between work and non-work.

The difference in levels of agency between the participants can be partially explained by the nature of the work involved in the different occupations. For example, the occupation of a trades-person holds little of the formality or emotional labour associated with a sales job which involves a pay structure partially dependent on commission. Similarly, trades work does not typically involve being part of a large bureaucratic structure and being on call. Trades-persons are thus involved in qualitatively different interactions and communications with others in the course of their work lives. Aside from say emergency plumbing work, they are not *expected* to be available at all hours. Trades-persons thus seem more able to manage the boundary between work and non-work domains.

The propensity to allow the work mobile phone to transgress the work-home boundary is also likely to be embedded in the economic context of the type of work being performed. We do not wish here to rely on meta-narratives which serve to reduce complex phenomena 'away', however, some mention should be made of the economic context in which our participants' narratives are located. Market forces are themselves 'flexible', and so it needs to be acknowledged that our participants may have offered very different narratives at a different point in time and space (as evidenced by our example of cultural differences by our Peruvian participant). For example, the estate agents in our study are operating in what can be currently described as a static property market, with a shortage of properties, sellers, vendors, and general lack of property movement. If the market was more virulent, they may have exhibited more agency in their management of the work-home interface, by virtue of being more (at least temporarily) financially secure. Along the same lines, there is currently a shortage of skilled trades workers in Australia. The high demand for trades-workers places them in an untypical position of some power, and this may go some way to explain their

greater control over usage of the work mobile phone, and their capacity to invoke rules that served to seal off the boundary between public and private domains.

Consistent with Geser's (2004) view that the mobile phone may serve to preserve organisational roles, we found that the 'just-in-time' nature of work mobile telephony did facilitate the preservation of organisational roles and power structures. Managers in the study repeatedly commented that they were able to 'virtually' monitor the progress of employees and different projects without temporal and spatial constraints, thus preserving and legitimising their control and managerial status and identity. Some participants openly stated that they would be called to solve problems, since only they were perceived to possess a type of esoteric knowledge base. As with the managers, this served to preserve their role and legitimise power structures. Other workers however, reported feeling de-skilled if contacted via the mobile while on call, largely due to a lack of access to the necessary resources required for problem solving activity. Again, the emergence of the metaphor of the 'double-edged sword' nature of work mobile telephony was apparent.

This study has attempted to empirically explore how the work mobile phone has shaped the organization and experience of work. It has revealed that the work mobile phone is perceived as a 'double edged sword', with both advantages and disadvantages for workers and organizations. There is a great need for more empirical research of this ubiquitous technology. We need to more fully understand the complex ways in which we interact and shape its form and usage, and how it in turn shapes and reshapes organisational communications related to distributive and knowledge supply chains, and our related negotiations of the boundaries between work and non-work domains.

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