

MOBILE PHONES, DRIVING AND WORK:
Current debates and historical reflections

Glenn Jessop
Institute for Social Research
Swinburne University of Technology
Melbourne, Australia



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Abstract

Along with the widespread growth and popularity of mobile telephony in Australia, the topic of mobile phone use while driving has surfaced as a prominent legal, social and public safety issue. The dangers have been highlighted in road safety research, yet despite studies clearly indicating the negative effect on driving performance and consequent legislation banning the practice, a large percentage of motorists still do it. This phenomenon has so far failed to receive much academic analysis. In turn, this paper draws on three sources of data to explore the 'problem' of mobiles and driving. Firstly, the story of Silvia Ciach, who drove into and killed a cyclist while composing a short text message, provides an illuminating case study. The circumstances surrounding the case, the court ruling, press coverage, public reaction and outcomes of the inquiry are examined to assess the legal and social implications of using a mobile while driving. Secondly, the intertwined and under-documented history of mobile telephony and its relationship to the automobile is considered. An exploration of the convergent and divergent histories of these two technologies sheds light on the current uses of mobile telephony. This is supplemented by several theoretical insights concerning the personalisation of the mobile phone (Wellman, 2001) and the promise of 'perpetual contact' (Katz & Aakhus, 2002b). Despite some limitations, these perspectives provide a useful framework for describing the patterns of mobile phone use in vehicles. Thirdly, as work-related calls are thought to constitute a high proportion of calls made while driving, the ways people use their mobile phones for communicating 'at' work are investigated. This paper informs the contemporary concern of mobile usage while driving, illustrating how it has created unresolved tensions and drawing attention to the legal and social issues.

Introduction

Mobile phone ownership in Australia has increased dramatically over the past 10 to 15 years with the widespread use and acceptance of mobile telephony producing a number of social debates, issues and concerns. Perhaps most notable has been the public panic which has developed concerning the health effects of mobile use (Burgess, 2004). The mobile phone has also been seen to disrupt particular social norms, expectations and etiquettes, with its use in public, such as on trains and in restaurants, mobile phone usage has generated considerable tension and has aroused heated response (Australian Mobile Telecommunications Association, 2004; Krotz, 2004; McCamish, 2004; Mitchell, 2004; Monk, Carroll, Parker & Blythe, 2004; Murtagh, 2002; Plant, 2000; "Second hand noise", 1999). In addition, the use of mobile phones while driving has surfaced as a prominent legal and public safety issue. In historical context, mobile telephony is the latest amongst a line of new technologies which were at first thought to involve a potentially detrimental level of distraction. Starting with windscreen wipers and including car radio, driver distraction has been a concern as far back as 1905 (Brown, 1965; Curry, 2002). More recently, road accidents and fatalities caused by mobile use in cars have fuelled the public's awareness of the dangers of phoning and driving.

An extensive amount of research has assessed the degree to which the operation of mobile phones while driving affects driving performance. In their seminal - and often quoted - research, Redelmeier and Tibshirani found that 'cellular phone activity was associated with a quadrupling of the risk of a motor vehicle collision' (1997, p. 455). They also claimed that using a hands-free device did not offer any safety advantage compared to hand-held phones, a finding supported by subsequent research (Strayer, Drews & Johnston, 2003).

Two comprehensive reviews of the research literature have summarised the effects of mobile phone use on driving. In Britain, the Royal Society for the Prevention of

Accidents (RoSPA, 2002, p. 7) concluded that operating a mobile while driving impaired a driver's:

- maintenance of lane position
- maintenance of an appropriate and predictable speed and following distance
- reaction time
- judgment of safe gaps in traffic
- general awareness of other traffic.

Reporting similar findings, the Monash University Accident Research Centre outlines four kinds of driver distraction: visual, auditory, physical and cognitive, asserting that 'operating...a mobile phone...may involve all four forms of distraction' (Young, Regan & Hammer, 2003, pp. 2-3; see also Direct Line Motor Insurance, 2002). Altogether, current research clearly indicates that using a mobile phone while driving negatively affects driving performance.

Yet despite evidence stressing the dangers associated with using a mobile while driving and consequent legislation banning such activity, a large percentage of motorists still do it. Observational studies conducted in Australia (Eby & Vivoda, 2003; Horberry, Bubnich, Hartley & Lamble, 2001; Taylor, Bennett, Carter & Garewal, 2003) and overseas (McCartt & Geary, 2004; RoSPA, 2002) have found that approximately 1.5% to 4% of drivers on the road at any one time are using a hand-held mobile phone, and 'despite heavy campaigning against the use of hand-held mobile phones while driving' one in five Australian drivers say they '*regularly* [italics added] use their mobile phone without a hands-free kit' (Australian Associated Motor Insurers, 2004, p. 3).

This paper uses three sources of data to explore several overlapping social problems surrounding mobiles and driving. The first section considers the story of Silvia Ciach, a real life example of the dangers of using a mobile phone while driving. The second provides a technological history of mobile phones and the automobile, and the final section concludes with an account of communicating at work.

The experience of Silvia Ciach

The circumstances and court ruling

On December 30, 2001, 22-year-old Silvia Ciach was driving home along a main arterial road near Geelong in Victoria. As she drove she compiled a short text message (SMS) to send to a friend, and according to eyewitnesses the vehicle drifted in and out of the bike lane three to four times ('Motorist faces court over cyclist death', 2003). A few kilometres later she again veered into the bicycle lane, running into the back of Anthony Marsh, a 36-year-old cyclist returning from a training ride. He died on impact. A short time after arriving at the scene of the accident Senior Constable Gray approached the driver who admitted that she had been distracted by her mobile phone (Tippet, 2003).

After the accident Ms Ciach was charged with culpable driving causing death under Section 318 (2) of the *Crimes Act 1958* (Victorian Government, 2004). Given the 'evidence of the whole circumstances' and along with her guilty plea, Justice Cohen classified her 'form of culpability' as 'driving with gross negligence' (R v Ciach,

2003, p. 2). Whilst the case had no legal precedent in terms of its form of culpable driving causing death, Section 318 (2) b – the offence with which Ms Ciach was charged – is classified as the most serious breach of traffic laws aimed at punishing driver carelessness, a fact reflected in the maximum jail term which carries ‘the same criminal element of negligence’ as manslaughter (Harkess, 2004, p. 46). As Justice Cohen explained, ‘these penalties in themselves indicate the very great seriousness with which the legislature regards this crime’ (R v Ciach, p. 1).

In turn Justice Cohen regarded it as important to make sure that the conviction stood as a deterrent for others, highlighting the pervasiveness of the practice in Australia and the need for greater vigilance on the roads. She ruled that Ms Ciach be convicted of the offence and sentenced to two years imprisonment. This term was wholly suspended for three years due to several reasons. The judge was satisfied with the genuine remorse shown by Ms Ciach and that her conscience would act as a powerful deterrent in the future. Moreover, Mr Marsh’s parents did not want her to be imprisoned, requesting that the magnitude of the tragedy stand as a reminder of the risk involved in using a mobile while driving. Altogether, it was ‘only very strong mitigating factors, including that...this specific risk [text messaging while driving] and its potentially fatal consequences had not previously been highlighted before a court’ that persuaded Justice Cohen to not send Ms Ciach to jail (R v Ciach, 2003, p. 6). The ruling was handed down on November 10, 2003, almost two years after the accident.

The media and public’s reaction

The accident received widespread coverage in the Victorian media, and a number of themes were evident in the press reports. Firstly, there was a tendency to portray the event as an innocent act with fatal consequences. A noticeable play on imagery in two separate articles illustrates the portrayal of driving while using a mobile as commonplace, painting a picture of the mundane and ‘serene’ task of driving. Tippet, writing in the *Sunday Age*, imagines the moments preceding the fatal accident: To her right as she drove, she might have enjoyed the broad blue sweep of Corio Bay, gleaming under a clear summer sky. Ahead, in the distance, she’d have seen the shimmering...[and] the long, straight, gently descending stretch of double-lane, divided highway that would take her to them (2003, p. 15).

He goes on to contrast this innocent everyday scene with the death minutes later of the cyclist who was hit at approximately 91 km/h with enough force to be hurled 28 metres through the air. Juxtaposing this is a piece written on the day of the sentencing. Again, the writer describes a sunny day:

it’s a normal day under sunny skies and motorists are going about their business. A woman...[is] chatting up a storm, one hand on the mobile phone and one on the wheel. The light changes and, with phone firmly cemented to her left ear, she puts her foot on the accelerator and continues with her day (Shand, 2003, p. 1).

Both writers stress the innocence of an everyday activity, making the point that an apparently mundane action can – potentially - result in fatal consequences. This innocence is further reinforced by the portrayal of Silvia Ciach as an everyday person:

Silvia Ciach looks nothing like a criminal. And exactly like thousands of similar criminals...Silvia committed a small act of everyday criminality – one more example of the wilful carelessness and arrogant stupidity you see on the roads all the time (Tippet, 2002, p. 15).

In summary, the implication is that the actions that led to Mr Marsh's death are commonplace, albeit with deadly consequences.

Newspaper reports have emphasised the public's defiance of laws that ban the use of mobile phones while driving and people's apparent ignorance of the associated risks (Dowling, 2004; Ede, 2004). Ede highlights the perception that many people are *unknowingly* overlooking the potentially serious consequences:

Many of us have done it: taken our eyes off the road to check a text message, answered a call while driving without the hands-free...[b]ut what most of us don't realise is that the few seconds we spend diverting our attention from the road is...estimated to cause up to 25 per cent of all car accidents (2004, n.p.).

Here we see the reporter identifying the practice as an ordinary and widespread behaviour by using the phrases 'many of us' and 'what most of us don't realise'. Other articles emphasise the *deliberate* intention of using a mobile while driving:

Clearly, however, motorists have either not accepted the dangers of such behaviour or are simply choosing to ignore them ('Both hands and mind on the road', 2003, p. 12).

Understandably, there has been a strong public reaction to this incident and the ruling handed down by Justice Cohen. As there was no legal precedent it was a landmark case that aroused debate concerning whether or not the sentence would act as a sufficient deterrent. In particular, bicycle groups were scathing in their assessment of what they perceived to be a lenient sentence. Writing on cyclingforums.com (2003), one person types:

My question is how can a car driver get away with killing a cyclist? One would go to jail for life they killed someone with a baseball bat but killing a cyclist its like getting a slap on the wrist. This is just fu#ked. Is the law ever going to change? (<http://www.cyclingforums.com/showthread.php?t=57420>)

A similar sentiment is found in a discussion thread on Bike Forums (2003), with contributors voicing concern over the sentence compared to other offences:

2 years isn't enough! people with maryJ [marijuana] get a harder sentence than that!

[S]omehow I feel that if the death had been by an 'accidental' gun or knife wound, the dead man's parents would be calling for blood.

<http://www.bikeforums.net/archive/index.php/t-40518-p-1>

Bicycle Victoria (2004) lobbied for the penalties for the offence to carry the same weight as being over the alcohol limit, claiming that ‘road safety legislation [has not] caught up with this dangerous new behavior’ and that the penalties are insufficient deterrents. Anthony Marsh’s parents, who have been vocal in generating awareness of the dangers associated with using a mobile phone while driving, have joined the chorus of people advocating for tougher penalties. According to them the current offence is ‘trivial and meaningless’ (Healey, 2003, p. 1), with Anthony’s father claiming that ‘there has to be some disincentive and we haven’t got that’ (Rose, 2003).

Since the court ruling in 2003 the public has become increasingly exposed to the dangers of using a mobile phone while driving via newspaper articles and media campaigns (Antoniou, 2004; Dowling, 2004; Kidman, 2004). However, changes in driver behaviour are hard to determine. Victorian police statistics released last year reveal a 15% drop in fines issued to drivers using mobile phones compared to 2003 (Bunce, 2004). This would appear a significant change, especially considering that mobile ownership increased substantially over the period. Yet there is evidence contradicting this trend, with police statistics in New South Wales showing a 20% rise in motorists caught using phones illegally. According to Telstra’s ‘Phone Safe. Drive Safe’ survey it appears that the practice is still rife: of the 718 drivers they interviewed who owned a mobile phone, 28% had read and 17% sent a SMS message while driving (Telstra, 2004a). While 62% of respondents regarded the ‘use of mobile phones a major road safety issue...more than half regularly answer their phone when it rings in the car’ (2004a, n.p.).

The court ruling raises unresolved questions concerning appropriate punishment. Would the response have been so heated if the call had been for an emergency? To what extent could using a mobile while driving be considered criminally negligent? The collision of two technologies of mobility – phones and cars – highlights important expectations about how people use and understand the mobile phone. A brief look at the connections between these technologies – which have to date remained largely unexplored – allows us to develop a more nuanced and richer understanding of the current use of communications technologies and the emerging problems associated with them.

A technological history

Cars and phones

Automobiles and telephony both arrived around 1900. Although landline telephony originated before automobiles in the mid-to-late 19th century, by the 1920s their distribution soon caught up with and overtook the penetration of telephony (Fischer, 1992, p. 44). At first two distinct technologies, the car and phone quickly began to build an important working relationship, forming social and technological connections that have contributed to the current state of mobile phone technology.

The technological development of mobile telephony can be split into two significant eras: pre-cellular and post cellular. Mobile radio telephony, predecessor to the cellular system, was initially used by the military and civil authorities, with police and emergency services pioneering mobile radio from the 1920s (Farley, 2004; Huurdeman, 2003). As early as 1920 rudimentary radio telephones were installed in

police cars in Britain (Hurdeman) and the United States (Dobson, 2002), and around 1947 the American Telephone and Telegraph company operated a highway service between New York and Boston utilising a basic radio telephony service (Farley). However, these systems were limited by several factors: networks were operated manually, the use of half-duplex mode meant only one person could talk at a time, and network capacity remained low due to insufficient allocation of frequency spectrum (Mouly & Pautet, 1992; Rappaport, 2002).

In 1947 D. H. Ring, a Bell Laboratories worker, published a seminal paper detailing the cellular concept, where frequency re-use would allow for a more efficient use of the frequency spectrum. Compared to previous methods, the use of smaller cells transmitting at weaker frequencies improved call quality and substantially increased the number of people who could concurrently access the network. The first mobile phones to utilise this technology were housed in automobiles; powered by large and heavy batteries, it was equivalent to 'driving around with a complete telephone station in the car' (Farley, 2000). Further progress was slow. In the United States at least, this was partly attributable to a lack of support from the Federal Communications Commission which limited opportunities for development by failing to allocate an adequate amount of frequency spectrum. More broadly, the communications industry was not very supportive of cellular research, with the 'area...considered by many to be a professional backwater' (Brown, 2002, p. 9).

Development heated up during the 1970s, with the first call being made from a portable hand-held cellular phone in the United States in 1973. The first commercial cellular network was launched six years later in Japan, and the system was introduced soon after in a range of countries worldwide throughout the 1980s (Hurdeman, 2003). Up to this point the development of radio and cellular telephony was intricately linked to the use of automobiles. Mobile phones were initially restricted to use in cars due to their battery weight and power requirements, and as far back as 1948 they played a valuable role in reporting mechanical trouble and road accidents (Farley, 2000). Partnerships in research and development were also evident. Throughout the 1970s several Mobile Communications Symposia were sponsored by the Institute of Electrical and Electronics Engineers Vehicular Technology Group, and the Vehicular Technology conferences provided an outlet through which 'mobile radio and cellular experts...[could] present and publish' (Carr, 1998, p. 103).

As advances in technology enabled increasingly smaller and more efficient units, the phone itself began to shift away from being used primarily in vehicles to becoming a more personal communication device (Lacohée, Wakeford & Pearson, 2003). No longer restricted to vehicles, it could be carried around in pockets, belts and handbags. As Carr states, 'cellular systems...facilitate[d] the widespread use of portable phones, as opposed to larger vehicle-mounted units that were the most common type of mobile unit in the pre-cellular era' (1998, p. 84). This was a critical factor behind the substantial growth in mobile communications. Other important technical advances aside from cellular technology were also fundamental to this process, such as the development of integrated circuits, high capacity batteries, digital telephone switching and frequency propagation (Carr ; Agar, 2003). In Australia the first mobile phone system, for uses in vehicles was launched in 1981, and after the introduction of portable cellular phones in 1987 the penetration rate of mobile telephony increased dramatically. By 2003 Australia had approximately 14.35 million mobile phone

subscribers and a mobile penetration rate of 72% (Australian Communications Authority, 2003; International Telecommunication Union, 2004), and since 2000-01 'Australia has had more mobile phone services than standard fixed telephone services' (Australian Communications Authority, 2003, p. 6), a feat accomplished on a global scale in 2002 (Srivastava, 2005).

Personalisation of the mobile phone

Aligned with the shift from use in cars to being a more portable device has been the mobile phone's development as a personal tool that has become an important facet of people's lives. Beyond the technological development of cellular technology there exist a constellation of global and local factors which have contributed to the expansion of mobile telephone markets. Structural factors include falling prices; the introduction of pre-paid cards - in contrast to fixed-term subscription contracts; market entry of service providers resulting in competition; and the development of network infrastructure (Burgess, 2004; Crabtree, Nathan & Roberts, 2003). Local explanations have emphasised the mobile phone's role in enhancing social connectedness, immediacy, accessibility, availability, security and emotional reassurance.

Indeed, it is the local use of mobile phones which has attracted the most sociological attention, with researchers exploring their social impact, mapping their social uses and exploring in particular how they have shaped patterns of social interaction and communication. In broad terms, the reasons for acquiring a mobile phone and subsequent patterns of use have tended to follow a common trajectory of three phases. Firstly, a phone is typically attained for the purpose of providing safety and security; secondly, it becomes an important functional tool, allowing people to organise different aspects of their lives, such as work, family, peer group; and thirdly, it helps support personal relationships and provides an avenue for social and emotional expression (Ling, 2004; Ling & Yttri, 2002; Palen, Salzman & Youngs, 2001). As Geser succinctly put it, 'there seem to be broad trends towards expanding usage from mere emergency to routine cases and from specific instrumental to more diffuse expressive communications' (2003, p. 7). A range of studies have documented the socially expressive exchanges of mobile users, such as the use of SMS in initiating and developing personal relationships (Byrne & Findlay, 2004; Kasesniemi & Rautiainen, 2002; Weilenmann & Larsson, 2002).

Scholars have offered a range of theoretical explanations concerning this shift from the mobile as a functional tool to a personal – even intimate – device. According to some, the popularity of mobile telephony parallels and complements the shifting forms of community from place- and group-based to more individually networked and person-oriented communities. Haythornthwaite and Wellman, for example, describe the sociological effect of wireless communication as moving interaction from place-to-place to person-to-person: 'the person has become the portal' (2002, p. 34). According to Wellman the mobile phone liberates users from place, with individuals emerging as the 'primary unit of connectivity' (2001, p. 238). In turn the mobile phone becomes an important tool for fulfilling instrumental and social goals. In this context it is not surprising that mobile phones have become symbolic markers of identity, with ringtones, handset covers and distinct SMS languages allowing users to develop a unique personality via their mobile (Crabtree, Nathan & Roberts, 2003). Taking this a step further, the device has been conceptually likened to an extension of

the body (Townsend, 2000, 2002; Licoppe, 2003), a theme evident in Katz's book *Machines that become us* which explores the hypothesis that mobile phone users may eventually want the technology incorporated into their physical body (2003).

The notion of perpetual contact has also been cited as a major reason for the mobile phone's popularity; that is, people want to be accessible – and to have access to others – continuously (Katz & Aakhus, 2002a). Rhetoric surrounding the promise of “anytime, anywhere” communication has proved particularly salient amongst social commentators (Galambos & Abrahamson, 2002; Leung and Wei, 2000; Srivastava, 2005) who propose that people harbour a desire to be in ‘constant touch’ (Agar, 2003). Exemplifying this school of thought, Katz and Aakhus' (2002b) theory of ‘apparatgeist’ provides a useful conceptual lens through which to view the social development of the mobile. They propose that ‘the development of personal communication technology presupposes perpetual contact’ (Katz and Aakhus, pp. 307-308) and the logic of apparatgeist assumes a desire for constant accessibility. This argument is based on a metaphysical notion that the mobile phone satisfies some human need and a spirit of ‘ideal communication’ (Levinson, 2004; Vries, 2005).

Although a productive line of inquiry, the personalisation of the phone provides a somewhat limited and simplistic approach. Availability is multifaceted and influenced by social roles, expectations and personal preferences. Mobile users do not aspire to be available all the time, often choosing to limit accessibility via strategies such as switching the phone off, letting calls go through to voice mail, screening incoming calls via caller identification and controlling who obtains their phone number (Licoppe & Heurtin, 2001). It has been widely recognised that the accessibility of mobile phones offers both advantages and liabilities (Cooper, 2002; Levinson, 2004), and social etiquette effectively limits their use in locations such as restaurants, cinemas and class rooms (Srivastava, 2005). Hence, it is problematic to assume that perpetual contact is always desirable, and while mobile telephony opens up opportunities for expanding personal availability and accessibility, it conversely necessitates a degree of control and management. Apparategeist fails to adequately capture this complexity, overlooking concrete examples of how mobile phones are used and the tensions they create. The example of Silvia Ciach demonstrates this tension of accessibility well. Should - or can - phone users be available all the time? Are social norms and etiquettes an adequate means of regulating mobile use in particular instances, such as in vehicles; or are legal restrictions sometimes required? The arena of work further emphasises this complexity in the practice of mobile telephony.

Work

The commercial sector has played an important role in the development of mobile telephony, with businessmen enthusiastically embracing cellular technology from its inception. Taxi and truck drivers were early adopters of radio telephony (Farley, 2004; Solymar, 1999) and despite the pedestrian pace of technological development between the 1940s and 1970s, demand for cellular service far outweighed supply (Carr, 1998; Mouly & Pautet, 1992), a trend driven predominantly by elite businessmen (Lacohée, Wakeford & Pearson, 2003). After the divergence of telephony and automobiles during the 1990s due to the personalisation of the mobile phone, we see a second form of convergence of the two technologies: originally restricted to use in vehicles due to technological factors, in their second incarnation

mobile phones return as small, portable devices used by their owners in the car as part of their everyday lives. So a reconnection of sorts is observed where car and phone come together.

Associated with this reconnection has been the emerging role of mobile phones as a business tool. To a degree this can be attributed to the 'perpetual contact' afforded by mobile telephony which has enhanced work productivity and flexibility (Goodman, Tijerina, Bents & Wierwille, 1999; Katz, 1999). This rhetoric was evident a century ago when Lee de Forest – a prominent radio engineer – developed an experimental car phone in 1906, proclaiming 'we hope it will be possible for businessmen, even while automobiling, to stay in *constant touch* [italics added]' (quoted in Churchill & Wakeford, 2002, p. 161). Churchill and Wakeford have further demonstrated the links between accessibility and mobile telephony, finding that 'advertising featuring workplace use of mobile devices' has been 'constructed primarily in terms of availability' (2002, p.161). As vehicles have become 'platform[s] for multi-tasking' (Featherstone, 2004, p.8), workers can stay in touch with their employers, employees and clients, as well as family and friends.

Research has documented the practice of 'mobile work', which includes the use of mobile phones for work-related calls from vehicles (Churchill & Wakeford, 2002; Laurier & Philo, 1998; O'Hara, Perry, Sellen & Brown, 2002; Sherry & Salvador, 2002). Laurier in particular has extensively examined the practice of conducting business while commuting (Laurier, 2002, 2004; see also Esbjornsson & Juhlin, 2003), finding that:

[a]ctivities which were previously associated mainly with company office buildings are now carried out in company cars...[m]obile workers make frequent phone calls from their cars...to exchange and to distribute organisational knowledge, as well as to make future arrangements for meetings (Laurier & Philo, 1998, n.p.).

Recent statistics support this development, indicating that work-related calls represent a high proportion of calls made from cars. In the United States in 1990, 80% of respondents reported making business calls while commuting to or from work (Goodman, Tijerina, Bents & Wierwille, 1999), and although the context has changed due to the introduction of legislation banning the use of mobiles in cars, up to 39% of drivers in Australia admit to using a hand-held phone on their journey 'to, during, or from work' (Telstra, 2004b, n.p.). Reasons offered for calling included letting the office know they're running late, organising a meeting and checking schedules (Telstra).

Aside from strictly business matters, mobile phones are also used at work for personal calls (Esbjornsson & Juhlin, 2003; Gant & Kiesler, 2002; Sussex Technology Group, 2001), and sociologists have suggested that they are blurring the distinction between work and private life (Gant & Kiesler, 2002). This makes sense in terms of Wellman's contention that the 'person has become the portal'. Following this logic, the use of a mobile phone transcends the boundaries of work because the phone is associated with a person, not an institution or organisation. While the notion of perpetual contact partially helps to explain this trend, the boundaries of accessibility

in relation to work-related calls are currently under negotiation, a theme particularly evident when it comes to safety at work.

Employers' responsibility issues

Given the growing awareness of the road safety dangers, work-related calls made while driving pose a considerable occupational health and safety (OH&S) issue. Employers in Britain now have a legal obligation to ensure a safe working environment: it is an offence to 'cause or permit a driver to use a hand-held phone while driving' and 'employers can be held liable...if they require employees to use a hand-held phone while driving' (RoSPA, 2004, n.p.). If vehicles are defined as a workplace under OH&S legislation, then employers have a legal duty of care to encourage responsible use of a mobile while driving at work (Australasian College of Road Safety, 2004; VicRoads, 2004). This legal imperative has already been demonstrated in the case of one company who were the subject of a lawsuit after an employee struck a pedestrian while talking on a mobile ('Employers ban dialling-and-driving', 2001).

In a press release issued in January this year, the head of road safety at RoSPA reinforced this concern:

Company car drivers and people who drive high mileages for work are up to 50 per cent more likely to crash than private motorists...it is vital that employers play their part by having policies in place to deal with managing occupational road risk, including tackling...mobile phone use (RoSPA, 2005, p.1).

Employers' reactions have been mixed. In the United States some have banned all forms of mobile phone use in employees' cars, while others have resisted explicit restriction, instead providing training and encouraging workers to pull over to use the phone (Peterson, 2004). Research conducted by RoSPA in 2002 found that large companies were 'aware of their legal responsibilities' and had 'policies to ban or restrict the use of mobile phones when driving for work purposes' (p.23), with many providing hands-free kits to be used in limited circumstances. This positive response was supported by an Association of Car Fleet Operators survey which found that 99% of fleets had implemented a policy prohibiting the use of hand-held phones (Workplace Law Network, 2004). However, another survey in Britain indicated that only a quarter of employees had been updated on new company policy after the bans (Green Flag Motoring Assistance, 2004). Clearly the standards and procedures of corporate enforcement are still being negotiated as companies and individuals develop appropriate measures that strike a balance between work productivity, accessibility and personal safety.

To conclude, it is apparent that the negotiation of mobile telephony is in its infancy; the law, public opinion, social expectations and communal behaviour are still in flux as norms settle and new questions are debated. Although in-depth qualitative analysis of mobile phones and social interactions are important, it is imperative that research does not neglect the bigger picture. This paper has attempted, albeit briefly, to inform the problem of mobile phones and driving from a broader perspective, highlighting the collision of two technologies in order to enrich current understandings of the impact of mobile telephony. While the personalisation of the mobile phone and an

understanding of perpetual contact provide a useful theoretical foundation in describing the development of mobile technology and its current use in vehicles both personally and at work, the experience of Ms Ciach and the use of mobiles at work underscore the complexity involved in the accessibility afforded by mobile telephony and demonstrate the limitations of these approaches.

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Address for correspondence

Glenn Jessop
 Faculty of Life and Social Sciences
 PO Box 218,
 John Street, Hawthorn,
 Australia 3122
 Email gjessop@swin.edu.au