

The Mobile Phone in Everyday Life

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This paper explores how ordinary people use their mobile phones [cell phones in the U.S. and Canada] to interact in everyday life. These people are virtual selves, but the impact of their mobiles is very real. Mobile phone technology, more than any other, has the ability to envelop its users in a sphere of perpetual contact and instant access, touching every aspect of their daily lives.

The virtual self is connected to the world by information technologies that invade not only the home and office but the psyche. This can either trap or liberate people... By virtual self, I am referring to the person connected to the world and to others through electronic means such as the Internet, television and cell phones... [These] technologies get inside our heads, position our bodies and dictate our everyday lives. (Agger 2004:1)

In analysing the meaning and significance of mobile phone use in the everyday lives of users, three discrete yet interrelated questions arise:

- What role does the mobile play in the management of everyday life?
- How does the mobile affect the configuration of self?
- How does the mobile affect human interaction?

There is a paucity of micro-level research on users' own interpretations and reflections of how their everyday life is fashioned through interaction by mobile calls or text messages. Therefore, I undertook a phenomenological approach using diaries, focus groups and interviews to describe and clarify how the mobile is incorporated into daily life.

The empirical data of this study reveal several insights which have not been developed in the existing literature. I have identified new behaviours which have been analysed as six discrete, yet interrelated, themes.

The co-configuration of the technology and the user have led to the production of new needs in terms of use, and this has had a profound effect on the ways users present themselves to others and conduct their social networks. The mobile has changed human capacity in terms of memory and concentration, whilst also producing new forms of emotional experiences such as duplicity and anxiety.

Contextualization

Existing research relevant to the area of mobile communication can be divided into three distinct but interrelated themes: communication in the global age, communication at the micro-level and mobile phone communication.

Communication in the Global Age

Globalisation. The debate regarding the existence of globalisation has been settled, as politicians, economists and sociologists accept that the world has become financially and materially interdependent. Deliberations now focus on the form of globalisation, how it came to exist and where it will lead in the future. Two issues of relevance to this article are communication as the driving force of social change, and increasing dependence on mobility in the global age.

The role of communication in the formation and development of society has been addressed by many social theorists such as Habermas, Thompson, Giddens and Agger.

Globalisation is political, technological and cultural as well as economic. It has been influenced above all by developments in systems of communication. (Giddens 1991:70)

The overall consensus is clear; communication is essential for society to function on both macro and micro levels of interaction, and developments in communication technology have played an integral part in the rise of modern societies. Giddens (1999a,b) believes that there is no single driving force behind globalisation, although instantaneous communication has had the most profound effects on society today. Giddens' work is supported by Habermas (1984, 1987) who asserts that communicative action stimulates, organises and facilitates social transformation. The process of understanding and agreeing with other social actors through rational discourse allows communal plans to develop and revolutionary processes to occur.

The current technological equivalent of Habermas' forum for rational discourse is the Internet, which may create an open forum for debate. However, Agger (2004) contends that although the Internet can bring people of different gender, age and culture together to communicate, it may not create the utopian ideal of global understanding. The self becomes the "virtual self"—connected to the world and others through electronic means, which potentially entraps or liberates.

Mobilisation. George Myerson (2001) highlights the significance of mobility in the global age by contending that "anything as massive as the mobile campaign most certainly deserves its own name...mobilisation" (Myerson 2001: 6-7). Myerson asserts that the new mobility of information and knowledge is not only dependent upon technological change, but more importantly, upon the cultural requirement of so many people to be mobile. "Mobilisation" signifies the importance of being free of wires, phone booths, bricks and walls. "The old phone is no more and so that old system of ideas has also passed away." (Myerson 2001:9). Mobile phone networks' marketing strategies attempt to convince consumers that mobile communication is synonymous with liberation, allowing the individual to choose how to spend time without restriction. The sheer scale of mobile use will soon equal or outstrip globalisation. The mobile allows us to communicate whatever we want, whenever we want to, with other people who possess telecommunication devices. This increases the number of people with whom we are able to communicate and the speed with which we can do it. "Network after network: you can virtually see the globe being encircled in a fine mesh of little connecting links." (Myerson 2001:15)

Communication at the Micro Level

Meaningful human communication depends primarily on language, both spoken and written. Research into human interaction using communication technologies such as text messages and phone calls could consequently deepen understanding of how social actors negotiate and manage their everyday lives in contemporary society.

Dramaturgical Role-play. According to Goffman (1959) human interaction has a dramaturgical character. Social actors play different roles in different scenes of their daily lives: father, son, brother, lover, friend, enemy, worker and consumer, all day and everyday. The management of these roles defines the interaction; failure to do so leads to the actors feeling discomfort and embarrassment. The self, in this manner, is not concretely defined, although experience and stereotypical expectations will define the role played by both actor and audience. The role played at any given time is their most important one and must remain the most convincing, so, unsurprisingly, conflicts arise when performers are divided over which role should take priority. Take for example a young man wanting to impress his companion on their first date at a restaurant. Faced with insolent service does he react as an outraged consumer, or a rational and patient man? Interaction, in Goffman's terms, relies on the interpretation of the scene and the mutual understanding of roles to be performed.

Individualisation. What to do? How to act? Who to be? These are focal questions for everyone living in circumstances of late modernity—and ones which, on some level or another, all of us answer, either discursively or through day-to-day social behaviour. (Giddens 1999)

The erosion of traditional structures on which to model oneself have changed somewhat since the publication of Goffman's work, as theorists now turn to individualisation to explain the changing nature of interaction,

both discursively and through day-to-day social behaviour. The changing definition of what is socially acceptable encourages the self to develop through experimentation (Bauman 1992: 2003). The self is no longer a rigid entity and all interactions are fluid, able to change direction to fulfil new subjectively defined objectives. Previous conventions which would have ridiculed and shamed individuals for being “different”—single parent, homosexual, black or disabled—are no longer valid. People are free to be who they want to be, when they want to be. Bauman suggests that experimentation allows the individual to present the formation of a new self. This freedom to choose applies to all aspects of everyday life—the self, relationships and careers—and centres around the individual alone. The liquid nature of modern living also discourages investment in a concrete future when the likelihood of having one is uncertain. This allows the self to experiment even more freely.

Experimentation and individualisation may lead to social and familial fragmentation (Beck 1992). As each individual is driven solely by their own needs, it becomes increasingly difficult and complicated to manage relationships. For example, a promotion may be good for an individual’s career prospects, but potentially harmful to the family if it is required to relocate. The notion of individualisation indicated that the individual must then decide which is of more importance, self development or familial harmony. As the family group contains more than one member it is increasingly unlikely that everyone’s goals will be exactly alike. In Beck’s view, this tension and conflict between individual and collective goals may threaten, loosen or even break the bonds which unite the family group.

This quality of freedom, then, whilst liberating, also leads to uncertainty as constantly changing roles result in confusion about what constitutes the self. Individuals therefore yearn to find, join and bond with a group of other self-oriented individuals with similar interests; they look for a place where they can ‘belong,’ a ‘neo-tribe.’

Performance Aids and Props. The erosion of traditional defined roles does not make Goffman’s work invalid. His *Presentation of Self in Everyday Life* involves the use of props and tools in order to express the most appropriate projection of the desired self on the audience. Baudrillard (1988) elaborates this dialogue when discussing ‘neotribalism’—modern fluid tribes who fulfil the desire to belong. Membership in such tribes is not founded on traditional categories of age, class, race and gender, as neo-tribes believe that such pigeonholing is insufficient in defining individual identity. However, individuals will adopt props in order to create self-identity in the neo-tribes where “the body is adorned only to be made into a spectacle” (Baudrillard 1988:18-19). Such props do not result in greater individualisation but paradoxically reinforce the sociality of the neo-tribe.

Individuals are free to define themselves through the clothes they wear, the activities they pursue and their bodily disposition (Featherstone 1991). The mobile is one tool which affords the “neo-tribes” of today mobility and freedom of choice, not only in the ability to communicate on the move, but to move more freely between ‘neo-tribes’ (Maffesoli 1991). Bauman (1992) postulates that the individual is increasingly detached from his membership in the social categories of class, gender, race and age, and free to choose the neo-tribe of which to become a member, although behaviour within that tribe will be prescribed. The individual is now enveloped in the tribal scene in a desperate search for community. The mobile may be both the artefact and agent which determines not only the membership, but also the normative behaviour within the chosen neo-tribe.

Agger would contend that developments in communication technology are a fundamental aspect of the fluidity of relationships. The self is not a static entity but can be redefined at will, reinventing itself daily. The self portrayed through mobile phone and Internet use may not necessarily be a true representation of the inner self. Goffman asserts that the same misrepresentations can occur in face-to-face interaction, but the use of technology enhances the ability for people to construct an ethereal self.

I agree that technology permits people to change their performances rapidly, call to call, chat-room to chat-room; however, I would contend that traditional relationships and roles do still exist. Although I support the notion that information and communication technologies like the mobile give people greater latitude in self-presentation, I do not believe that people are entirely blank canvases. The requirement to gain employment will require workers to conform to certain roles, and they can effectively discard this when their shift is over. Yet I think it is also important to note the increasing trend for employees to be held responsible for their behaviour out of work if it would bring the employer into disrepute.[1]

I contend that there is also a tension within this research. Paradoxically, a situation of mutual dependence arises from the need of virtual selves to belong, but the self-defined goals which drive individuals prevent the creation, existence and maintenance of the neo-tribe, as potential members put their own goals before those of the group.

The virtual self is connected to an entire world of others with equally transient roles and weak bonds.

By virtual self, I am referring to the person connected to the world and to others through electronic means such as the Internet, television and cell phones... [These] technologies get inside our heads, position our bodies and dictate our everyday lives. (Agger 2004: 1)

Technology in Everyday Life. The mobile is an example of consumer culture as material objects have taken on significant symbolic, cultural importance and distinct organisational potential in the Western world (Slater 1997). Therefore, the analysis of other technological items in consumer culture, such as the personal stereo, can provide a basis of comparison with my own work on mobiles (Lury 1996; Bull 2000).

The existing literature on the sociology of technology attempts to describe the constitution of the self and the corresponding social-psychological, physiological and emotional states. There are differing sociological views about the relationship between technology and society. Those espousing technological determinism[2] regard technology as autonomous and the agent of social change. Technology is seen as a force which shapes society, and problems arise when the increasing complexity and rate of technological change outpace the ability of social actors to adapt. Technological determinists would question how technology impacts society.

On the other hand, social determinism maintains that society changes technology (Mackenzie and Wajcman 1985). Politics, economics, culture and organisation are crucial to the invention, design, adoption and implementation of technology. The ways in which technologies are required and used by society are driven by market forces, and the adoption or rejection of technologies are shaped by social action. The design and production of the technology will be shaped by technologists, but the ultimate choice lies with the consuming agents of society. Technological artefacts, although introduced into society, are not forced upon it. Social determinists therefore consider it crucial to question and acknowledge the influence of social actors on the development of technology.

We will take technological change as a given, as an independent factor, and think through our social actions as a range of (more or less) passive responses. If, alternatively, we focus on the effect of society on technology, then technology ceases to be an independent factor. Our technology becomes, like our economy or political system, an aspect of the way we live socially. (Mackenzie and Wajcman 1985:3)

For example, the design of the personal stereo enables the user to listen to their desired choice of music wherever they go. The actual implication of this creates an entirely new perception of the world for users; space, time and relationships are all forced to adjust due to the continual presence of music (Bull 2000). However, this is a process of co-determination as each individual will adopt and implement the technology personally, to her own specifications, needs and desires.

Latour postulates that the sociology of technology research should focus on networks of human-non-human interaction to examine how these networks are mutually structuring or co-determining. When discussing the development of commercial camera and film technology he describes:

What we observe is a group of variable geometry entering into a relationship with an object of variable geometry. Both get transformed. We observe a process of translation—not one of reception, rejection, resistance, or acceptance. (Latour 1991:116)

Mobiles present an exciting opportunity to establish how technology developed for communication with others could have an increasingly prominent impact on the subjective configuration of the self. It could be contended that the mobile—a technological tool initially designed simply as means of communication—has had an impact beyond its function; it has become a fashion accessory, a prosthetic extension of and delineation of the self, a symbol of economic status and power.

In this study I argue that to analyse the nature of mobile use it is necessary to take account both of the particular properties of the mobile as a technology and of the way these properties are engaged with by particular categories of users; that is, I argue for the co-determination of the users and the technology.

The Co-Configuration of the User. Specific properties of specific technologies will permit certain uses and encourage the development of new behaviours and rituals (Grint and Woolgar 1997). The mobile phone, for example, has a screen which displays numbers, callers, composed text, the latest Hollywood movie star or, more recently, pictures of friends or relatives. The inner technical circuits can store hundreds of numbers, save sent and received messages, organise and remind the user of when they should be at their next meeting or to buy a birthday card for their daughter. The increasing number and range of functions available on the mobile phone greatly exceed those of the

mono-functional telephone distributed by British Telecom in the 1950's and these are having profound effects on mobile phone users.

The multi-functional mobile phone has technical elements which can affect human behaviour, or, in Steve Woolgar's terms, configure the user. He discusses the interaction between objects and their users, and concludes that "the new machine becomes its relationship with its configured users." [3] Configuration occurs when the object impacts the way the user defines his or her identity, thereby setting constraints on their future actions. Co-configuration exists when the social actor simultaneously defines the use of a multi-functional object, thereby giving it a malleable sense of meaning. For example, the mobile phone of the 1980's would have been a very effective doorstop, had their owners decided not to use it to communicate with others. Likewise, today's mobile phone could act as a mere paperweight if owners decided that they wanted to use it this way. The technology impacts the user, but only to the extent that the user decides how to use the object.

The mobile phone is therefore polysemic—having a number of subtle meanings and uses induced by context. As polysemy refers to text with many meanings, the mobile has many potential uses. Empirically "use" can refer to the increasing multiplicity of functions that the mobile phone has been designed to have. For example, it can make and receive calls, and send and receive text messages. It can also function as an alarm clock, an organiser and phone directory. Conceptually, as the sociology of technology notes, all technologies have many potential practical uses which will be defined by the agency of the user. For example, an agent can interpret the "use" of a mobile phone in an almost indefinite number of ways. It can be a means of entertaining themselves, a way to form, maintain or break relationships or a tool of surveillance. The fundamental theme of recent sociology of technology is therefore that "use" is configured by the agent, who is simultaneously configured by the multi-functional object.

Mobile Communication

One of the most astonishing explosions in modern consumer culture is undoubtedly the mobile. Statistics establish that over 76% of the UK own a mobile, and 66% of 15-24 year olds say they can't live without them. [4]

Mobile phone research to date consists of both quantitative and qualitative data. A number of commissioned reports have been published, which tend to employ immense international resources and use a combination of methodologies. The most comprehensive and up-to-date quantitative example was a survey of 4,000 British mobile phone users aged 15 and over. The report was commissioned and published by Vodafone in January 2003.

A breakdown of the British mobile phone population is compared to the composition of the general British population. Age, income and gender of the mobile phone population mirror that of the population as a whole, discarding thoughts of a stereotypical user. However, the work fails to identify how mobile phone users interact with their phone, which again strengthens the argument for qualitative research.

The results also illustrate interesting comparisons between mobile phone use (76%) and Internet use (45%), the composition of the mobile population and the way in which phones are used, including personalisation and text messaging. However, although rich in statistical information, the report lacks any depth and insight into why the phones are being adopted and adapted in these ways, as the report was designed to analyse mobile behaviour in a quantifiable way. Moreover, statistical data can be confusing. For example, there are discrepancies between Vodafone's and Orange's surveys. This highlights that all survey results will depend on what and who you ask and how. The surveys underline the phenomenally rapid expansion of the mobile networks, but ultimately fail to enrich an understanding of the motives and meanings attached by individuals to their mobile phone behaviour.

Nevertheless, there is literature which adopts a qualitative approach to mobile communication. Several studies have indicated a growing culture of dependency on mobile phone technology (Plant 2000; Roos 2001). Plant (2000) undertook a study of international phone use with interesting examples of mobile phone behaviour all around the globe—from "dummy" phones in Peshawar to signify status, to a Somali trader answering to the ring tone 'jingle bells' under a palm tree in order to conduct business and earn a livelihood. Plant even highlighted the troubling social effect on Japanese children whose constant use of mobiles made it difficult to interact on a face-to-face basis. One student said that young mobile phone users are becoming:

...less capable of direct, social communications. They rely on technology to converse. They are often intelligent with collecting information but not with utilising it, and I am often surprised by their awkward emotional responses. (Plant 2000: 57)

The problem is even more pronounced in China, where the one-child policy encourages the use of media technologies

to replace the loss of the extended family. The growing dependency on mobiles substantiates the contention that technology not only has an impact on the configuration of the self, but also the corresponding social-psychological, physiological and emotional states of the user. Michael Hulme stated that:

There has been growing evidence of an increased dependency on mobiles—not just in practical terms, but in an emotional sense. (Michael Hulme cited in “Downtime” by Mark Lewis in *Computer Weekly*, May 20, 2003 www.computerweekly.com Accessed October 1st 2004)

This “need” and “dependence” on mobiles was further qualified in Hulme’s work on the UK (2001) which concluded that 72% of users are obsessed with their mobile and 86% of users feeling anxious without it ; 46% of respondents aged 25-34 even liken the loss of their mobile to a bereavement.[5] This reliance on mobiles may have an economic as well as emotional component: communication must be efficient, goal-oriented and useful.[6]

Literature such as this causes me to question how completely technological means of communication are being incorporated into daily life, and encourages me to investigate the forces and motives which underlie the behaviour of mobile users.

Although networks’ marketing campaigns emphasise the ability of mobiles to bring people together, others contend that dependency on the phone ironically increases feelings of alienation. The mobile can intensify feelings of loneliness and unhappiness. Surrounded by people who are constantly in touch with others through mobile phone conversations, some users feel that no one is thinking of them when no calls or text messages are received. Being permanently accessible heightens users’ awareness of when they are not being contacted, consequently making them feel permanently unwanted (Plant 2000).

These findings refute the conclusions drawn by Kate Fox in 2001. Fox reported that the mobile would liberate users from “an alienating and fragmented” community.[7] Comparing the mobile to the new “garden fence,” she asserted that people are now free to gossip and participate in the social grooming required to bring a sense of community to today’s fast-paced city life.

Howard Rheingold also discusses the mobile phone phenomenon and, in Marxist fashion, envisions it as a tool of the “next social revolution” by reference to the ousting of President Estrada from leadership by mobile-phone-toting Filipinos in January 2001. “Smart mobs consist of people who are able to act in concert even if they don’t know each other” (2002: xii). Rheingold, who coined the term “virtual community,” “investigates” (exactly how is not clear) the role of the mobile in the transformation of culture and community. This new behaviour exemplifies the co-configuration of mobile phone use.

A well-documented area of sociological enquiry now revolves around the transformation of time and space through mobile phone use. [8] The existence of mobile phone technology has led to mobile owners being able to make contact and be contacted every minute of the day, wherever they may be, whatever they are doing. This can be liberating, but such mobilisation is also blamed for the loss of control over oneself as unwanted calls and texts are able to invade all time: work, leisure and rest. This results in a paradoxical situation where one feels liberated, but also more available to others, and hence more liable to be controlled.

Mobiles, however, not only invade the space of the two agents involved in the technological interaction. There has been a reconfiguration of the boundary between public and private space. Those in the vicinity of either agent are hostage to the raised voices discussing topics of no interest to them. The alerts of incoming calls or texts cause irritation to many (Monk et al 2004), so much so that bars, restaurants and transports now boast specific services for people who are tired of mobiles interrupting their personal space. Where mobiles are prohibited, individuals believe they can reclaim their own sense of space and not feel inferior to the person on the other end of their neighbour’s mobile phone. Resembling passive smoking, constant chatter is polluting public space.

The invention of the camera phone has further complicated the public/private debate as pictures can be taken relatively discreetly and distributed to a wider audience without permission.[9] However, extensive literature exists on the public/private nature of mobile phone use and this will consequently be limited in my discussion.

The research conducted is therefore set in the context of existing work on communication technology. This study acknowledges the wealth of data that focus on the quantitative use and uptake of mobile phone technology, but notes that existing accounts fail to explain adequately the role or use of mobiles in the everyday experience of users. I overcame this weakness by undertaking a detailed phenomenological study in order to ascertain the subjective experience of the role of mobiles in the participants’ everyday life.

Method

The focus of this research is the subjective responses of individuals to their mobiles. Several authors commend this approach. Appadurai (1986) notes that material artefacts, such as mobiles, can open themselves up to many forms of investigation in pursuit of an understanding of their social meaning and identity, but previous research on technology and culture has favoured adopting an ethnographic approach. Tia DeNora (2000) used the sociology of technology to investigate music as a constitutive feature of human agency, through the use of phenomenological ethnography and in-depth interviews. DeNora emphasises the importance of the use of ethnography wherever subjective responses are a prerequisite to conclusions drawn.

There is no shortcut to this issue; only ethnographic research will do, and only ethnographic research has the power to elaborate our conceptualisation of what such processes entail...(DeNora 2000:38)

Bull (2000) studied personal stereo use and undertook a phenomenological ethnography which “follows users as they struggle to maintain their corporeal integrity of self through the technological organisation of space and place.”[10]

Phenomenology is a method that permits an adequate understanding of the users’ habitual daily activities as it is attentive to the way in which social meanings are bedded down in individual forms of experience...Phenomenological method lends itself to an investigation of the structure of technologically mediated forms of everyday experience by permitting the dual study of the structure of experience together with the sedimented meanings underlying the daily experience of subjects. (Bull 2000:10)

Relying upon observations of personal stereo use and discussions with their users, Bull is able to build a vivid picture of how the personal stereo is incorporated into the daily lives of users in the city.

By attending closely to how users describe their activity, it is possible to develop a structural framework that incorporates notions of space, place, time, cognition, (looking, listening, thinking, remembering) and the interpersonal within a critical framework encompassing the concepts of control, management, contingency and asymmetry. (Bull 2000:12)

Hence, I replace the personal stereo with the mobile and simulate the work of Bull to build a picture of mobile phone usage in everyday life using diaries, focus groups and interviews. Whilst gathering the qualitative data I encouraged the participants to speak for themselves so my analysis can reveal the sedimented meanings underlying their everyday lives.

The sample consisted of 15 mobile phone owners aged between 16-45. The youngest amongst the group (six girls and four boys aged 16-17) were asked to complete a diary of their mobile phone usage, detailing where and when calls and text messages were sent and received, at what time, from and to whom, and, most important, how the communication made them feel.

These diaries were coded and three themes of interest were identified; the contextual framing of use, the changing mental and emotional states of use, and the element of time in mobile phone use. These issues were raised in the focus groups where contributions highlighted an additional theme of mobile phones restructuring social relationships.

Analysis

A delicate web of interrelated themes arises, all stemming from the co-configuration of the individual and technology. New behaviours and rituals arise from the use of the mobile which affect users’ management of their everyday lives. These effects can be envisioned as interconnected themes or the radial threads of a web which encompass aspects such as relationship management, presentation of the self and new experiences for the user. These threads are subsequently interrelated by a spiral weft of time and space, building a rich understanding of how mobiles co-configure everyday life.

The overwhelming issue at hand is the co-configuration of the user and polysemic technology, which highlights how significantly the mobile is incorporated into daily activities both intentionally and unconsciously.

Co-Configuration of the User

My empirical data illustrate that certain technical qualities of the mobile can have profound effects on its user. The theme is recurrent, and is illustrated in many interrelated ways. My findings reveal tendencies and patterns of behaviour across users, but these are sometimes differentiated according to gender or generation. I have attempted to gather the data in as logical a manner as possible, although interweaving lines of thought will be identifiable as the analysis progresses. The identified developments can seem contradictory; users feel accessible yet isolated, mobile yet constrained by perpetual contact. Communication is instantaneous, yet is entirely dependent upon the user receiving the call or message. Interaction is simultaneously private and public, impersonal yet personal (Roos 1993).

To summarise, the co-configuration of the mobile is the key to unlocking the meaning and significance of the mobile in everyday life. The particular properties of this technology create new behaviours which both reflect and generate new social uses of mobile phone technology.

Reconfiguration of Time and Space

Interwoven with the radial thread of new uses configuring new behaviours are the interlocking spiral wefts of time and space. These themes pervade all aspects of the use of the mobile in everyday life, so while it is appropriate to consider them here, their significance should be recalled throughout. The fact that the mobile makes users available 24/7 has not only an impact on time but also on space. This in effect allows users to redraw the boundaries between public and private space in their lives. This has a further effect on relationships: previous private interactions can now impinge into the public domain.

The social etiquette of answering mobiles in public was pursued in the focus groups, but both teenagers and adults decided that etiquette is solely dependent on the situation. It is interesting that they felt there is no right or wrong way to handle incoming calls when in the presence of others.

New Frames of Use

The Production and Redefinition of Need. The production of “need” is typical of many commodities of modern consumer culture. Slater (1997) contends that consumer capitalism provokes unlimited and insatiable needs because they are:

No longer fixed by nature or by the traditional social order. Whereas culture might subordinate need to higher values, consumer culture dreams up ever more needs and enslaves people to a vicious circle of unceasing need feeding off perpetual dissatisfaction. (Slater 1997:77)

The mobile can be used to meet a variety of needs; there is a varying contextual frame of use. It is contended that some of these uses are evoked by the very act of possessing the phone, as they are uses that did not exist prior to being a mobile phone user. This substantiates the view of technological determinism—the technology has produced new “needs” in the lives of its users. However, other data support the contradictory view that it is users who determine how the technology is used and configured. Perhaps it is therefore reasonable to propose a compromise. There is a symbiotic relationship in which neither the technology nor the user is dominant, but both are inextricably intertwined.

There are two main needs for which the mobile is used: functional and non-functional interaction. Functional interaction can be defined as goal-oriented or instrumental communication, using the mobile to fulfil personally defined aims and objectives.

I use mine to find things out, it's quite handy when you need to know something quick. (Clare, 45)

Clare is goal-oriented when she uses her mobile phone. When there is a problem to be resolved Clare uses her mobile phone to complete the task on the spot. As an aspect of time management, Clare prefers to “do things while they're on my mind” rather than wait until she has access to a landline, or can resolve the matter in person. This, in turn, relieves her of future anxiety and concerns she may have experienced prior to using her mobile phone.

It's fantastic. If I'm worried about a bill, or need to chase someone for something, I don't have to wait until no one can see me sneaking to use the school phone or wait until I get home—when I would probably have forgotten about it anyway! I've

paid for [the calls] already, so I may as well use it. (Clare, 45)

Clare's contractual agreement with the network provider stipulates that she can have 200 free minutes of calls a month, and therefore Clare automatically incorporates the cost of calls made throughout the day into her monthly bill. Clare is conscious of the amount of money she has to pay every month for having her mobile and subsequently utilises her mobile as she deems efficient. She sees her mobile as a service and way of life—like having a car; it is little use sitting on the driveway.

The cost-conscious, time-efficient use described here is resonant of a Marxist analysis. Capital markets, where time is money and communication is a commodity, drive the pace of life. Clare's quality of life is therefore enhanced by instantaneous communication at her convenience. Lorna on the other hand rarely uses her mobile phone for making calls:

No, I'll wait until I get home, unless it's really urgent. Don't know why, just habit I suppose. (Lorna, 40)

The individual differences illustrated here highlight the sedimented meanings underlying the daily experiences of users. The definition of "importance" is subjective, differing from individual to individual. Furthermore personal definitions can change over time.

I remember when I got mine for the first time. I swore that I would only use it for emergencies—breakdowns and stuff. It's funny what emergencies come up now—I had to call Harry the other day to make sure he recorded Corrie! (Janet, 45)

Here, Janet is referring to the shift of the mobile's functionality from actual life-threatening emergencies to superficial use for requests for non-essential information. The way Janet uses her phone has changed; owning the phone has evoked new needs. The phone has configured her behaviour, and her perception of what constitutes important use of the mobile has changed.

The teenagers' diaries illustrate that the mobile also fulfils a functional role for them. Their goal was normally information: calling employers to check hours and change shifts, and checking with friends about details and deadlines of homework. However, during the focus group session their interaction focused mainly on non-functional, non-instrumental interests.

This is not to imply that different ages use their mobiles in any identifiable ratio of functional to non-functional social interaction.

It is interesting to observe the potentially contradictory nature of the changes in behaviour or agency caused by the technology. An object that was meant to make life simpler, easier, more efficient and convenient paradoxically produces greater fragmentation of everyday experience and concentration, a radial thread which will be developed later.

The focus group data primarily raised issues of informal social interaction. This is defined as communication that is not undertaken in order to fulfil specified objectives. Keeping in touch, chatting and gossiping are all ways people interact informally and can symbolise the human equivalent of "social grooming" (Fox 2001). The participants described it as fun and feel that it is vital to "keep up to date with" people who are important in their lives.

Discussions revealed that the informal social interaction included gathering information on the caller's life, the lives of others known to both parties and matters of shared interest. Janet, Clare and Lorna chose text messages rather than calls for informal social interaction. I contend that this reflects the strength of the relationship between sender and recipient.

I always text. Well, I see them [friends] all day, everyday, at work, so there's no real need to call them. (Lorna, 40)

Lorna relies on text messages to stay in touch with her friends and nothing more. The texts are superficial in nature—"We arrange what we're going to do for lunch the next day"—and to keep in touch, sending wishes and greetings to the small circle of friends to whom she has given her phone number.

I'll see them soon anyway, so I'd rather not call them when I'd have to worry about how much money I have left on my credit. (Lorna, 40)

Yet again, cost-consciousness is observed, as Lorna acknowledges that during the call she would be concerned about how much it was costing her. She therefore sees text as a cheap means of keeping in touch. She also feels that it may

be unnecessary to call her friends as she meets with them regularly. However, all focus groups agreed that the mobile facilitated communicative “chat,” and in effect, this increased the number of times they would contact each other about trivial matters.

My findings illustrate that this “chat” is not gender specific. The male participants readily admitted to using their mobile phone for trivial purposes.

We talk about nothing most of the time. (Jason, 17)

I'd check with a mate to see what he thought about this shirt I was going to buy. (Richard, 17)

Age was not identified as a variable either, as Janet, Clare and Lorna admitted to “talking nonsense all the time” as well. However, teenagers used calls and text messages to chat, whereas the elder participants opted for text messaging over calling. I propose that the main reasons for this are privacy, empowerment and duplicity.

Privacy, Empowerment and Duplicity.

[I use text] cause it's great for gossiping, cause it's nice and private. I don't have my husband whining in the background 'you're not gossiping again are you?' I tell him it's just another one of those competition texts[11] and he's none the wiser! (Janet, 45)

The secrecy of text messaging has revolutionised the way in which people are practicing informal social interaction. The focus groups said that in the past, they would have called the recipient but found text messages to be a lot more entertaining due to their private nature.

It feels a bit naughty doesn't it? Even if you're not doing anything wrong! [laughs] (Lorna, 40)

As mobiles can increase the privacy of interaction, Ito (2000) believes there is a subsequent empowering of those previously limited by the public nature of landlines in the home. Text messages can be read, replied to and deleted so that even the most suspicious of bystanders is unlikely to know what has been said between the sender and the recipient. If a phone call is received and is of a delicate nature, the user can walk away to where they have more privacy.

Here the design of the mobile facilitates private interaction even within public space and potentially duplicity. For example Janet could conceal her textual gossiping from her husband, just like teenagers could hide romantic conversations from their parents. When the boundary of public and private behaviour is redefined, it allows mobile phone users to create, develop and maintain secret behaviours because of its privatised nature. Drama and excitement can be injected into new relationships and the user can feel greatly entertained by this hidden method of communication. Once again the technology and agent are co-configured.

I too also contended that teenagers would be the most likely to experience the greatest shift in empowerment through use of the mobile. Landline telephones facilitate parents in monitoring and regulating their children's relationships with their peers, as any telephone conversations take place under family scrutiny. I can now add that this escape from surveillance is not confined to the age of the user and that mobile phone interaction enhances the ability of all users to participate in informal social interaction.

The privacy of text messaging seems fundamental to its success. It is, therefore, understandable that mobile phone users admit to being adventurous with the content of their text messages. Whereas older participants tended to use text messages as a means for keeping in touch with those people closest to them—to maintain existing relationships—the teenagers used text as a way to get to know people better, to build relationships. However, the mobile can complicate this process.

The Building & Breaking of Platonic & Intimate Relationships. This generational difference between relationship maintenance and relationship creation illustrates that the mobile has introduced complex new boundaries between “close” relationships.

I wouldn't have had my last three boyfriends if it wasn't for text! (Beccy, 17)

This has major implications for the presentation of self in everyday life, which will be covered in more detail later. Whilst participants acknowledged that texting helps build relationships, some people also blamed this technology for

breaking down relationships.

Ah man, I had this girlfriend and she was totally paranoid. I found out she checked my phone for texts and stuff so I always had to be careful, cause sometimes she would read something into an innocent text message and go ape. So, I had to keep all her text messages—otherwise she would moan I didn't like her, and delete everyone else's. Thing is, I got this new phone and it has a 'Sent Messages' box, and I didn't know it was there. She was checking it though and saw I had been texting other girls. (Rob, 17)

This situation climaxed when Rob's girlfriend deleted all the numbers from his "memory," which will be discussed later. The point here is that informal social interaction is emancipated by the ability to express oneself more freely and flirt over 'private' text messages. However, text messages are only private if the user does not show others sent or received texts, and if others don't find them on your phone. The teenage girls also admitted that it would be common for them to compose and compare messages together.

It's great, 'cos you can totally document your relationship and then you can remind yourself and show your friends how you got together with someone. It's dead sexy. (Carly, 17)

This previously inconceivable phenomenon illustrates that the technology produces new kinds of behaviour that couldn't exist until mobiles were adopted. This indicates that not only do informal social text messages bring the sender and receiver together, but they also act as a topic of discussion for other circles of friends or generate new kinds of rituals and performances around intimate life. The significant technological shift here is the speed at which relationships can be formed—which is only adequately reflected in the speed at which relationships are also broken. Old-fashioned "snail-mail" love letters could be kept and shown to friends during months of courting, but now the immediacy of text is creating new ways for people to form and break relationships.

New Modes of Presenting the Self in Everyday Life

People see their phone as a reflection of themselves and their status, they use it to communicate how they are feeling and to improve their everyday experience of life. (Michael Hulme cited in "Downtime" by Mark Lewis in Computer Weekly, May 20, 2003 www.computerweekly.com Accessed October 1st 2004)

The Presentation of the Self. The "self," argues Goffman, "is not an entity half concealed behind events, but a changeable formula for managing oneself during them" (1974:573). It is "a code that makes sense out of...the individual's activities and provides a basis for organizing them." (1971:366)

Goffman (1959) outlines the dramaturgical role of the self in everyday life; each individual has a role to play in scenes where he must play a part. Each actor has control over the way his audience perceives him and must evaluate the performance of his fellow actors. He must draw from past experience to ensure that he expresses himself in the desired fashion, whilst impressing upon his audience and fellow actors the role he wants to play.

In the global age however, the traditional roles which social actors are required to play are becoming less rigid, subsequently allowing the actor freedom of choice in how to present the self. The mobile can be used as a tool to create, manage and organise the presentation of the self, a prosthetic attachment which facilitates the configuration of identity and the organisation of the user (Lury 1998; Blom and Monk 2003). The need to experiment and extend the parameters of identity is reflected in the compulsive desire to obtain the latest model, the current fascia, up-to-date ring tones, downloadable games, covers and holders. The majority of the younger focus group members had had a phone since age 11, with one boy having one from age 10, another from age 12. Either way, the need to have a mobile phone was summed up concisely by Rob:

Style! (Rob, 17)

Emphasis on the mobile as fashion items has been researched by Leopold Fortunati who believes that "the mobile is an accessory that enriches those who wear it, because it shows just how much they are the object of communicative interest, and thereby desired, on the part of others" (2002:54). However, I found that whereas all teens were conscious of the latest trends and models, the boys were more likely to actually seek the latest gadgets—such as camera attachments and downloadable games. The girls were happy with "whichever phone is cheapest—as long as it isn't a brick" (Sarah, 16). The adults thought the constant new trends were "just gimmicks letting Vodafone line

Beckham's pockets some more" (Clare, 45).[12] Whether they had got their mobile phone free with a bank account, a bottle of juice, or as a gift, none of the teenagers knew of anyone who did not have a mobile phone, but the notion of mobile-phone-as-fashion-accessory was not entirely justified. It seems it has less to do with the model of phone than the fact that you own one.

You need one to fit in. (Greg, 16)

This statement acknowledges the influence of peer pressure and the desire to belong. It now seems that it is not so trendy to "have one to fit in". It now seems that to be really cool you need to have two mobiles. Louise (17) admitted that she owned two mobiles; one she used daily, carried with her at all times, her main phone, and one that she used in order to select her own social group. Two other girls explained that some of their friends had two phones, and the boys did not seem surprised that this occurred. None of the boys or their male friends had a second phone.

The "two-phone" issue will be discussed later in association with the impact this has on the management of relationships, but cannot be ignored here. Louise's second phone is an occasion for her to practice perfect fluidity in her relationships, therefore disentangling herself from solid, grounded relationships.

Tia de Nora (2002) states that "music is used as a referent for the clarification of identity." [13] In other words, an individual's taste in music can further compound her sense of identity. I propose that Louise's need to have two mobiles is a way of strengthening her subjective belief that she can be selective when it comes to choosing her friends; her friendship is an exclusive prize that can be won only by passing the tests she assigns her newest acquaintances. This reinforces her self-image as the popular socialite.

The Management of the Self. Using a mobile phone in public, whether in discourse or text, is behaviour from which others will make inferences. Public mobile phone use is a way for people to practice identity management. An example of Plant's research includes a man dressed in an expensive suit sitting on a train, loudly discussing the fantastic business deal he just clinched with a colleague on the other end of his mobile phone call. Then, much to his embarrassment, the mobile rings, illustrating how "phony" his call actually was.

In this situation, the man is fostering the impression that he is a successful businessman. He has prioritised this as the most essential role to convey to his audience at that point in time. However, the mobile did not have to ring in order to create embarrassment—maybe a close friend of his, a colleague or family member who knew he was not a successful businessman could have entered the train. This would also have caused embarrassment as his false performance would have been evident to people who were aware of his real role.

This example is a perfect illustration of the complexity of impression management described here by William James:

...We may practically say that he has as many social selves as there are distinct groups of persons about whose opinion he cares. He generally shows a different side of himself to each of these different groups. Many a youth who is demure enough before his parents and teachers, swears and swaggers like a pirate among his "tough" young friends. We do not show ourselves to our children as to our club companions, to our customers as to the labourers we employ, to our masters and employers as to our intimate friends. (William James)[14]

This incident reinforces the need for audience segregation as described by Goffman (1959). It is necessary for the user to separate the people in front of whom s/he acts out different roles. Audience segregation will be explored more under the heading of "New Means of Relationship Management" as the issue at hand here is the implication for the self, not others.

Mobile phone technology enables users to freely experiment with the identity they want to portray to their audience; they can play numerous different roles. Mobiles also increase the ability of users to maintain contact with more people in private; consequently, the user has entirely different audiences who are unaware of her alter ego. Therefore, when the mobile user is contacted by one audience whilst in the vicinity of another, the user is placed in a compromising situation—whether to play the role expected of the proximal audience, or to play the role expected by the audience at the other end of the mobile line. For example, Chris was recently "caught out" when his employer called him on his mobile when he was in the pub watching football.

Yeah, [lying] can get you in all kinds of trouble! I pulled a sicky and just spoke to the supervisor who said it was fine. My boss then called me up while I was in the pub and I didn't know whether to pretend to be sick when I knew he'd probably

hear the noise from the pub. All my mates were laughing at me for being so bothered about it, but it 's hard to know what to do. (Chris, 16)

It becomes increasingly complicated to manage a multiplicity of roles. Paradoxically, the mobile gives the user freedom to experiment with the notion of self, but the inability to maintain control over audience segregation results in a potentially fragmented identity.

One of the consequences of being contactable "24/7" is that impression management becomes difficult to sustain. It requires skill to maintain the varying notions of self and to ensure that the right persona is adopted before the right audience. Like any good actor, the role must be learnt off by heart, remembered and performed upon demand.

New Forms of Sociality

Fluid Relationships. Bauman defines the changing nature of relationships as "liquid love":

Having no bonds that are unbreakable and attached once and for all,...the denizen of our modern society... today must tie together what bonds they want to use as a link to engage with the rest of the human world by their own efforts with the help of their own skills and dedication. Unbound they must connect...None of the connections that come to fill the gap left by the absent or mouldy bonds are, however, guaranteed to last. Anyway, they need to be only loosely tied, so that they can be untied again, with little delay, when the settings change—as in liquid modernity they surely will, over and over again. (Bauman, 2003: vii)

The fluidity of modern relationships is assisted by the use of technologies such as Internet dating, e-mails, instant messaging and mobiles. Ultimately, interpersonal bonds are loose, quickly tied and quickly broken.

Unlike 'real relationships,' 'virtual relationships' are easy to enter and to exit. They look smart and clean, feel easy to use and user-friendly, when compared with the heavy, slow-moving, inert messy 'real stuff'. A twenty-eight year old...pointed to one decisive advantage of electronic relation: 'you can always press 'delete.' (Bauman, 2003: xii)

The loose nature of interpersonal bonds was clearly illustrated when one of the focus group members discussed the difficulty of recalling numbers she rarely used—such as those of old school friends and people she met on holiday. Losing her mobile had further loosened the bonds of these fluid relationships. I asked whether losing these contacts was important to her:

Well, I don't know. I never called them, if that's what you mean. It is just kind of expected now though, if you get on with people, to swap numbers. And maybe you do intend to call them, but then, after a while you realise that you would probably have nothing to talk about. It's good to have their number though anyway, just in case. (Andrea, 16)

I asked if she had wanted to get to know these people more.

Nah, it's just like, if you don't take their number at the end of the conversation, you're basically saying that the last half hour—however long it is you were talking for—was a waste of time, 'cos you don't want to see them again. I don't know whether it's for me or them—I suppose it might be both of us? (Andrea, 16)

Yeah, I know what you mean. If it's someone you used to be friendly with and then you've grown apart or something, you need to play nice and not let on you don't have anything in common anymore. Or if it's a friend of a friend you feel almost obliged to be friends with them. (Louise, 17)

It seems that these feelings of obligation are becoming more prolific with the common use of the mobile. The process of individualisation would postulate that the urge to accumulate a growing mountain of numbers is in order to guarantee that each person has the widest of social spectrums to choose from; you can be the reminiscing schoolmate, the doting daughter and the rock chick girlfriend all in the same day. This resonates with the configuration of the self, previously discussed.

Another interesting aspect is highlighted in the passage above. There is an unspoken understanding amongst the teenagers that the taking of numbers does not necessarily mean that the individuals involved desire to pursue the relationship. There may be a new social etiquette forming when it comes to the giving and taking of acquaintances' contact details.

New Influences on Human Capacity

Impact on Memory. Not only has the mobile caused changes in use, it has also produced new kinds of behaviour or agency. From my research, it is obvious that mobiles have had a significant impact on the nature of memory. The use of speed dialling has made the phone book and numerical memory virtually redundant. Phone numbers are no longer learnt “off by heart.” The technological prosthesis, by taking over functions that were formerly human, actually reduces the human capacity to function in the same way. The technical memory function on the mobile has developed into a need to have it, as our former capability to store numbers in our heads is disabled. Jason (17) described how his memory had been affected by mobile phone use.

I even forgot my home phone number the other day! (Jason, 17)

Once a mobile is lost, stolen or damaged, the user has, potentially, lost the numbers of everyone they were in contact with before. Therefore, one of the biggest concerns of the teenagers in the sample was losing their mobile phone, complete with all their friends’ telephone numbers. This was equivalent to losing their “memory.”

It’s not so bad for those people you see everyday, but I had the number of people, you know, from holiday, old school friends. I’ll never see them again to get their number back. (Andrea, 16)

The teenagers relied on the memory function of their mobiles rather than their own memories, as did Clare, Janet and Lorna.

I can never find the address book anymore, cause I never need it! All the people I ever call are in my mobile. (Janet, 45)

I then enquired about who wasn’t “in” Janet’s mobile.

People I never call. Old relatives and neighbours who I don’t ring very often. Actually, tends to be those people without mobiles—if I don’t need to text them I don’t need their number. (Lorna, 40)

I postulate that forgetting contacts’ phone numbers is not just a result of reliance on speed dialling but ultimately, and perhaps more significantly, a result of the changing nature of relationships. People don’t just forget the numbers but the people whom the numbers represent. This is because all relationships and bonds are fluid and no longer committed to heart.

Relationships are catalogued and stored until a time arises when it is in the user’s interest to pursue the relationship. This can be likened to a squirrel hoarding provisions—people “hoard” the number of a new contact in case they wish to pursue this “relationship” later. There is a transformation in the way users perceive durable and transient relationships and a decreasing ability to distinguish between them.

Impact on Concentration. Having observed students disperse after class, it was surprising to note that the first thing each child did was to reach for their mobile phone. Concerns abound that mobile phone users are distancing themselves from the world around them and that instead of enjoying the scenery or the people one meets by chance, they are too engrossed in their “virtual” mobile world (Plant 2000). Teenagers and adults alike reported the mobile as being a distraction. For example, Rob (17) spoke of how he is perpetually conscious of his phone, even when calls or responses to sent texts were not expected or even wanted.

It was the other night, and I was trying to study and I just kept looking at my phone. God knows how long I’ve been doing it for, but I just felt the urge to be with it, sometimes I feel like it is just me and it in a bubble. And I don’t know what I was waiting for, but I just kept thinking ‘someone might call’ or ‘someone might text.’

This heightened awareness of contactability and lowering of concentration may be specific to Rob, but other members in the focus group agreed.

I think it’s when I get bored in class or something, and my mind wanders away, but it seems like my first thought is always ‘has someone tried to call?’ And sometimes I just have to check my phone, like, that minute, right then. (Sarah, 16)
And then the teacher tells you off for fiddling with yourself under the table! [group laughs] (Beccy, 17)

The long-term impact of concentration and studying techniques cannot be confirmed with such a small sample, but

this insight will be developed later under the theme of obsessive-compulsive use.

New Forms of Experience for the User as Subject

The Nature and Character of the User. Co-configuration has an effect on the nature and character of the user as a subject. This particular technology and its particular properties generate new forms of experience. Emotions are experienced which affect behaviour and these are dependent upon the self and the interpretation of the scenario, text or call. Although it is acknowledged that the interactional aspects of mobile phone use depend upon a second party, I argue that whether or not mobile phone users initiate or respond to calls or texts messages, and how they do so, reflects back upon the self. I will demonstrate that the user does not require a second party to experience changes in their emotional state. The effect of mobile phone usage on the nature and behaviour of the user can be classified under the headings below.

Self-centered Empathy. When I asked how receiving calls and texts made them feel, participants replied positively:

- Means someone's thinking of you. (Rob, 17)
- Someone loves you! (Andrea, 16)
- It's exciting, you wonder who wants to talk to you. (Greg, 16)
- Unless you're at school or work and then it can just be dead embarrassing. (Rob, 17)

The recipient projects a meaning to the incoming message which leads to attributing similar motives to the sender. This interpretation of communication as indicative of an emotional state is reflected in the way the girls behave towards others around them:

- Getting a text makes you feel wanted, so if I see a friend and they seem down, when we go our separate ways I send them a text to let them know that I'm thinking of them. (Kat, 17)

If the sentiment is not returned, the desire to try and cheer up the friend in future may be reduced.

- Well, I'll do it once or twice, but if they never do the same for me, why should I bother? There's no point in doing it if they aren't really your friend. (Kat, 17)

It seems apparent, then, that texting someone when they are miserable is not to make them feel better, but to make oneself feel better about having tried to relieve the friend's discomfort, and is actually driven by the desire to have your friends act in a similar way if you needed some support. Returning the text message is also deemed a benchmark of the quality of the relationship.

There is a gender difference here, though, as the men would not text something sentimental to a male friend who was miserable. Instead, they would text an invitation to the pub, to play pool or football. The men, however, would send sentimental texts to female friends of theirs who were feeling down.

Anxiety. The adult focus group sent text messages for gossip, fun or information. When a reply was not instantaneous the women agreed that the recipient must be busy, and did not pay second thought to it. The teenagers did, however, discuss at some length the thought processes behind the "single-blind anxiety" mobiles can initiate. Single-blind anxiety occurs because the mobile is essentially an interactive tool. When the caller/sender initiates contact and does not receive an immediate response the caller/sender is blind as to whether the recipient has received notification of the call/text message. Once again, meaning is attributed to communication or lack of communication. For example, the recipient may not have their mobile phone with them, they may be busy or in the shower. Had they been able to answer or respond, they would have done so accordingly. However, the recipient may also be ignoring the call because they do not want to have contact with the recipient or, in the case of a cheating spouse, the recipient may be with someone else. This uncertainty can lead to paranoia and anxiety until the recipient responds.

The situation described here is particularly problematic when it comes to text messages. The way written text is interpreted depends on the individual reader. The mindset of the individual, previous experiences and logic can lead to completely different conclusions being drawn from the same text. The best international example of this is the interpretation of religious texts, the bible and Qu'ran. This means that the author's intended content of the message can be lost in the reader's interpretation of it. Intent cannot be distinguished from content. The teenage

group acknowledged this problem and discussed the use of “smileys”—a collection of symbols, letters and numbers that imply meaning. “Smileys” are a means of anchoring the meaning of an ambiguous text which should reduce the possibility of misinterpretation. For example:

:o)	happy	;o)	winking
:0(sad	:oX	kiss
>:o[angry	:'(crying
:-o	surprised	: \$	confused

However, despite the potential ability of “smileys” to clarify intent, some of the teenagers were reluctant to use them.

Nah, too much bother. (Carly, 17)

No, they're wicked! Makes sure your mates know when you're being sarky. (Jason, 17)

I suppose. I just can't be bothered though! (Carly, 17)

But it's well worth it—saves grief if you don't want someone to take something the wrong way. (Jason, 17)

As text messages can be misinterpreted by the recipient without the intent of the sender, “smileys” can potentially relieve the risk of anxiety for both parties, anchoring the polysemy of the text. The author will not need to worry that they have been misunderstood, and the message is clear to the recipient. When I asked if text messages were taken the wrong way regularly, all teenagers agreed that it had happened to them at one time or another.

Yeah, I got this one once, and I was like, what the hell is that supposed to mean?! I didn't know if my pal was being a bitch, but it just turned out I read it the wrong way. (Sarah, 16)

It's really bad when you have fallen out with someone though, and you don't know if they're trying to be mean or nice. (Andrea, 16)

I've done that—I wrote this text message and I knew it could be taken two ways, but I sent it anyway. Is that bad? (Sarah, 16) [laughs from group]

Evil! (Andrea, 16)

She deserved it! (Sarah, 16)

This acknowledges that the initiator can intentionally induce anxiety for the recipient by sending ambiguous text messages. Users are able to play with ambiguity.

Sometimes, I'm sure I haven't done anything wrong, but I feel a bit nervous in case I've done something to upset someone without realising it (Louise, 17)

Yeah, and you go racking your brain for the last time you spoke to them. (Rob, 17)

The focus group come up with words such as “confused,” “angry,” “cautious” and even “nauseous” to describe how they feel when they get such a text. Emotions are intensified due to the speed at which the mobile's technical properties allow users to communicate constantly and intensely. This is further compounded when there are no gestures, body language or tone of voice to help interpret the text. The teenagers believe that there are three ways to deal with this situation. The first solution is to ignore the text, waiting until you see the sender face to face. That way “You can tell from the way they stand and stuff” (Chris, 16) whether the text message was intended to cause harm. Secondly, you can respond stating your confusion in order to get the matter resolved as soon as possible, whichever intention was meant. The third outcome is to reply to the text, but does the recipient choose to respond to its “nice” or “nasty” meaning? Choosing to respond positively could alleviate the problem, as a second nasty response from the initiator will at least ease the confusion in the mind of the recipient. Choosing to respond negatively could make things worse. Like the conflicting interpretations of religious texts, confusion can lead to defensiveness and ultimately retaliation:

It's dead bad though, isn't it, cause you can get all angry and then send it and its gone—poof! You can't change your mind and bring it back again. Then, before you know it, you've got World War Three on your hands! (Kat, 17)

However, the problem of single-blind anxiety is magnified when the sender is unaware that the intended content has been misinterpreted. As above, the sender then starts to question whether they have caused upset with their original text message. The speed and ambiguity of the communication compound misunderstandings.

Because text messages can be a practical way of saying things that one would not normally be brave enough to say to people's faces, mobiles can complicate relationships. If a mobile phone users have a problem with each other, text messaging can be used to avoid direct face-to-face interaction. Kat describes this below:

I'd heard that I'd upset a friend of mine, and I knew that I might have done, but I daren't ask her to her face. So I sent her this text message, and it was kind of skirting the issue and I can honestly say I felt sick until she got back to me. (Kat, 17)

Should the recipient of this text have equal confusion as to the content of the message, a situation of double-blind anxiety would exist. The initiator is anxious as to which way the message will be interpreted and the recipient is equally unsure of the intent of the message. Both parties are gridlocked in anxiety. Greg offered a solution to stop this anxiety-cycle.

Why don't you just call them and speak to them? That way neither of you are sitting around playing pop-psychology. Surely, if a friendship meant something to you, that's what you would do? (Greg, 16)

The tone of the voice can act as a way of judging intent, the group agreed, and decided that text messaging can "cause more trouble than it's worth" (Greg, 16). However, there are some concerns about the simplest option taking precedent over what seems to be a new kind of addictive entertainment.

Distraction and Recreation.

It's kind of fun, though, isn't it? You know that you've sent it [the text message] and it can be taken in loads of different ways, and you wonder how the other person will respond. You kind of do it on purpose, then you're thinking about it until they get back to you. (Jason, 17)

Consequently, the speed, ambiguity and game-like interaction of text messaging can perhaps explain the obsessive-compulsive nature of its use particularly amongst teenagers.

The same anxieties and mind games were played with the call function of the mobile, mainly due to the "caller ID" facility.

It's well worse though if you're calling someone to say you're sorry or something, then they don't answer and it's ringing and it's ringing. (Rob, 17)
And you know that they know you've called. (Greg, 17)
Yeah, so do you leave it and hope they call you back or keep calling? (Louise, 17)

Again, the single-blind scenario leaves the caller to speculate about the best cause of action for themselves and the recipient.

Dunno, cause I'm never ready to leave a message, so I kind of feel that I have to call again to be polite, but I don't want to, cause then they will have two missed calls, which is a bit much. (Rob, 17)
Nah, I'd keep calling 'til they answered! (Andrea, 16)
Fair dues, girls call and call and never give you the chance to ignore it! (Greg, 16)

This discussion raised the issue of when it was socially acceptable to answer or not-answer calls.

Depends on the situation, doesn't it? Whether it's an emergency or not (Jason, 17)

I asked Jason how he would know whether the call was an emergency unless he answered it, but he just re-iterated that it was dependent upon the situation. Later on in the group, an alternative line of questioning arose, when alternative opinions came up:

I hate it when you've arranged to be with someone and they spend the whole time on their phone (Carly, 17)
Yeah, a friend of mine came round the other night and she spent like, an hour, on the phone to her boyfriend. And I just thought—what's the point of you coming round here? (Beccy, 17)

This again highlights the subjective nature of defining “emergencies” and the blurring of what private behaviour is acceptable in public space.

The persistence of the women to make their point heard was not mirrored by the men in the group:

...because we have some pride! (Rob, 17)

Adults were not immune to such games, though; a very similar statement was made by Lorna.

There was this one time, this guy was messing me about I think, so I sent him a text, and I knew that it could be taken two ways, but I just figured that it would test him and his response would show, you know, whether he liked me or was just playing with me. (Lorna, 34)

Again, I believe that the anxiety and entertainment derived from these texts are not also dependent upon the ambiguity of the text message—also the ambiguity of the relationship between sender and recipient, hence the emotional turbulence experienced by both. There is an interrelationship between the thought process behind the compilation and receipt of text messages, and the resultant behaviour and experience following it. Ambiguous text messages exemplify co-configuration once more; the new functions available on mobiles result in new behaviours, which further compound the use and meaning attributed to mobile phone use. Lorna, like the teenagers, was unsure about where her relationship was heading, and her uncertainty was relayed back into the use of the technology. One reason behind this is:

You can say things in a text that you can't say face to face with someone (Chris, 16).

Courage. The text function on the mobile allows users to push their communication to the individual's limit. This can be positive:

I wouldn't have had my first few boyfriends if it weren't for text messaging. (Louise, 17)

It's a good way to break the ice with people you don't know that well yet. (Jason, 17)

However, the opportunity to misread the message, the friendship or relationship does not enable the relationships to evolve, and a good deal of face to face interaction is therefore required in order to maintain a strong bond in the early stages.

This once again illustrates the co-configuration theme—new features on the phone have led to new behaviours and emotions.

Obsessive-Compulsive Use. It became evident that many teenagers had become dependent on their phone. Its multiplicity of uses had made them believe that they are unable to function without it. They all needed to have their mobile phone turned on “24/7” (Rob, 17)

I always charge mine at night on my bedside table. It's like a ritual; I charge my batteries and so does he! It's there then if anyone needs me and as an alarm clock to get me up in the morning. (Rob, 17)

Louise went one step further:

It's like, even though I know it's gonna ring and light up and vibrate [when someone contacts me] I get paranoid I've missed a call or something. I will fall asleep with it in my hand and then when I wake up he's there right next to my pillow. (Louise, 17)

Yeah, you just need to know it's there. (Sarah, 16)

But it gets dead mad 'cos sometimes, I can't sleep and just toss and turn and look at my mobile, like someone had called or text and I hadn't noticed since the last time I looked—two minutes ago! [laughs] (Louise, 17)

Louise did seem genuinely concerned about this reflection on her own behaviour and commented “God, I've never realised how bad that is.” It seems appropriate to liken this mobile phone dependency to a kind of technological security blanket. Both Rob and Louise talk about “needing” their mobile phone, although they could not rationalise their own behaviour. Another interesting point about the comments above is that both people anthropomorphised the mobile and even more interestingly, both considered their phone to have a male gender. Neither could justify why

they had done this, and hadn't realised they had done so.

This "need" to be with their mobile phone was not shared by the adult focus group who would turn their phone off—admittedly less and less the longer they owned it. Clare (age 45) got her phone for "emergencies," for example, in case her car had broken down. Although Clare had never needed to use it for this purpose, she compared the mobile to having a safety net.

I know I probably don't need one, like, if I crashed or broke down—god forbid— someone else on hand would have one that I could use, but I suppose it's just good to know it's there. It's like a safety net, just in case. (Clare, 45)

Clare has had the phone for two years and started to use it on a daily basis eighteen months ago. She keeps the phone on for incoming calls from her family, her new definition of "emergency," and uses text with her friends as her outgoing means of communicating.

I used to only have it on for when I wanted to use it, make a call or something. But I check it through the day now, on my breaks, in case one of you [implying Janet and Lorna] has text me. As for home, I don't mind turning it off, cause all my friends can get me at home, but I normally keep it on now. Don't really know why. I'll definitely turn it off if it's a special occasion though. (Clare, 45)

Oh, but be careful Clare, that's how I started... I turned mine off at the theatre the other week and checked it in the toilets in case anyone had called or text! (Janet, 45)

It seems that the use of the phone can become slowly addictive, from "my gran's got a mobile phone...in a plastic bag in the bottom drawer" (Chris, 16) to the dependency described above. This growing obsession with the phone can be compared to the addictive feelings experienced by smokers, drinkers and drug addicts. In this context, the term "user" does not simply refer to the practice of utilising a mobile phone. It has connotations of a physical, psychological and at times irrational, dependency on a technological communications device. This may be positive, as it could reduce dependency on tobacco, alcohol and drugs. Ann Charlton and Clive Bates, Director of Action on Smoking & Health UK (ASH), wrote to the British Medical Journal to discuss the correlating relationship between the decline in teenage smoking and the increase in mobile phone use. Although acknowledging that it may not be a causal relationship, Bates suggests that teenagers would rather spend their disposable income on their pay-as-you-go phones.

It's more than something to do with the hands, mobiles are smart, chic and adult. They allow individuality and self-image to be projected through choice of brand and mobile and, like cigarettes, they are important in socialising. (Charlton and Bates 2000:1155)

New Means of Relationship Management

New Strategic Definition of Relationships. To approach the issues of relationship management it is necessary to define how the participants subjectively defined their relationships with people they call and text from their mobile phone.

The people the older focus group had in their "memory" were very close friends and family. Friends and family they see regularly were the ones contacted the most and more often than not they would text rather than call. I have already discussed the motivation that determined whether users chose text versus call. Text messages would be sent to friends who are not in geographical proximity, those who are not seen regularly, but this does not mean the bond between the friends or family is weaker. The focus group discussed that sometimes employment and other responsibilities can mean friends move further apart—but this does not weaken the bond.

That's why text can be so good. If you haven't spoken to someone you really care about for ages because you've had other things on your mind, it doesn't mean you care about them any less. But it can be good to text them cause you don't know what's happening with them and their life. If you call you might be interrupting something so a text is a good way to initiate contact. Then you'll know whether it's safe to call. (Lorna, 40)

When the issue of missed calls arose I asked whether they ever purposely ignored calls because they did not want to talk to that individual.

The only time I ever ignore a call is if I'm really busy, and then I'll call them back when I'm finished—even if I don't like

them! [laughs] I mean, I get the odd cold-call and those mad 'you've won!' text messages but apart from that I would never give my number to someone I don't like (Janet, 45)

The crucial point here is that to give someone her phone number, Janet is already comfortable with the person as a friend and would want to hear from him or her again in future. There is already a sense of strength in the relationship prior to giving out her number. This may be due to the stability in Janet's life and her confident self-image. Janet feels comfortable with her definition of friend, acknowledging that this impacts on the presentation of herself. Thus, she gives her number only to those she defines as suitable to be a friend. As the teenagers are less certain as to how to define and present themselves, they do not have such strong specifications of who gets their number. I have already outlined the complexity of impression management and how numerous roles compound difficulties. Therefore it is only natural that once the teenager has experimented with playing a new role with a new group of "friends" and decided that they do not want to portray that image any longer, they want to discard that relationship. The bond was always loose and weak in order to facilitate immediate release from it.

I sensed, however, that when people have a strong relationship, built on the foundation of family or really knowing someone, the mobile can strengthen the bond. For example, the adults commented that the giving of the mobile phone acts a way of keeping in touch with those closest to them. However, mobiles can also be used to control those closest to you.

Tactical Relationship Development and Modes of Defence. When discussing the potential for the mobile to play an active part in the organisation and construction of social space Louise (17) did not question the use of two phones for different levels or hierarchies of friends. It seems that it is now common to own two phones—one carried at all times, in order to be contacted at all times, and another to be checked less frequently, as a means to manage who contacts you and when.

Sure, I've got two phones. Loads of my friends have. Say you meet someone at a party...it means that if you're not sure about someone, you give 'em your second number. Then, if you like 'em later, when you know 'em better, they get promoted, like, to your proper number. I used to hand out a false number all the time, and still do, to the plebs. This second phone is for the 'unsures' that I haven't decided about yet. (Louise, 17)

When asked whether Louise had any concerns about the other person finding out about this form of deception, she continued:

Nah. If they didn't like it, it's probably 'cos they didn't get upgraded in the first place. They're just bitter cause I can be picky with who my mates are. My mates which have been promoted think it's funny. Those which wouldn't find it funny would never get promoted—and that's the whole point! I'd never be friendly with someone who didn't understand my need to be selective, y'know? (Louise, 17)

I then asked Louise whether she would ever feel concerned that she was given a second rate phone number by another person, and be ranked as an "unsure" herself.

Nah... It's cool. I understand...if it's someone I want to be friendly with. I'd be really annoyed if it was a pleb rubbishing me though! You see, some people you need the right number for—some people you want the right number for. Either way, each person has their designated place in my phone. I know I'll be number one in someone's phone, and last in someone else's. It's all cool. (Louise, 17)

From Louise's account, it seems the mobile is a tool which transforms, boosts and expands Goffman's conversational preserve—the control over who can summon one into dialogue and when he or she can be summoned into it (Goffman 1971). By denying or giving access to the mobile number, Louise is dictating who has access to her.

New Means to Hurt and Attack. The management of everyday life via the mobile is not simply facilitated by the mobile use of the individual, the self. It also relies upon social structures of support to acknowledge individuals' existence via the mobile network. The fact that the mobile is an interactive technology requires someone to call or someone to answer. In this interaction dependent framework, the mobile has been noted as a tool, a weapon as it were, to hurt others.[15]

An abusive way to use the mobile in everyday life involves bullying. Bullying was acknowledged as a way to hurt others—a spiteful attempt to bombard the victim with psychological abuse: taunts, crude remarks and insults.

I know it goes on. It did a lot when we were younger, I think. People picked on the little ones. (Louise, 17)
 We've kind of grown out of that now though. (Sarah, 16) [laughs from the group]
 It's well tight though. (Louise, 17)

There was genuine compassion from the group, and all knew or had heard of someone who had been affected at one time in the past by textual bullying. One of the group highlighted that it was no different from hate mail:

Well, it's been going on forever hasn't it? Nasty notes passed around class, text abuse. It's all the same, nothing's changed.
 It's quicker, that's all. (Rob, 17)
 Nah, it's worse! It's just wrong! (Louise, 17)

When I probed the group for why the use of mobiles in this manner was so wrong, none could identify in any clarity why they thought it worse than, say, face-to-face bullying. However, further investigation would suggest that using the mobile in this way is far more personal than hate mail. As the mobile tends to be carried around at all times by the owner, they can be abused, at all times. They do not only fear the arrival of the post in the morning; they feel dread at every incoming call and text. The attacker is constantly with them, able to strike perpetually. Louise had had a falling out with a friend and described how receiving abusive text messages made her feel:

It's awful, 'cos it's not like you can hang up like a phone call. They're there, and you have to read it all in case you think they might say sorry at the end of the text. But they aren't, and then the next time your phone goes you feel sick in case it's them again. (Louise, 17)

Textual harassment has become such a problem that it is now classified as a criminal offence.[16] The focus groups were aware that the caller/sender identity can be used to track not only the number of the phone, but also the area of use to enable policing of such activity.

There's that thing where people can tell if you're doing it now though. It certainly isn't secret. You can trace it. (Rob, 17)
 And the school would come down hard on you if you did. (Louise, 17)

The adult focus groups were also aware of the use of mobiles to bully others. However, I was able to ascertain that this may be specific to their occupation—classroom assistants—they had been cautioned to be aware of the problem. Even though mobiles are prohibited in class, the adults were aware that they may have little impact on textual bullying and mobile phone harassment.

I mean, they aren't allowed to use them, but we can't really stop them. Even if we could, there is a problem of identifying which messages were upsetting because of something bad happening, or which were intentionally hurtful. (Janet, 45)
 Yeah, you have to trust the kid to come to you with a problem. (Clare, 45)

In contrast, Nicola, who is a mature student and not accustomed to the school environment, was unaware that mobiles could be used to hurt and harass.

Well, I'm glad they didn't have them when I was young then! I would never give out my number! (Nicola, 29)

However, with the increasing use of mobiles, it seems that bullies have a new way to torment their victim—revolving around not having their number. An example from within the focus group:

You know what I hate? When you give someone your number, and then you call them, and they don't answer. And you saw them put your number in their phone, and then when you say 'I called you, you didn't answer, why didn't you answer?' they're like 'well, I don't have your number'. And you know they do have your number and they're just being awkward. This guy kept on doing it to me and I don't give him my number anymore. (Greg, 16)

Greg stood out in this particular focus group as very socially aware of others' intentions, and was not discouraged by this selective behaviour.

It's good to know that the friends I've got are true friends, not fair-weather friends. I'm glad he doesn't have my number (Greg, 16)

It seems that the deletion of numbers is quite prolific, as another member of the same group continued:

That sucks mate. Shit, I remember when my ex girlfriend went through my (mobile phone book) memory and deleted all the girls numbers. Bloody mental. [laughs] That's why she's my ex! It took me forever to get all those numbers back! Actually, some I'll never get back. Bitch! (Rob, 17)

This example illustrates two important things. Primarily, the mobile signified a threat to Rob's then-girlfriend to such an extent that she was compelled to take drastic action. Her own paranoia was alleviated to some extent by the knowledge that Rob would then be unable to contact other women in his life.

Liberating Restraints and Self-Imposed Regulation

The existence of mobiles in daily life allows users to be monitored by the authorities[17] and others with access to their phone. The physical giving of the mobile to a friend or family member can also be symbolic of simultaneously liberating and restraining the user by facilitating perpetual contactability. Behaviour can be further restricted by the financial constraints that underpin mobile phone usage.

Liberating Restraints. The example of Rob's girlfriend (above) indicates her desire to exercise control over his social relationships. Plant suggests that because mobiles can act as tools of surveillance, a person intending to be unfaithful will have one phone for the married partner and another for the lover. This is not to suggest that the mobile is the cause of the affair, but it is worth noting that suspicions can be confirmed via the technological capabilities of the mobile: a record of incoming and outgoing calls and the last text messages sent and received. In Plant's study one girl noted how she always ensured that she saved the last message from her boyfriend "in case he checked"—like when Rob's girlfriend believed that not saving her text messages meant he did not care for her. The mobile seems to breed a feeling of insecurity for those with suspicions, who cannot contact the mobile owner. As one philanderer said:

I would like to turn off my mobile when I'm in bed with someone, but my wife suspects I'm being unfaithful if she can't reach me. (Plant 2000:55)

The adult group, however, had not even contemplated using the mobile as a means to restrict the social interaction of their partner. But they were conscious as parents that giving their children mobiles was a significant means of managing their lives.

I gave [mobiles] to the boys so I could get hold of them when I wanted. Make sure I would know what they were up to, that they were safe. (Clare, 45)

Bestowing the mobile was likened to slackening the reigns, allowing more space for the child. However, it is also apparent that this prestigious giving of rights is also a way for Clare to get hold of the sons at all times—just in case. Interestingly, later on in the interview, I was able to ask under what circumstances she actually called her eldest son.

To be honest, I never call him. He'd kill me! I only ever text him, and if I need to speak to him, I'll write that in a text so that he knows I'm going to call. Yeah, otherwise I'd get into trouble with him for embarrassing him in front of his mates. So, yeah, if I'm out to pick him up from the pub, I'll text him and let him know I'm outside. That way, he can come out when he's ready and his friends can't call him a mummy's-boy (Clare, 45)

Self-Imposed Restriction. Despite the teenagers' awareness of the mobile's ability to contact others and resolve emotional conflicts, they often chose not to as it would cost them too much money. Whereas the adults were prepared to pay a price for convenience, the teenagers were less willing to work out problems using their mobile phone. It seems their needs revolve more around saving money than solving dilemmas. In the example below, Kat explains how a problem with a friend could have been resolved smoothly with a mobile phone conversation, but was prolonged because neither of them would call the other:

Of course, I could have called them. But that would have cost me loads at that time of the day. So you just leave it don't you. Hey, if it's that important to them, they should have called me. Why should I be the one to make the first move? (Kat, 17)

The choice is made and both Kat and her friend stubbornly stick to their idea of who should act first. This example also illustrates how users try to second-guess what the other person should do, knowing that they could call. A paradoxical situation arises where the user is liberated in the way they can communicate, but bound by the knowledge that others will interpret their response or non-response. A generational trend is also uncovered as phone calls are

used to alleviate adults' anxiety whereas mobiles can induce it in the teenagers.

Conclusions

I conclude that Giddens' comment on technology is pertinent to the mobile:

Some of the influences that were supposed to make life more certain and predictable for us, including the progress of science and technology, often have quite the opposite effect. (Giddens 1999b:2-3)

The polysemy of mobile phone technology has a complex, co-configuring effect on its user. Encompassing all public and private relationships at all points in time, the mobile has far-reaching consequences for the self in everyday life. Polysemy leads to contradictory developments in use. Convenient instantaneous communication is accompanied by perpetual consciousness of contactability. The ease with which people can now communicate underlies anxiety of not being contacted. Raised awareness of the proximity of friends, relatives, employers, services and bullies can subsequently influence the mental state of the user. The mobile can increase the metabolic rate of everyday life whilst simultaneously fragmenting daily experience; it can liberate and enhance individual self experimentation whilst constricting and complicating identity management. The popularity of quick, easy and private text messaging has ironically been identified as causing ambiguity and anxiety or even provoking new kinds of group reflection on communicative processes.

Although the sample size is limited, I am still able to identify some gender and generational differences. The main generational trend established was that mobiles were used by the older participants to maintain, strengthen and manage existing relationships, whereas the teenagers were still in the process of developing, organising and, in some cases, manipulating their relationships. It is unclear to what extent this behaviour is the result of teenagers' immature social networks, the growing trend of fluidity of relationships, or is stimulated by the technology itself. The evidence suggests that the technology itself seems to be eliciting fluid behaviour, although I would recommend a larger phenomenological study using similar methods in order to clarify this.

The differences in gender are less obvious. This may have been due to my predominantly female sample. Nevertheless, I identified some variations in behaviour: although both genders (and generations) acknowledged the growing market of mobile phone technology, the males were keen to own a mobile phone with the latest technological functions, whilst the women did not feel the same desire. The males were also less likely to be sentimental with their male counterparts, but both genders felt the mobile enabled them to express themselves more freely to the opposite sex. Both genders described feelings of dependence on the mobile, anthropomorphising it as male.

However, the evidence also suggests an equality of use driven neither by gender nor generation. All participants would use the phone when they subjectively defined a situation as an "emergency," but used the mobile more frequently for informal social interaction and gossip. Everyone believed that no social etiquette could be determined as public social use depends on the specific situation in question. A change in human agency and heightened anxiety was also experienced by both gender and generation when the mobile was used in ambiguous situations.

The polysemy of the mobile is likely to increase as the mobile becomes more of a mobile multi-media communication station than mobile phone. A recent telecommunications article went so far as to say that the mobile is about to become extinct.

Your communication device will be your mobile TV, Video, Camera, Camcorder, Internet, emailer, Route Finder, Games console, Radio, Address book, Record collection...The list is endless and that's only on current technology. (Harper 2004)

I am able to conclude that the impact of perpetual contactability is significant enough to warrant further research into this area and that the combination of mobile and personal visual, audible and interactional technology will also have considerable effects on the everyday lives of their users. Future studies will need to explore the potential impact of the extra functions of developing mobile communication devices on the daily life of their users.

John Thompson highlights another area worthy of further attention:

The ways in which individuals make sense of media products vary according to their social background and circumstances, so that the same message may be understood in differing ways in different contexts. (John Thompson 1995:38)

A more detailed ethnographic approach may enable the researcher to develop this concept in greater depth. It is clear that consumer preferences regarding mobile phone technologies are deeply embedded in the considerations, themes and complexities of everyday life (Ropke 2003).

Endnotes

1. For example, politicians' involvement in extra-marital affairs or television celebrities and sports personalities' use of illegal drugs lead them to resign as the public perception of their private lives is no longer compatible with their public roles.
2. See, for example, Thorstein Veblen 1963.
3. Woolgar, Steve. 1991. "Configuring the User: The Case of Usability Trials." in John Law (ed.) *The Sociology of Monsters*. London: Routledge.
4. Vodafone 2003. "The British Mobile Communications Survey" conducted by MORI.
5. Survey undertaken by ananova for Orange 2002. "Mobile Owners Would Prefer to Lose their Wallet than their Phone." http://www.ananova.com/news/story/sm_598172.html?news.technology
6. The Guardian February 22nd 2003. "Affluent but Anxious and Alienated."
7. Page 21.
8. For the most comprehensive discussion on this issue, I recommend James E. Katz and Mark Aakhus 2002..
9. See <http://mobilemomentum.msn.com/article.aspx?aid=12>
10. Ibid. p. 10.
11. Both focus groups discussed the annoyance of getting text messages that claim that you have won prizes. 'CONGRATULATIONS! You have won £3,000! To claim your prize call/ text your name and age to 12345!' These texts are bogus and cost the caller up to £1.50 per text or per minute. All focus groups say they delete them and ignore them.
12. Clare is referring to the fashionable Vodafone television adverts using footballer David Beckham to promote the camera phone.
13. De Nora 2002: 44
14. Theodore Flournoy, *The Philosophy of William James*. Authorised translation by William James Jr. (London: Constable, 1917) in Erving Goffman 1959: 57.
15. "Bullying by Mobile Phone and Abusive Text Messages." Bully OnLine, website of the UK National Workplace Bullying Advice Line. www.bullyonline.org/related/mobile.htm
16. See the Telecommunications Act 1984 (s.43) and Protection from Harassment Act 1997.
17. See, for example, the case of Neil and Christine Hamilton who were cleared of sexual assaulting Nadine Milroy Sloane at a flat in Ilford, Essex, when their mobile phone use proved they could not have been at the scene of the alleged crime. (R v Milroy-Sloane, 13.06.03)

References

- Agger, Ben . 2004. *The Virtual Self: A Contemporary Sociology*. Oxford: Blackwell Publishing.
- Aoki. Kumiko., and Edward J. Downes.. 2003. "An Analysis of Young People's use of and Attitude towards Cell Phones." *Telematics and Informatics* 20 :349-364.
- Appadurai, Arjun. [ed.] 1986. *The Social Life of Things*. Cambridge: Cambridge University Press.
- Baudrillard, Jean. 1988. *Selected Writings* (ed. M. Poster) Cambridge: Polity Press.
- Bauman, Zygmunt. 1992. "Survival as a Social construct." *Theory, Culture and Society* 9:1-36.
- . 2003. *Liquid Love*. Cambridge: Polity Press.
- Beaubrun, Ronald. and Samuel Pierre. 2001. "Technological Developments and socio- economic issues of wireless mobile communications." *Telematics and Informatics* 18:143- 158.
- Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London: Sage Publications.
- Blom, Jan.O and Andrew F. Monk. 2003. "Theory of Personalisation of Appearance: Why Users Personalise their Personal Computers and Mobiles." *Human- Computer Interaction* 18(3): 193-228.
- Charlton, Anne and Clive C. Bates. 2000. "Decline in Teenage Smoking with Rise in Mobile Ownership: Hypothesis." *British Medical Journal*. Nov (321).

- De Nora, Tia. 2002. *Music in Everyday Life*. Cambridge: Cambridge University Press.
- Featherstone, Mike. 1991. *Consumer Culture and Postmodernism*. London: Sage.
- Fortunati, Leopoldina. 2002. "Italy: Stereotypes, True and False." in *Perpetual Contact: Mobile Communication, Private Talk, Public Performance* edited by Katz, James. E and Mark Aakhus. Cambridge: Cambridge University Press.
- Geser, Hans. 2002. *Towards a Sociological Theory of the Mobile Phone*. http://www.socio.ch/mobile/t_geser1.htm, Accessed October 14, 2004.
- Giddens, Anthony. 1991. *Modernity and Self-Identity*. Cambridge: Polity Press.
- . 1999a. "Runaway World: globalisation." Reith Lectures, 1999. news.bbc.co.uk/1/hi/english/static/events/reith_99/week1/week1.htm. Accessed October 1, 2004.
- . 1999b. *Runaway World: How globalisation is Reshaping our Lives*. London: Profile Books.
- Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. London: Penguin.
- . 1971. *Relations In Public: Microstudies of the Public Order*. Harmondsworth: Penguin.
- Grint, Keith and Steve Woolgar. 1997. *The Machine at Work*. Cambridge: Polity Press.
- Habermas, Jurgen. 1984. *The Theory of Communicative Action, Vol. 1, Reason and the Rationalisation of Society*. Boston: Beacon Press.
- . 1987. *The Theory of Communicative Action, Vol. 2, System and Lifeworld: A Critique of Functionalist Reason*. Boston: Beacon Press.
- Harper, Carl. 2004. "Mobile Phone Evolution." UK Mobiles Sites www.mobilephonesites.co.uk. Accessed October 1, 2004
- Hulme, Michael. 2001 "Me, My Mobile and I" Proceeding of the Computer Interaction Society International Conference. Seattle, USA. cited in "Downtime" by Mark Lewis in *Computer Weekly*, May 20, 2003 www.computerweekly.com Accessed October 1st 2004).
- Ito, Mizuko. 2001. "Mobiles, Japanese Youth and the Replacement of Social Contact." *Society for the Social Studies of Science Meetings*, Boston, 2001.
- Katz, James. E. and Mark Aakhus. 2002. *Perpetual Contact: Mobile Communication, Private Talk, Public Performance*. Cambridge: Cambridge University Press.
- Latour, Bruno. 1991. "Technology is society made durable" in *The Sociology of Monsters*. Edited by J. Law, London: Routledge.
- . 1992. "Where are the Missing Masses? A Sociology of a Few Mundane Artifacts" Pp. 225-258 in *Shaping of Technology/ Building Society: Studies in Sociotechnical Change* edited by W.E. Bijker and J. Law, London: MIT Press.
- Law, John. (ed.) 1991. *The Sociology of Monsters*. London: Routledge.
- Lury, Celia. 1996. *Consumer Culture*. Cambridge: Polity Press.
- . 1998. *Prosthetic Culture: Photography, Memory and Identity*. London: Routledge.
- Mackenzie, Donald. and Judy Wajcman. (eds) 1985. *The Social Shaping of Technology*. Milton Keynes: Open University Press.
- Madge, John. 1965. *The Tools of Social Science; An Analytic Description of Social Science Techniques*. New York: Doubleday Anchor.
- Maffesoli, Michel. 1991. "The Ethics of Aesthetics." *Theory, Culture and Society* 8:7- 20.
- Monk, Andrew., Jenni Carroll, Sarah Parker and Mark Blythe. 2004. "Why are Mobiles Annoying?" *Behaviour and Information Technology* 23(1):33-41.
- Myerson, George. 2001. *Heidegger, Habermas and the Mobile*. Cambridge: Icon Books.
- Pavis, S., H. Masters and S. Cunningham-Burley. 1996. *Lay Concepts of Positive Mental Health and how it can be Maintained*. Final Report to Health Education Board for Scotland.
- Roos, J. P. 1993. "Sociology of Cellular Telephone: The Nordic model (300,000 Yuppies? Mobiles in Finland)." *Telecommunications Policy*. 17 August (6).
- . 2001. "Postmodernity and Mobile Communications." *New Technologies and New Visions... ESA Helsinki Conference, Session D, Thursday 31 August*.
- Ropke, Inge. 2003. "Consumption Dynamics and sociological change—exemplified by the mobile and related research." *Ecological Economics* 45(2): 171-188.
- Schutz, Alfred. 1973. *The Structure of the Lifeworld*. Evanston, IL: Northwestern University Press.
- Slater, Don. 1997. *Consumer Culture and Modernity*. Cambridge: Polity Press.
- Thompson, John. 1995. *The Media and Modernity*. Cambridge: Polity Press.
- Townsend, Anthony M. 2000. "Life in the Real—Mobile Telephones and Urban Metabolism." *Journal of Urban Technology* (7)2:85-104.
- Truss, Lynne. 2003. *Eats, Shoots & Leaves*. London: Profile Books.
- Veblen, Thorstein. 1963. *The Engineers and the Price System*. New York: Harcourt.
- Vodafone. 2003. *The British Mobile Communications Survey*. Conducted by MORI. www.mori.com/polls/2002/pdf/vodafone.pdf. Accessed October 1st 2004.
- Wei, Ran. and Louis Leung. 1999. "Blurring Public and Private Behaviour in Public Space: Policy Changes in the Use and Improper Use of the Cell Phone" *Telematics and Informatics* 16(1-2):11-26.
- Woolgar, Steven. 1991. "Configuring the User: The Case of Usability Trials" in *A Sociology of Monsters* edited by John. Law, London: Routledge.

