

New Media Technologies and the Transition to Personal Public Spheres:
Exploring the Circuit of Mobile Device Use Model

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ABSTRACT — Rooted in the foundational idea that new media entities or mobile devices like the Apple iPod, alongside Smartphones are omnipresent in modern society, this exploration attempts to situate these devices and uncover their place (or lack thereof) in our public sphere. Through a series of qualitative interviews with Toronto mobile device users between the age of 18 and 34, this study uncovers a variety of explorations through the integration of the *Circuit of Mobile Device Use Model*. It examines the ways in which mobile device operators use their technologies; the primary places of use; how these technologies have negotiated place – primarily public spaces; and the dependability on the devices.

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"To each his own bubble, that is the law today" (Baudrillard, 1993: 39).

"As private individuals carrying cellphones enter into public space they engage in new forms of behaviour, develop new codes of social interaction, and face new demands for etiquette" (Crow & Sawchuk, 2008: 144).

CHAPTER ONE: INTRODUCTION

In *Electric Dreams*, Ted Friedman (2005) reflects on innovations in technology that gave rise to the Sony Walkman. Employing Raymond Williams' (1974) notion of "mobile privatization" (26), using new media technology to transform the public sphere into a private space, Friedman concludes that, "the use of [personal mobile] technology [has the power] to insulate the individual from larger social groups, turning even public spaces into private experiences" (Friedman, 2005: 115). Akin to the rise of the Walkman, the current advent of personal electronic devices, such as the smartphone and the Apple iPod, highlight the privatizing potentials of new media technologies through technologically mediated experiences – an encounter that can only exist through the facilitation of a technological device. First introduced in *Television: Technology and Cultural Form*, Williams' concept of mobile privatization is a practical way of scrutinizing a society that is "isolating and connecting, atomizing and cosmopolitan, or inward-dwelling but outward-looking" (Groening, 2008: 110). As a result of the proliferation of mobile devices, public space facilitates sensory overload, as it looks and sounds very different today than it did five years ago. Today, the modern mobile device user is talking or typing into a sophisticated device, be it in a restaurant, on a train or while they pound the pavement on their way to work.

Through technological convergence, the modern smartphone introduced the traditional capabilities of a mobile phone while simultaneously embracing the properties of personal digital assistants and other assorted multimedia applications – including a camera, a web browser and a digital media player. The designation of "mobile phone," is no longer adequate in describing the modern day smartphone. Similarly, innovative personal stereos, like the Apple iPod, have significantly influenced the ubiquitous

landscape of digital music. Promptly fetishized in Western society, the iPod has “become a cultural commodity that has changed how music is shared, transported, distributed, stored, and consumed” (Boradkar, 2005: 22). Blurring boundaries of hegemony between the user and the mobile device, both entities are equally shaped by the intrinsic properties of interactivity, immediacy of response, an amplified sense of control, and an imminence of connection (Gumpert & Drucker, 2007: 10).

According to the Canadian Wireless Telecommunications Association (CWTA), at the end of June 2011, Canadian wireless phone subscribers totaled over 25 million (CWTA, 2011). Half of all phone connections in Canada are now wireless (CWTA, 2011). In early 2011, 75% of Canadian households had access to a wireless phone; accordingly wireless revenues in Canada totaled \$18 billion in 2010 (CWTA, 2011). Mobile broadband subscriptions in Canada totaled 5,668,142 (as of June 2010), which epitomizes 24.2% of total wireless subscriptions. Of the total mobile broadband subscribers, a dominating 86% were subscribers with a smartphone voice and, or data plan (CWTA, 2011). Accordingly, mobile devices have rapidly become one of the dominant communication and information conduits for most individuals in Canada. Couple this growth in mobile phone adoption with the wealth of laptop and tablet usage, and the rise in prevalence of wireless Internet access, and collectively these technologies form a virtually continuous network of connectivity, a state of perpetual contact (Katz & Aakhus, 2002), where an individual is always accessible and always on (Davis, 2010: 1).

In *Why Things Bite Back*, Edward Tenner (1996) illuminates the instabilities and fluxes of the reception of varying novel products and technologies alike throughout history. While history is replete with countless examples of these entities having been initially met with interest and fervor, unforeseen adverse consequences are often encountered, afterwards (Tenner, 1996; Baron, 2010). Professor of linguistics, Naomi Baron (2010) notes, “modern drugs save lives, but benefits must be weighed against side effects. Fast food is convenient, but often makes for a poor nutritional choice. Deep-water rigs increase the world’s access to oil but risk polluting our waters,” similarly, mobile technology, although efficient can actually be counterproductive for face-to-face

engagements (2). Throughout much of the early twenty-first century, the proliferation of cellular telephones, personal stereo devices, handheld organizers and personal gaming systems triggered the birth of a new, digital era. This epoch has been defined by transportable, personal and prosaic communication and entertainment entities. Feasibly characteristic of the hastening tempo of modern life – one that is defined by drive-through mealtimes and services (banking, postal and pharmacy amenities alike) – we are carting our electronic media intake and its subsequent devices, with us, for use on the move (Robinson, 2003: 1).

For some, mobile devices may simply be a means to stimulate the desire to remain occupied while participating in daily tasks such as commuting, engaging in physical activity or simply alleviating boredom. Conversely, they also facilitate a distraction from the hectic and chaotic public, and permit individuals to, “shut out the world in a sense and create [their] own private space – space [they] can carry with [them] wherever [they] go, like a bubble; it’s mobile and privatized” (Streeter, 2005: 10). In Robert Putnam’s (2000) thought-provoking *Bowling Alone*, the political scientist contends that at the expense of technology, individuals are becoming progressively detached from one another. Noting the significant changes in societal and community living, Putnam maintains that this transformation can be attributed to the industrial revolution and the inclination to become increasingly independent individuals – a trend prominent over the last fifty years, throughout the Western world. As a result, he posits that the premises that underpin civic society are decaying as individuals become increasingly disconnected from one another, their communities and society. Paradoxically, while increasing interaction, the ongoing communications upheaval has resulted in a steady decline in intimacy. Increasingly relevant to my own research, this trend is one that needs to be closely scrutinized, in order to further comprehend the impact of new media technologies on an individual level, and also its effects on the public realm.

1.1 Statement of the Problem

Mobile technologies, with particular attention to smartphones and personal stereo devices, have enabled the amalgamation of public and private life – an integration with theoretically infinite inferences concerning sociability. The technological design of mobile media devices requires the user to tailor specific content, whether mp3's and playlists on the iPod, or applications on smartphones, in order to employ the full essence of the device. In this manner, users are permitted and even encouraged to bring these technological entities into the public sphere, and inevitably allow themselves to be potentially segregated from others in the public realm through technologically mediated experiences.

Through my research, I will explore the social implications of ubiquitous mobile devices such as the Apple iPod and the smartphone. I intend to disclose the ways in which this new media landscape permits the renegotiation of public and private spheres, highlighting the isolating properties of these technologies, and the ways in which they impede sharing practices and social interaction.

1.2 Purpose of Research

With the propagation of mobile technologies, several communication scholars have initiated a series of investigations pertaining to the uses of these technologies, particularly in relation to the significance of the entities in the user's lives (Katz & Aakhus, 2002; Ling, 2004; Baron, 2008; Turkle, 2010). Whereas research on the social impacts of the Internet is widespread and acute (Castells, 2001; Katz & Rice, 2002; Turkle, 1995; Wellman, 2006; Young, 1998) studies of mobile device usage, and consequences are limited and insufficient.

Traditionally, Canada has seen slower cell phone adoption rates in comparison to other countries, attributable in part to the relative inexpensiveness of landline telephones. This telecommunications landscape however, has undergone (and is continuing to undergo) considerable change. According to the Canadian Wireless Telecommunications Association (CWTA), "the number of cell phone subscribers increased from 3.5 million

in 1997 to 22.8 million in 2009” (CWTA, 2008). According to the “2011 Cell Phone Consumer Attitudes,” as prepared for the Canadian Wireless Telecommunications Association (CWTA) “nearly half (48%) of mobile phone users between 18 and 34 years old have a smartphone. This group is more likely to have a smartphone compared to those 14 to 17, or 45 years or older. In the 18 to 24 year old group, smartphone adoption is 55%” (CWTA, 2011). As one of my prime devices of study, it is clear that the smartphone is becoming increasingly prominent, and accordingly the effects of this ubiquity need to be explored, especially where it pertains to the reshaping of the public sphere. Despite the fact that this type of research has been investigated in the past, (Crane, 2005; Davis, 2010; Groening, 2008; Lever, 2007; Wellman, 2006) it has yet to be done in Toronto, and accordingly not only is the research germane, but it is also timely.

Despite the ubiquity of mobile devices in Canada, there have been few studies on how young people, predominantly in urban areas, use such devices. Hence, in this study I will present the ways in which mobile device operators use their technologies; the primary places of use; how these technologies have negotiated place – primarily public spaces; and the dependability on the devices.

"The use of the mobile in certain public spaces makes the relation of private and public slightly different" (Cooper, 2002: 22).

"[Mobile devices] favour the progressive encroachment of intimacy in the public sphere and of extraneousness in the private sphere" (Fortunati, 2002: 24).

CHAPTER TWO: REVIEW OF LITERATURE

2.1 Exploring Theoretical Frameworks

"It is largely machines [...] that define what it means to live in a certain epoch – at least, as an economic historian might define life" (Heilbroner, 1994: 69).

"We do not use technologies, as much as live them" (Winner, 1994: 32).

In order to assess the relevance and impacts of technological innovations within the public sphere, it is crucial to explore the various paradigms that have informed communication and technology scholars. While the purpose of this thesis is not to expose how far technology conditions society, it does strive to raise mindfulness of varying theoretical perspectives under the phenomenon of technology. Particularly relevant to the analysis of mobile devices in Western society are the technological determinist perspectives and social construction theory. Technological determinists, such as the likes of American authors Thomas L. Friedman and Ray Kurzweil and scholars Jacques Ellul and Marshall McLuhan, see technologies as efficient in altering the very framework of society. In contrast, social constructivism disputes technological determinism by setting technology in a reflexive position; "technology does not 'act', it is 'acted upon' (Ki, 2007: 15). In *The Social Shaping of Technology*, scholars Donald MacKenzie and Judy Wajcman (2000) "propose that things develop as they do, not merely for technological reasons; on the other hand, they deny simplistic social determinism by maintaining that technology does not emerge from a single social determinant" (MacKenzie & Wajcman, 2000 as cited in Ki, 2007: 15).

2.1.1 *Technological Determinist Perspective*

Technological media are often perceived as self-generating artifacts that autonomously and unconventionally manipulate and affect ways of life. Technological determinism arises in the shadows of countless elucidations of the function of technology in human history (Bimber, 1994: 80). Coined by American sociologist Thorstein Veblen, the technological determinist perspective can be considered a reductionist theory postulating that society's technological development compels its social construction (Ellul, 1964: xviii). Rosalind Williams (1994) stresses this idea, in an abridged declaration that, "technology determines history" (218). Similarly, Neil Postman (1992) affirms that a technological determinist maintains "the uses made of technology are largely determined by the structure of the technology itself, that is, that its functions follow from its form" (7).

In 1967, economist Robert L. Heilbroner compiled a technologically deterministic inspired article entitled "Do Machines Make History?" Today, Heilbroner's original question has changed from "do machines make history," to "how do machines make history". Heilbroner's riposte is effortless: "machines make history by changing the material conditions of human existence" (Heilbroner, 1994: 69). Similarly, Katie Lever (2007) notes within communication principles, "theories that use the technological determinist perspective argue that there are qualities inherent in the nature of certain media that lead to specific and immutable effects on the user and society" (18). Technological determinism comes in two modes – hard determinism and soft determinism. The soft deterministic view holds that technological change "drives social change – but at the same time responds discriminately to social pressures" (Smith, 1994: 2). In contrast, hard determinism views perceive technological development as "an autonomous force, completely independent of social constraints" (2).

Presupposing the notion of technological determinism is that of autonomous technology, the framework that posits technology to be out of human control, while maintaining that it develops with logic of its own. Relevant to the notion of autonomous technology, "technologists and engineers who develop technology lack understanding of

the social impact of technology and are often naïve about the means of controlling it” (Dusek, 2006: 105). Technology has been said to have a logic of its own, sovereign of human desires (106). Val Dusek (2006) explores the twofold means by which society supports the theory of autonomous technology. The first notion asserts that people rarely reject technology, while the second notion posits the tendency of technologies to spawn more technology. Both of these entities result in a vicious cycle – the solution to unanticipated problems caused by a particular technology are merely solved by the invention of new technologies, not the rejection of such (106). Similarly, society tends to adjust to technologies – rather than adjusting technologies to society. Langdon Winner (1977) calls this “reverse adaptation” (Dusek, 2006: 107).

On the premise of positivistic theories, it is crucial to acknowledge mobile devices such as the iPod and smartphones as key to the amendment of societal frameworks. The development of mobile technologies has caused some users to become dependent upon their devices, using them for both connecting and isolating purposes. The pervasiveness of mobile device use has the potential to promote some possible severe effects on both primary users, and society as a whole. Laura Gurak (1995) has cautioned that technological determinism extracts any sense of human agency or hegemony over social conditions. For Gurak, the concept itself of technological determinism “is frightening, for it completely ignores any human agency in the design and implementation of new technologies” (4). Similarly, Sally Wyatt (2008) muses that “[technological determinism] leaves no space for human choice or intervention and, moreover, absolves us from responsibility for the technologies we make and use” (167). Wyatt criticizes that if technologies are in fact developed on the exterior of social interests, then “workers, citizens and others have very few options about the use and effects of these technologies” (167). Hence it may be beneficial to amend deterministic thought, and rather than merely suggesting that technologies determine society, acknowledge that they can “serve as a lens for examining how social order is produced and reproduced through systems of communication” (Campbell & Park, 2008: 372).

2.1.2 Social Construction Theory

While the technological determinist approach commences with a coupling of science and technology and culminates with social conditions, the social construction principle initiates with social conditions and concludes with technology (Arnold, 2003: 238). The rejection of the technological determinist perspective exemplifies society's force in having an effect on the direction of, or the acceptance and dismissal of technology (Dusek, 2006: 99). Accordingly, social constructionists assert that the development of a technology lies in the hands of individuals and interest groups. In *Technology and the Politics of Knowledge*, Andrew Feenberg (1995) uncovered the means by which consumers have dynamically altered technological designs and plans based on their own interests (Dusek, 2006: 103).

At the beginning of the twentieth century, sociologists like Georg Simmel, who was influenced by Kant, developed notions of society that highlighted the construction of the social world (Dusek, 2006: 198). Accordingly, social constructionists emphasize that "a technological artifact is only the totality of meanings attributed to it by various groups" (Dusek, 2006: 205). As technology advances, users' perceptions and attitudes towards these technologies change accordingly, generating new social and cultural practices. These social and cultural phenomena may then change the way technology evolves. This epitomizes the social construction of technology. An alternative to the technological determinist perspective, the social construction paradigm advocates that individuals shape and influence technologies – not the contrary. As such, social constructionism investigates beyond the "physical components and structures of technologies so as to focus on the social dynamics of the media selection process" (Lever, 2007: 19). This theory thus comments on personal technology use, and the ways in which they can be socially constructed; however, the theory itself can only be employed if the constructing technology is functioning under the hegemony of and in the interests of society, or components thereof (Rowland, 2005: 288).

The social construction of technology is exemplified in the figurative relationship between the users of the technology and the technology itself. In the case of my own

research, mobile device users respond to the technological convergence and advancements, and as a reaction, the technology evolves according to the user's demands. In order to fully grasp the social and cultural changes brought forth by the technology – benefits and implications alike – it is crucial to persist in the investigation of individuals' perceptions and uses toward the technology. The social construction of technology (SCOT) explores the literal notion that “devices, artifacts, or inventions are literally physically constructed” (Dusek, 2006: 204).

In Claude Fischer's (1992) *America Calling*, the American sociologist overtly denied the notion of technological determinism in stating that “the telephone did not radically alter American ways of life; rather, Americans used it to more vigorously pursue their characteristic ways of life” (Fischer, 1992: 5 as cited in Arceneaux, 2005: 24). Kristóf Nyíri (2006) muses that the rise of mobile phones radically accentuates the hypothesis of the social constriction of technology. Recognized as a virtually fundamental bow and arrow of its era, the mobile phone is a representative tool of communication in postmodern society. As Nyíri notes, here “‘postmodern’ applies to primarily radical decentralization and fragmentation of social communication, resulting in the casting aside of hierarchical structures, centralized control and linear logic” (60). The modern mobile then, is a reaction to the postmodern encounter, and simultaneously “it is of course, a reinforcer of continued decentralization” (60). While users construct technologies through social forces, mobile device users in turn both present themselves via technology, and accordingly construct the social via technology (Bull, 2001: 192).

Although mobile device users, particularly those who identify with smartphones and personal stereo devices, may experience deliberate or involuntary modes of social isolation, this should not be the primary result of experiences with mobile devices. In solely highlighting this particular insulating aspect, while ignoring the connectivity aspects, ultimately results in reinforcements of the technological determinist framework. It is crucial not to negate the relevance of human agency and social constructions. Contrasting the view that users are merely passive heirs of technology, the social

construction framework sees users as dominant in the role and meanings associated with the construction of a technology (Pinch & Bijker, 1984).

2.2 Technological Convergence

"The current buzz-word is convergence. That means that everything will tend towards one common system which will cover all our needs for communications and entertainment" (Solymar, 1999: 294).

"...digitization set the conditions for convergence; corporate conglomerates created its imperative" (Jenkins, 2006: 11).

The augmentation of digital communication at the end of the twentieth century has encouraged media organizations to distribute audio, text and visual media over a wired, wireless or fiber-optic connection. In response to such, manufacturers of smartphones and mobile devices alike have amalgamated a variety of multi-faceted features to their respective devices that incorporate characteristics from three relevant technologies – the telephone, television and computer. This has been widely referred to as technological convergence.

Through technological convergence, the modern smartphone encompasses the traditional capabilities of a mobile phone while simultaneously embracing the properties of personal digital assistants and other assorted multimedia applications, such as a camera, a web browser and a digital media player. Under the powerful notion of convergence, it is likely that the expression "mobile phone" will soon cease to exist, as it is becoming increasingly inadequate in supporting a noble definition of the technology. In considering the all-encompassing features of the modern mobile device, replete with a camera, media player, debit card, alarm clock, personal scheduler and much more, it becomes clear that the archaic and two-dimensional term "mobile phone" will likely be buried in the graveyard of obsolete technologies, somewhere between the fax machine and the payphone (Campbell & Park, 2008; Lievens et al., 2007; Sundet, 2007; Westlund, 2008).

2.2.1 Varying Perspectives on Convergence

Jay David Bolter and Richard Grusin (2000) discuss the emerging language of new media in *Remediation: Understanding New Media*. They note the prominence of keywords such as transparency, immediacy, hypermediacy and remediation. Accordingly, Bolter and Grusin assert that “convergence is remediation under another name, and the remediation is mutual: the Internet refashions television even as television refashions the Internet” (224). For Bolter and Grusin, convergence is the reciprocated remediation of at least three crucial technologies – the television, computer and telephone – each of which is a crossbreed of technical, social and economic ritual (224).

Acknowledged as the prophet of media convergence, the late MIT political scientist Ithiel de Sola Pool (1983) was the first to lay out the concept of convergence in his anthology, *Technologies of Freedom*. De Sola Pool noted:

A process called the ‘convergence of modes’ is blurring the lines between media, even between point-to-point communications, such as the post, telephone and telegraph, and mass communications, such as the press, radio, and television. A single physical means – be it wires, cables or airwaves – may carry services that in the past were provided in separate ways. Conversely, a service that was provided in the past by any one medium – be it broadcasting, the press, or telephony – can now be provided in several different physical ways. So the one-to-one relationship that used to exist between a medium and its use is eroding. (19)

Similarly, Henry Jenkins (2006) described convergence as, “the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behaviour of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want” (2). In *Convergence Culture: Where Old and New Media Collide*, Jenkins discloses an anecdote about attempting to purchase a primitive cell phone, one that would allow him to solely make phone calls. He candidly revealed that he “didn’t want a video camera, a still camera, a web access device, an mp3 player, or a game system. [...] [He] didn’t want the electronic equivalent to a Swiss Army Knife” (5). To Jenkins dismay, he was told by a myriad of mobile companies that

single-function phones were no longer being manufactured, as there was no market for them – nobody wanted them.

2.2.2 Impacts of Convergence

The smartphone, which is commonly perceived as a media convergence device, brings together “the functionalities of several (formerly) separate digital devices that have recently been introduced into the media landscape” (Pachler, Bachmair & Cook, 2010: 187). Perhaps the most widespread and innovative example of modern engineering in mobile operating systems and applications, is Apple’s iPhone. The iPhone implements the functionality of a camera, music player, web browser, text composer and GPS navigator, alongside the original voice communication utility, and has amalgamated them all together “so seamlessly into a great user experience” (Bernabo et al., 2009: 16).

New media technologies, like the smartphone, have “lowered production and distribution costs, expanded the range of available delivery channels and enabled consumers to archive, annotate, appropriate and recirculate media content in powerful new ways” (Jenkins, 2004: 33). Accordingly, convergence is recognized as much more than merely an opportunity for large corporations and brands to advertise themselves – it represents a reassembly of media aptitude and a remodeling of media aesthetics (35).

In *Smart Mobs: the Next Social Revolution*, Howard Rheingold (2002) asserts that technological convergence possesses immense potential for the “improvement of life and liberty in some ways and (could) degrade it in others,” as he believes that technology has the potential to be “used as both a weapon of social control and a means of social resistance” (xviii). It is undeniable that technological convergence has affected markets and cultures alike, but my primary concern is the interrelated social impacts. In line with the notion of individualism, the sophisticated level of convergence could be counterproductive to social interaction as users become increasingly dependent on their mobile devices. The Canadian Broadcasting Corporation (CBC) documentary *Are We Digital Dummies?* measures the ways in which technological devices are influencing our personal lives – in both adverse and constructive ways – and echoes a crucial query: “can

we manage the technology around us, or will we let it manage us?” (CBC, 2011). Consider the plethora of mobile applications available that have the potential to insulate individuals into their own private bubbles away from the public sphere. Through the convergence of smartphones and mobile devices alike, amenities, and media combine and through them, “the world comes to the user and she can impact on the world” (Pachler, Bachmair & Cook, 2010: 8). Accordingly, the mobile device makes the world shift at the user’s command and the user subsequently moves through the world with and through the device.

2.3 The Mobile as an Extension of Wo/Man

“...we orient ourselves to objects or experiences through our embodiment” (Dusek, 2003: 80).

“There is no doubt that televisual technologies have irretrievably altered our sense of embodied ‘location’ and ‘presence’” (Richardson, 2007: 212).

The human body and machines coalesce within media space. The use of headphones on an iPod or applications on a smartphone visibly demonstrate the concept of a technologically mediated experience. Mediation broadens the human body; “its ability to perceive, to express itself, to ‘reach out and touch’ others across space and time” (Van Loon, 2008: 15). American philosopher Albert Borgmann (1984) muses, “the essence of technology is to ramify and attenuate, and thereby eliminate our connection with the social and material world in which we live” (Arnold, 2003: 241). Under Borgmann’s device paradigm, the device performs more functions, and in contrast the user performs less and less. Accordingly, Michael Arnold (2003) posits, “as we are able to do more and more (through the application of technology) we perform fewer and fewer” (241). It is undeniable that the proliferation of mobile devices has challenged not only conventional conceptualizations of private and public, but also the relationship between communication technology and the body (Campbell & Park, 2008: 373).

2.3.1 McLuhan's "Extensions of Man"

Modern communication devices and interfaces alike append themselves to the human body and accordingly saturate bodily senses. In line with the notable McLuhan aphorism, "media are extensions of the senses," the mobile phone can be perceived as a spare organ, incorporated with the body, often continually (McLuhan, 1967 as cited in Biocca, 1997: 8). Suitably, the mobile is used incessantly as a means of extending the potential reach of the voice and ears across infinite space (Arnold, 2003: 246). In a nation-wide study, scholars Dafna Lemish and Akiba Cohen (2005) found that individuals are increasingly categorizing themselves through their mobile technologies to the extent that they describe these devices as "extensions of [the] self" (McLuhan, 1964: 7). Similarly, the study also revealed that many of the respondents perceived that their mobile devices had "become part of [their] body" (Lemish & Cohen, 2005: 191). As mobile technology becomes an integral part of an individual's day-to-day life, not only are boundaries of public and private traversed, but also there is an apparent blur between where the individual's body ends, and the technology begins.

Mobile technologies, with their ubiquity and subsequent potentials as extensions of the body, should be used to augment communities in the public sphere rather than to merely replace them. This concept is not new. Marshall McLuhan (1964) acknowledged that technological incursions manipulate both "society as a whole, and the individuals who consume them" (McLuhan 1964 as cited in Lever, 2007: 23). It is this modeling of media consumers that McLuhan was concerned with when he argued that technologies and media are extensions of the senses, and thus are augmentations of (wo)man. In Finland, where mobile phone adaption is perhaps the most sophisticated in the world, teenagers acknowledge their devices as mobile phones, but instead use the words *känny* or *kännykkä*, which can literally be translated as meaning "an extension of the hand" (Oksman & Rautiainen, 2003: 294). As the mobile is worn on, or close to the body, many users have categorized the technology as a prosthetic – an addition and extension of their physical selves (Campbell, 2007; Gant & Kiesler, 2001; Hulme & Peters, 2001; Srivastava, 2006). For some, the possession of mobile devices in public spaces becomes

“an essential urban armory acting as an urban digital Sherpa, helping them to navigate through the spaces and time of urban life” (Bull, 2007: 75).

2.3.2 Biocca's *Progressive Embodiment*

Over time, and through what scholars have come to identify as technological convergence, the mobile device now incorporates the functionality of the telephone, computer and the television. Accordingly, these increasingly composite interfaces are worn close to the body, and are perceived directly through, and with the senses. They are embodied – “a progressive embodiment that also happens to be mobile and private, as well as a sensory amplification” (Robinson, 2004: 39). In keeping with McLuhan, Frank Biocca (1997) presents an unequivocally technologically deterministic view in “The Cyborg Dilemma: Progressive Embodiment in Virtual Environments”. In his work, he introduces the concept of “progressive embodiment” which he describes as:

The growing attachment of the human with the mechanical or electronic and mediated, which is increasing over time and [...] becoming integrated into every life, and into everyday life through ordinary items such as wristwatches and wearable devices. (2)

Using a similar point of departure as that of Raymond Williams and Marshall McLuhan, Biocca chronicles a coalescing of technologies and the body. Sherry Turkle (2005) asserts that with the current state of customizable and tailored mobile devices, individuals come to experience these technologies as a “second self” (121). Mobile technologies, with their ubiquity and subsequent potentials as extensions of (wo)man, should be used to augment communities in the public sphere, rather than to merely replace them.

Biocca also notes that, “each progressive step in the development of sensor and display technology moves telecommunication technology towards a tighter coupling of the body to the interface” (Biocca, 1997: 2 as cited by Robinson, 2004: 39). Therefore, as the interface is adjusting and adapting to the body, the body is subsequently adapting to the interface (2). A primary example of this fine-tuning can be exemplified in the power of the mobile device to act as a supplement for human memory. Whereas individuals

once remembered countless phone numbers and e-mail addresses alike, today the utilities of speed dial and electronic phonebooks embedded within mobile devices have functioned to abolish the perpetuation of such practices. As users depend on mobile devices to augment their memory, the dependency on the device increases, thus perpetuating a blur between the boundary of body and technology.

2.3.3 *Coalescing the Body and Technology*

Leopoldina Fortunati (2003) posits that machines are inundating human bodies at a mounting degree as “the human body is already, in essence, technology” (71). Perceived as an atypical machine, the body functions to produce society’s most valuable commodity – “the newly born, the labour force of tomorrow” (72). Accordingly, Fortunati notes, “the body, whole being the real, great domestic technology, is represented as the emblem of naturalness” (72). Not all perceptions of humans and technologies are in line with that of Fortunati. Several scholars and individuals alike consider humans and technologies as separate entities. Technologies are seen as powerful, omnipresent entities that evolve rapidly whereas humans are seen as sluggish and stagnant in comparison. Giuseppe Longo (2003) explains:

On the one hand, the distinction between humans and technology is not sharp, because technology has always played a big role in shaping the intimate nature of humans, and, on the other hand, technology’s evolution has gradually taken the place of human’s evolution and has become a sort of continuation of it. (23)

Speaking directly to mobile devices like the smartphone, Fortunati discovers the links between the body and technology, noting that “the body is assimilated to the machine, objects become technological, technologies become ‘intelligent’” (Fortunati, 2003: 81). Don Ihde (1983) notes that “good” technologies are those that do not call attention to themselves; thus, the better the technology operates, “the more likely it becomes that we may simply grow used to its functions and ‘forget’ that it is there and that it is a significant element in our mediated communication situation” (52). A primary example can be seen in the ease of accessibility of GPS functionalities on smartphones.

Rather than stopping to ask for directions, or calling an individual for assistance, the user can simply input their coordinates and be easily guided to their desired destination. It is then, when human dependencies on technologies such as the mobile device become so common and so efficient, that they are analogous with the body. Juliet Schor (1992) asserts, “once people become acclimated to the speed of the computer, normal human intercourse becomes laborious” (23). In discussing this dependency on the device, there are several associated mental, emotional and physical consequences. One particularly novel effect is explored in what has been called “ringxiety” or “phantom vibrations”.

Directly applicable to ideas of mobile technology and the body, several users have reported sensing vibrations or hearing their phones, when in actuality, they have not. Sometimes referred to as the aforementioned “phantom vibration syndrome” or “ringxiety,” the psycho-acoustic phenomenon was reported in the *British Medical Journal (BMJ)* in December 2010. The study conducted by Michael B. Rothberg found that in a survey of personnel at one medical centre, 68 percent of respondents had reported feeling phantom vibrations, with 13 percent experiencing the sensations daily. Similarly, Ingrid Richardson (2007) asserts, “use of mobile and wearable media can be described in Drew Leder’s terms as an *incorporation* by which we reshape the ability structure of our bodies” (206). In such, Callon and Law (2004) muse that mobile phones can best be thought of not merely as extensions to the body, “instead they are organs, integrated into the body” (Callon & Law, 2004: 9 as cited in Lee, 2008: 44). Accordingly, the human body and machines coalesce within media space, thus the environment fashioned by the mobile device is an assemblage of technology, space and the body.

2.4 Mobile Privatization

"The 'public' is colonized by the 'private'" (Bauman, 2000: 37).

"[Mobile devices] can even more effectively be used to shield oneself from wider surroundings by escaping into the narrower realm of highly familiar, predictable and self-controlled social relationships" (Geser, 2006: 10).

Raymond Williams (1974) first introduced the idea of mobile privatization in *Television: Technology and Cultural Form*, by noting that "at most active social levels people are increasingly living as private small-family units, or, disrupting even that, as private and deliberately self-enclosed individuals, while at the same time there is a quite unprecedented mobility of such restricted privacies" (187). Williams stated that it encompassed escalating mobility and suburbanization with a "home-centered way of living" (20). Mobile privatization is a concept that can be used in a practical way to examine a society that is "isolating and connecting, atomizing and cosmopolitan, or inward-dwelling but outward-looking" (Groening, 2008: 110). The concept facilitates an assessment of the relationship between communication systems and the society in which they are entrenched (Williams, 1974: 19-25). Accordingly, the design of the Apple iPod and its complimentary headphones are inherently private – they enable users to listen and engage with content that others cannot see or hear. Smartphones also facilitate similar ideas of intimacy, isolation and exclusivity. The term "mobile privatization" in this way reflects personal, privatized practices inherent in the technologically mediated experience. In perhaps the most articulate illustration of the concern over isolation and alienation, the *New York Times* facetiously asserted that "if *Waiting for Godot* were written today, Estragon and Vladimir 'wouldn't speak to each other; they'd both be on their cellular phones'" (*New York Times*, 24 Sept. 1995 as cited in Arceneaux, 2005: 25).

Walter Benjamin's (1938) concept of the "theatre box," is comparable to Williams' mobile privatization, where the contemporary equivalents to the locale are mobile media devices such as the television, radio, Internet, personal stereos and cellular phones. These entities are comparable to the theatre box in that they allow individuals to be simultaneously insulated and connected. Individuals can be open and engaged to

particular types of communication while warding off unsolicited contact. Accordingly, innovative mobile technologies become a means of fleeing the “hyperstimulus of modern urban environments” (Groening, 2008: 111). Similarly, Ito et al. circumscribe mobile devices as a form of “cocooning” technology on the premise that “they enable users to experience personalized media ecology that is carried around by the person rather than being attached to a physical place” (Berry & Hamilton, 2010: 114).

Mobile device users who are inevitably immersed in their own space, and concealed by their own new media landscape, are physically aware of public surroundings, yet they are largely acclimated to their own private sphere. These mobile technologies segregate individuals in public spaces, severing them from their surroundings (Ling, 2008). The mobile device user has the ability to generate implied desires for “civil inattention,” and their gadgets act as a justification for not instigating contact (Urry, 2007: 106). Gary Gumpert and Susan J. Drucker (2007) have attributed the rise of “disembodied private space” to mobile technologies. As users erect “media walls,” it is clear that portable headsets and ear buds, alongside their accompanying personal stereo devices, allow individuals to be simultaneously mobile and private. The Apple iPod and smartphones encompass a variety of media applications and features, thus it is essential to note that the “private sound (and video) experience excludes others and deters potential interaction in public space” (13).

Leopoldina Fortunati (1997) explores the socially isolating capacities of the now nearly defunct mobile phone asserting that it is not only an unsociable medium, but that it disables users from communicating with those in physical proximity – those in the users natural community. She notes:

In the hands of [users] the mobile phone has become an especially ‘antisocial’ instrument ... by taking communications back into the individual sphere the mobile phone has not only somehow devalued the rules governing public communicative space but it has carried out a kind of theft: it has ‘stolen’ communicative space from the ‘public’ sphere ... And so it happens that travelers sharing the same train compartment for hours prefer to speak with someone far away ... They converse with ‘elsewhere’ instead of conversing amongst themselves and becoming familiar with one another, and instead [of]

undertaking the adventure of making a new acquaintance, thus agreeing to the public control of whatever is said ... the common property of what is said in the public space is plundered. (2)

As mentioned, privatization is generally linked to notions of protection and shelter, and accordingly, this process of privatization works against social bonds and strong community ties. Fortunati explains the dilemma facilitated by mobile devices in extracting individuals from physical environments to communicate with remote others. This notion of conversing elsewhere, instead of with co-present others can be further explained by the concept of “connected isolation”.

2.4.1 “*Connected Isolation,*” and *Auditory Gazing*

Stephen Groening’s (2008) notion of “connected isolation” – the altering rapport between independence and community brought forth by the implementation of mobile devices and screens in the public sphere is analogous to Raymond Williams’ concept of “mobile privatization” (3). With complete user control of the mobile device, urban sounds that are invasive and unpleasant can be easily replaced by alternative sounds, elected by the user. This soundscape substitution alters the users’ relation to the urban setting and civilization alike by implementing a tailored sense of presence and time. In customizing these settings, mobile device users maximize their self-oriented encounters with the public. Michael Bull (2000) notes that “the use of a [mobile device] ‘drowns out’ geographical space and places [the user] ‘into a room of her own’ by ‘closing her ears and shutting her eyes’ to the space occupied but not inhabited” (52). Tia DeNora (2000) asserts that by calling upon “music’s power as a prescriber of social action, users shape experience, organize the self, and reconfigure their relationships to the urban environment” (Simun, 2009: 923).

Siegfried Kracauer (1995) speaks to the ambiguous and seductive nature of mobile technologies in commenting on the most prominent accompanying accessory – the headphones.

Who could resist the invitation of those dainty headphones?
They gleam in living rooms and entwine themselves around

heads all by themselves; and instead of fostering cultivated conversation, one becomes a playground for Eiffel noises that, regardless of their potentially active boredom, do not even grant ones modest right to personal boredom. Silent and lifeless, people sit side by side as if their souls were wandering about far away. (333)

Alongside his discussion of auditory, mental and emotional intimacy, Kracauer is equally concerned with what mobile technologies are able to achieve socially. It is crucial here to address that individuals no longer communicate with those in close physical proximity. Inevitably, the technology of mobile devices and the accessory of the headphones enable users to prioritize their social encounters. In this way, mobile devices are often used as a form of “conversational preserve,” demarcating whom the user wishes to communicate with.

2.4.2 Erving Goffman's 'Civil Inattention,' and 'Conversational Preserve'

Canadian-born sociologist and scholar, Erving Goffman has contributed enormously to social theory primarily through his work *The Presentation of Self in Everyday Life* (1959). Directly applicable to Williams' notion of mobile privatization are Goffman's most prominent notions of symbolic interaction, civil inattention and conversational preserve. Goffman's work has been revisited by communication and mobilites scholars alike, and is particularly useful for scrutinizing mobile media in the public sphere (Höflich, 2006; Ling, 2008; Persson, 2001).

Civil inattention was coined by Goffman to demarcate the process by which individuals encounter those in local proximity and demonstrate an understanding of awareness in regards to co-present others without imposing or intruding. Joanne Finkelstein (2007) notes that civil inattention is merely “a sign of recognition that others have claims to a shared space or environment, [as such, it acts as a] signal to strangers, a sense of boundary and self-enclosure” (109). Goffman (1971) muses that “this does not mean ignoring others but acting as if they were of no interest, as if we (even if this is not actually the case) were not listening to them” (85).

In “The Insanity of Place,” (1972) Goffman underscores the fundamental significance of interactions in public and semi-public places: “ [i]n these places a fine mesh of obligations obtains which ensures the orderly traffic and co-mingling of participants” (415). The modern mobile user slogs through the public domain, mobile device in tow, which subsequently promotes a sense of civil inattention; the user may look up periodically between social media updates, texts and mobile conversations, but the user’s gaze is not habitually met with an open invitation for interaction. In this manner, civil inattention is directly related to Goffman’s conversational preserve.

Put into “Goffmanian” aphorisms, the public use of mobile devices calls into question notions of public privatization, through a state of ‘conversational preserve’. Goffman defines the notion as:

The right of an individual to exert some control over who can summon him [sic] into talk and when he can be summoned; and the right of a set of individuals once engaged in talk to have their circle protected from entrance and overhearing by others. (Goffman 1971:51)

Here, the mobile user exchanges occasional eye contact with individuals in the public sphere, but does not stop and engage. Instead, the essence of the device itself acts as an easily positioned entity to automatically deter interaction. Michael Bull (2000) muses that personal stereos exemplify a valid demonstration of conversational preserve, “On an everyday level, the use of a [mobile device] is a method of not attending to interactional possibilities” (26). Through age-old practices, users are able to employ their mobile devices as a means of avoiding interactions, and maintaining a sense of privacy, no matter where they are.

Scholars have lamented the decay of social fabric and the deterioration of authentic and socially constructive public interaction, since the industrialization era (Humphreys, 2005: 369). As such, the rise of the machine, “has led to the privatization of public space and displacement of participation in public interactions” (Humphreys, 2005: 369). Public places, restaurants, train stations and coffee shops alike, are ordinarily “‘colonized’ by the private lives of mobile individuals” (Geser, 2002 as cited in

Srivastava, 2006: 10). The ubiquity of mobile devices in the public sphere has meant that the once pronounced distinction between the dichotomy of public and private has become far less obvious.

2.5 Always On: The Tethered Self

"As with the BlackBerry, whose users tend to be 'always on,' it's sometimes not clear who is controlling whom with mobile phones" (Baron, 2008: 35).

*"Wireless communication keeps people connected
"anytime, anywhere" (Galambos & Abrahamson, 2002).*

"Always On, Always Connected" (Research in Motion, Blackberry Slogan).

At the core of what it means to be "always on," is the dependency on the availability and ubiquity of information and communication technologies (ICTs). ICTs that individuals use to be always on vary from smartphones like BlackBerries and iPhones, to laptops and netbooks. Twenty years ago, every activity and relationship had its own place; financial transactions were done at the bank, flirting was done on a date, movies were enjoyed at the theatre, and shopping was done at the local mall. Today, with the growth of convergence in new information and communication technologies, each desire, task and relationship is becoming a continual presence (Agre, 2001: 10). Accordingly, Philip Agre (2001) asserts that because of mobile communication devices, there is a "tremendous shift in human relationships: from episodic to always-on" (10).

University of Texas scholar, Jennifer Deering Davis (2010) uses the term "always on" in her dissertation to refer to "the state of being constantly connected, which has communicative, informational, and psychological implications" (6). By the same token, in *Alone Together: Why We Expect More from Technology and Less from Each Other*, Sherry Turkle (2010) asserts, "these days, being connected depends not on our distance from each other but from available communication technology. Most of the time, we carry that technology with us [and] being alone can start to seem like a precondition for

being together” (155). Turkle describes mediated connections as a form of ‘tethering’ an individual. Michael Bull (2007) further explores this notion:

To be ‘tethered’ can be looked upon either positively or negatively. To be tethered is to be constrained, held down, yet this tethering is often experienced as pleasurable and desired, enabling the urban subject to function better both in terms of cognitive control and in terms of arranging daily experience. One might also look upon tethering as a form of intimacy – of a connection that warms up the hostile spaces and times of daily life. On a world in which physical mobility is the norm, the connectivity engendered in the mobile phone is emblematic of both, the desire for intimate contact with others and the end of shared social urban space. (86)

Similarly, on the technical side, Davis notes that fields such as computer science, telecommunications, and human-computer interaction allude to being always on with phrases such as ubiquitous computing, anytime/anyplace computing, and everywhere (Greenfield, 2006; Davis, 2002; Davis, 2010). These ascribed terms refer to the “technological condition where information and communication processing capabilities are built into a variety of devices and objects, and users can access these computing capabilities from nearly anywhere; they are no longer chained to a desktop computer connected with wires to a corporate intranet” (Davis, 2010: 8).

Despite the aforementioned notions of being always on, users are not actually always present in the physical environment. Consider the extent mobile device users go to, in order to ignore others. In a series of studies conducted by Baron, several participants admitted to having developed strategies for controlling interactions with people they did not want to engage with. These social avoidance mechanisms, such as pretending to talk on the phone when there is no one on the other end, or even looking at the screen to avoid eye contact with someone nearby, will inevitably have a negative impact on social capital and community.

2.5.1 “Perpetual Contact,” & “Absent Presence”

In James Katz and Mark Aakhus’s (2002) *Perpetual Contact: Mobile Communication, Private Talk, Public Performance*, the communications scholars coin the

concept of “perpetual contact”. Through a series of varying and all-encompassing studies of mobile phone use, Katz and Aakhus speak to the ways in which mobile communication “changes the nature and quality of social behaviour and organization” (301). Accordingly, perpetual contact “connotes the ability to contact anyone at anytime from anywhere” (Davis, 2010: 6). Perpetual contact is “an ideal, a form of ‘pure communication’ that does not yet exist due to social and technological limitations,” that is quite identical to the idea of being always on (6). Larissa Hjorth (2007) muses that mobile media function to “push and pull” users, “setting [them] free to roam and yet attaching [them] to a perpetual leash” (Hjorth, 2007 as cited in Berry & Hamilton, 2010: 113). This ‘perpetual leash’ instigates conflict in modes of interaction in the public sphere; any interactions taking place on the mobile are often first priority, at times even over face-to-face conversations.

With mobile devices, individuals have the capability to be physically present, while emotionally and mentally away, based on the portability of these technologies. Kenneth Gergen (2002) deliberates the idea of *absent presence*, which he defines as the “growing domain of diverted or divided consciousness invited by communication technology, and most particularly the mobile telephone. One is physically present but is absorbed by a technologically mediated world of elsewhere” (227). Gergen’s notion is a crucial element of being always on; individuals who are always on simultaneously control their absent presence. The occurrence is quite generic – when a mobile device is in the public sphere, and it rings, vibrates or commands the attention of the user, it encroaches into a person’s physical environment (Davis, 2010: 7). As Sadie Plant (2001) notes, “a ringing phone will often take precedence over the social interactions it disrupts: the need or desire to answer a call often outweighs the importance of maintaining the flow of face-to-face interaction” (7). Similarly, Arnold (2003) posits that the absent invader is habitually “welcomed and given precedent over those who are physically present” (247).

A user’s capacity to manage his or her absent presence will consequently play a role in the ways in which they are seen as always on. Sherry Turkle (1995), denotes this

behaviour as *continual co-presence*, “the management of one’s multiple selves – both physical and mediated – that is enabled by mobile communication” (Davis, 2010: 7). As such, mobile technologies have the capacity to continually distort the dichotomy of public and private realms as the individual engages in private use of the technology.

2.5.2 Effects of Being Always-On

The bulk of the research that pertains to being “always on” highlights potential and analyzed consequences of this continuous availability – both negative and positive. Simply put, the benefits of being always on can include “elimination of time and space constraints, better coordination and planning, increased communication, enhanced productivity, even individual image management” (Davis, 2010: 21). Perhaps the most influential of these benefits is identified by Katz and Aakhus (2002) as the ability to communicate from anywhere, at any time. They note that mobile phones “liberate individuals from the constraints of their settings,” (7) allowing them to remain accessible, despite place and space changes. Similarly, Katz and Aakhus assert the positive productivity outcomes of mobile devices such as BlackBerries, in noting that they can be useful “instruments for managing practical affairs” (Katz & Aakhus, 2002: 8, as cited in Davis, 2010: 21). Technologies such as the mobile phone and smartphone not only inspire individuals to complete tasks more quickly, but also facilitate polychronicity.

Despite some positive outcomes, being always on can lead to a variety of negative consequences. Baron (2008) theorizes that the costs of being always on can be measured in “personal terms, ethically and cognitively, and with respect to social interaction” (213). These theoretically detrimental effects include, “loss of privacy and control, information overload, interruptions, deterioration of work and personal life boundaries, [as well as boundaries of public and private] and addiction” (Davis, 2010: 22). In a study of BlackBerry owners in Canada, Catherine Middleton (2007) found that even though users felt that their devices were giving them better control over communications, the devices actually served as tools for blurring dichotomies of home and work life. Similarly, this same control that users identified, was actually one that was being used

against them, as the BlackBerry essentially functioned to fortify systems of administrative control over employees. Another prominent downside of being always on is divided attention. Agre (2001) maintains that managing several conversations or tasks at once can lead to degraded quality interactions (Agre, 2001). Individuals become more interactive as a result of being always on, but far less intimate. John Locke (1998) muses that “intimate talking, the social call of humans, is on the endangered behaviours list” (19). Similarly, as mentioned earlier, another negative outcome is the lack of boundaries in work and personal life, as well as “an erosion of the public-private distinction” (Katz & Aakhus, 2002: 8). Evident through Middleton’s study, among many others, the challenge of sustaining strong boundaries between work and personal life becomes progressively more problematic in an always-on world (Davis, 2010: 24).

Turkle (2008) has noted the popularity and seductiveness of always-on/always-on-you communication devices that offer up the sense that one can accomplish more, experience “place polygamy” and control more facets of life through their mobile phones (129). The problem concerning control and the mobile device in an always on world, queries where the control actually lies – in the hands of the user, or in the device that is in the user’s hands. Guest Columnist for *The New York Times*, Robert Wright (2008) has said “technological change makes society more efficient and less personal. We know more people more shallowly” (Wright, 2008 as cited in Baron, 2008: 224). Speaking to this idea of vague communities and weak ties, Michael Bugeja notes that “for many users of mobile technology, community metamorphoses into elevator music. We know it is out there but are not really paying attention” (Bugeja, 2008 as cited in Baron, 2008: 224).

Always close to the body, and always on, users tend to their mobiles, and in turn the mobile trains them to need and depend on it (Turkle, 2011: 154). As such, we are tethered to our “always-on/always-on-you” communication devices, and the individuals and entities we reach through them: “people, Web pages, voice mail, games, artificial intelligences [alike]” (Turkle, 2008: 122). In speaking to being always on, Baron posits a useful metaphor for assessing mobile device usage. She notes that although playing the piano is a remarkable skill, practicing incessantly can lead to suffering from carpal tunnel

syndrome. Similarly, she asserts that modern technologies, like mobile phones, are invaluable utilities to human productivity, social connectedness, safety and relaxation; however, we certainly need to reassess our conventions in order refrain from being so reliant on them (Baron, 2008: 231).

2.5.3 Addiction and Dependency

The “always on” realm presents a series of challenges to users and non-users alike; perhaps the most prominent of these trials are the blurring of boundaries and the rise of dependency on technological devices. In 1998, Kraut et al. concluded that compulsive use of new technologies “reduces the individual’s social implication in the real world, and as a consequence, his or her psychological well being, because it produces the kind of isolation, loneliness and depression the individual wants to ease by connecting to the Internet” (Kraut et al., 1998 as cited in Beranuy et al., 2009: 1182). Here we see what can be recognized as the Internet paradox – using the Internet as a means of connecting, when really the opposite is done. On the premise that smartphones and mobile devices alike share the same isolating properties as personal computers, it is crucial to assess the addictive properties of these devices.

Traditionally, the label ‘addiction’ has been retained for clinical narratives, and in turn is often avoided within studies of consumer behaviours (James & Drennan, 2005: 88). Instead, terms such as ‘compulsive,’ or ‘excessive’ are used; these expressions are slightly more subtle, especially in alluding to radical behaviours associated with consumption (88). Mobile addictions or dependencies can be assessed as technological addictions, or non-substance addictions that involve disproportionate “human-machines interactions,” and in turn result in a profound reliance on the device to provide mental and emotional benefits (Griffiths, 1999; Shaffer, 1996; Walsh, White & Young, 2008: 79). As individuals use mobile devices more often, as a means of attaining gratifying outcomes, excessive usage results in addiction (Charlton, 2002; Orford, 2001; Walsh, White & Young, 2008: 79).

Unlike substance-related addictions, mobile device dependencies fail to generate

apparent or visible indications; the addicted individual may appear to behave in a socially tolerable way, thus making diagnosis difficult (Griffiths, 1996; Lemon, 2002; Walsh, White & Young, 2008: 79). What is crucial to note, however, is that as individuals become more reliant on mediated mass communication, they in turn are less dependent on relational interactions in the public sphere (Agre, 2001; Banjo, Hu & Sundar, 2008; Bugeja, 2008; Bakke, 2010). In the animated and vivacious public sphere, replete with cafes, parks, restaurants and shopping centres alike, there is no longer a sense of communal space, but instead a place of social assembly. Turkle muses, “people come together but do not speak to each other. Each is tethered to a mobile device and to the people and places to which that device serves as a portal” (Turkle, 2011: 155).

2.6 Public & Private Space

“As private individuals carrying cellphones enter into public space they engage in new forms of behaviour, develop new codes of social interaction, and face new demands for etiquette” (Crow & Sawchuk, 2008: 144).

“Heidegger (1962) argued that it is only in the private sphere that one can be one's true, authentic self” (Papacharissi, 2010: 132).

The current state of mobile phone subscriptions in Canada, and throughout the world, inevitably indicates a noteworthy change in person-to-person communications within the wider media environment (Brown, Green & Harper, 2002; Katz, 2006; Katz & Aakhus, 2002; Ling, 2004; Sawchuk & Crow, 2008). Accordingly, the omnipresent and pervasive nature of mobile devices is subsequently altering notions of private individuals and communications within public space (Sawchuk & Crow, 2008: 143). Revisiting technological convergence, mobile devices today feature calling, texting, photo, gaming and browsing capabilities. Technological convergence facilitates the blurring of the dichotomy between production and consumption, between making and using media, and between active and passive spectatorship of mediated culture (Papacharissi, 2010: 65).

Perhaps the most beneficial aspect of mobile devices is that they do not require

users to remain static or geographically constrained in order to operate, or to allow communication with others. As Richard Sennett (1992) asserts, “the technology of modern motion replaces being in the street with a desire to erase the constraints of geography” (14). The mobility of appliances like the smartphone “lends itself to usage in places where people themselves are mobile” (Humphreys, 2005: 380). Through the multifunctional capabilities of mobile devices, interactions and conversations no longer take place in confined areas. Accordingly, the rise of mobile devices has “eroded older patterns of individual social behaviour in public space in North America, and in Canada specifically” (Sawchuk & Crow, 2008: 144).

Richard Ling (2004), an established theorist in the use of technologies pertaining to the new media landscape, argues that mobile devices – particularly mobile phones – are reconfiguring social rituals and facilitating social cohesion. Geoff Cooper (2002) similarly notes, “the use of the mobile in certain public spaces makes the relation of private and public slightly different” (22). In this fashion, Leopoldina Fortunati (2002) posits that mobile devices “favor the progressive encroachment of intimacy in the public sphere and of extraneousness in the private sphere” (49). Accordingly, Barbara Crow and Kim Sawchuk (2008) assert that as private individuals carrying cellphones “enter into public space they engage in new forms of behaviour, develop new codes of social interaction, and face new demands for etiquette” (144).

2.6.1 Defining Public & Private

Lee Humphreys (2010) asserts that public places serve as a fundamental location for social engagements. Similarly, according to Stephen Carr (1992), “public places afford casual encounters in the course of daily life that can bind people together and give their lives meaning and power” (45). According to Zizi Papacharissi (2010), public and private may be defined, at the simplest level, on the foundation of mutual exclusivity. Thus, public is purely that which does not remain private, and “can be shared in *common*; is associated with the greater *public good*; [...] can suggest a way for members of a public to become associated and effect action; and can exist within or outside the realm

of the *state*” (27). Papacharissi, in writing about the ambient omnipresence of media in public places and the ways in which they interrupt and re-organize daily routines, channels media scholar Anna McCarthy (2001), who notes:

Public spaces are not purely and self-evidently public; they are, like every other cultural space, characterized by particular configurations of public and private. Indeed, what makes the public/private division such a major category of social power is the fact that it is dynamic and flexible, varying from place to place. Taking this into account allows us to specify, with a great deal of precision, how the visual and bodily constitution of the subject as a citizen, of a consumer, or a trespasser occurs in quantum ways within the spaces of everyday life. (McCarthy, 2001: 121 as cited in Papacharissi, 2010: 125)

Papacharissi asserts that the private sphere model traces the evolution of a citizen who has recoiled from the public sphere of engagement and interaction, to “a technologically enabled mobile private sphere of thought, expression, and reaction, in search of autonomy and expression” (136). What is interesting about this prescribed autonomy is whether it can actually exist in the form of the user exerting control over a device that has substantially altered and controlled modes of interaction.

In order to fully comprehend the latent impacts of mobile devices on dimensions of public and private life, it is crucial to examine the ways in which social interactions in public have traditionally occurred, and changed over time. According to Lee Humphreys (2005) and Robert Putnam (2000) “people have lamented the decline of genuine and socially productive public interaction since the industrialization era” (Humphreys, 2005: 368). Critics have argued that this industrialization and the subsequent rise of machines have led to the “privatization of public space and the displacement of participation in public interactions” (368).

2.6.2 Traversing Public vs. Private Spheres

Gumpert and Drucker (2007) note that “public space is where community rituals are enacted and role identity performed. Rituals of public behaviour include the tacit acknowledgement of others: greetings, nods, handshakes, and kisses” (Gumpert &

Drucker as cited in Kleinman, 2007: 14). The ubiquity of mobile music and communication technologies, in a fashion to many of mobile technology's precursors, has distorted the boundaries that distinguish public and private space. Jürgen Habermas (1989) coined the phrase "public sphere" and by which he means "the public sphere [is] a realm of our social life in which something approaching public opinion can be formed. Access is guaranteed to all citizens" (102). As devices that foster said isolation, mobile devices can be detrimental to the public sphere, in that they result in a renegotiation of public space.

Parallel to the way in which television permitted the break from reality within a domestic setting, mobile devices now offer these same plausible prospects. As such, mobile technology facilitates the broadening of the domestic sphere to the public sphere. Individuals have the capability to be physically present, while emotionally and mentally elsewhere. Joshua Meyrowitz (1985) in a manner similar to Williams' ideas of private encounters in public places suggests that people lose their sense of place when engaging with electronic media, such as cell phones and personal stereos. He muses, "when we communicate through telephone, radio, television or computer, where we are physically no longer determines where and who we are socially" (115). In line with Meyrowitz, Jukka-Pekka Puro (2002) argues when a user is immersed in an activity facilitated by a mobile device, be it talking, texting or browsing, they are "in his or her own private space in the psychological sense, [and] as a result, [the user] is less open to certain social contacts and interactions" (Puro, 2002 as cited in Humphreys, 2005: 371). Accordingly, Puro believes that discussing topics of private and personal concern in public spaces fill the air with private affairs.

As mobile users continue to pervade the public sphere with their isolating devices, they encounter a sense of displacement through their technologies whose portable and insulating capabilities facilitate the "reorganization of public and private realms of experience" (Bull, 2001: 180). As Humphreys notes, private conversations in public places are more than the simple privatization of public space; "it is the constant negotiation of the public and private individual within social interaction groups. [Mobile

device] behaviour becomes a marker for studying such dynamic social processes” (Humphreys, 2005: 381). Accordingly, social relationships no longer rely on physical places, but are distributed through space (Drucker and Gumpert, 1991). New media technologies, like the smartphone, facilitate “the shift of social interaction from private to public places, and conversely from public to private” (Wei & Leung, 1999: 12).

2.6.3 *Notions of ‘Community’*

In what might be a romanticized perception of unity and kinship, Zygmunt Bauman (2001a) asserts that, “words have meanings: some words, however, also have a ‘feel’. The word ‘community’ is one of them. It feels good: whatever the word ‘community’ may mean, it is good ‘to have a community,’ ‘to be in a community’” (1). Similarly, Turkle muses, “communities are constituted by physical proximity, shared concerns, real consequences and common responsibilities. Its members help each other in the most practical ways” (Turkle, 2010: 239). In *The Individualized Society* (2001b), Bauman opposes his earlier perceptions of community, by incorporating his thoughts on the increase of human mobility having detached individuals from their original territories, thus resulting in the demise of community. He argues, “the cellular telephone, offering independence even from wired networks and sockets, delivered the final blow to the claim physical proximity might have had on spiritual togetherness” (38). Similarly, Michael Bugeja (2005) muses that notions of community play a vital role in human moral development. He asserts, “simply put, *community* is a place for ‘communion’ – the true habitat of humanity – where people share lives, rear children and partake in the essentials of healthy and productive living. [...] The conditions of community necessitate face-to-face interaction in physical places” (45).

Today, a walk in the city, through a train station or into a café reveal a puzzling enigma; a series of individuals talking to themselves, with little concern for what is going on around them, content and undaunted by intimate conversations in public spaces. Addressing the rise of mobile devices, the ubiquity of the current state of social capital, and the lack of demarcation between private and public spaces, Turkle (2008) notes:

A train station is no longer a communal space, but a place of social collection: tethered selves come together, but do not speak to each other. Each person at the station is more likely to be having an encounter with someone miles away than with the person in the next chair. Each inhabits a private media bubble. Indeed, the presence of our tethering media signals that we do not want to be disturbed by conventional sociality with physically proximate individuals. (122)

What is crucial to note in Turkle's argument, is not solely the blurring of the private-public dichotomy, caused by users integrating their devices into the public sphere, but rather the fact that the mobile itself has the ability to signify a virtual "do not disturb" sign. Instead, people come together in communal spaces, to communicate – yet not with one another, but rather with, and through their mobile devices, which allow them to be always on. In a sense then, "walled communities" are being fashioned because of the mobile phone (Ling, 2004: 192).

Ursula Franklin (1994) notes "silence has been influenced by all the other things that have changed as our world has become what Jacques Ellul calls a technological milieu, a world that is increasingly mediated in all its facets by technology" (1). Returning temporarily to Goffman's "conversational preserve" the prominence of "silence" in the public sphere emerges once more. Where the sociologist used the phrase to delineate the ability of an individual to wield some hegemony over who converses in public and when, Richard Sennett (1994) similarly describes a lifeless urban space in which the mobile device user falls silent, thus deteriorating the public sphere:

Individual bodies moving through urban space gradually became detached from the space in which they moved, and from the people the space contained. As space became devalued through motion, individuals gradually lost a sense of sharing a fate with others...individuals create something like ghettos in their own bodily experience (366).

It is evident here that mobile devices offer up a method of objecting to interactional possibilities, thus promoting a decline in face-to-face interactions. Through this act of "social malnutrition," and the ability to isolate themselves from society, mobile device users are in turn dismantling structures of community, and the public sphere (Eitzen,

2003). Users are content with going about their own business and not having other members of society interact with them; accordingly the familiarity and confidence individuals may once have shared with one another is deteriorating. As previously stated, mobile device users set boundaries through their devices in order to uphold control of their environment; however, these confines are in turn causing psychological separation from individuals and society (Crane, 2005: 5).

2.6.4 Notions of 'Social Capital'

In Richard Sennett's (1971) *The Fall of Public Man*, the notable professor and author explored a history of public culture and public place, ultimately condemning "structural changes that have harmed the quality of modern urban life" (Katz, 2003: 30). Nearly twenty years later, Sennett's inventory of public changes were echoed by Robert Putnam (2000) in his comprehensive exploration, *Bowling Alone*. The result of Putnam's surveying focuses on "diminished civic engagement, democratic mobilization, citizenship, quality social relationships, trust and social capital" (Katz, 2003: 30).

Richard Ling (2004) noted that one primary area where the effects of mobile devices are being "played out" is in the field of what has been called "*social capital* and its opposite twin, *individualization*" (177). Further, Ling notes, "if the mobile telephone contributes to individualization, it follows that the device also plays into our experience of social capital" (177). Akin to aforementioned notions of community proposed by Turkle and Bauman, Ling defines social capital as "the web of trust and reciprocity that, in effect, binds the individual to society. It is, on the whole, positive, since our ability to trust other social actors facilitates the functioning of society" (178).

While Putnam explores a series of causes related to the disturbance in social capital, he offers little to no discussion on mobile devices. Instead, he asserts that, "Internet surfing, like TV, can play into individualism and can isolate people and monopolize time that might otherwise be spent interacting with their immediate social sphere" (Ling, 2004: 182). Despite the fact that Putnam doesn't directly speak to mobile devices, he does address features encompassed in these devices (web access and

television). Accordingly, he affirms that the results of this decline in “social capital” can be reflected in the demise of habitual forms of community life, and the rise of isolation.

Along with dystopian adherents Putnam and Turkle, D. Stanley Eitzen (2003) upholds the notion that modern technologies, such as mobile devices, have aggravated the decline of community further, and have facilitated a trend of isolation. The scholars argue, “contemporary technologies, while improving the potential for increased levels of communicative activities, actually serve to isolate individuals” (Lever, 2007: 19). Accordingly, scholars who employ this dystopian paradigm in regards to technology deem “as one spends more time engaged in computer interactions, he or she has less time to pursue real time, face-to-face interactions (Putnam, 1995a, 1995b; Turkle, 1996; Eitzen, 2003)” (Lever, 2007: 19).

In *Interpersonal Divide*, Michael Bugeja (2005) discusses the current state of communication in society, noting a rise in interaction, coupled with a steady decline in intimacy. Similarly, Bugeja explores the state of displacement from public to private in observing that individuals are spending far too much time in virtual rather than real environments. He remarks, “such isolation complicates life, not because life has become complex in reality, but because we have forgotten how to cope with the rigors of the human condition” (6). Relevant to this human condition, he discusses the individual’s lifelong quest for acceptance – one that used to be conducted in community. Today, this pursuit of approval is directed as much to virtual as physical place; “[which] widens the interpersonal divide and, in part, addresses why the venerable task of deepening conscience and expanding consciousness has become so difficult in our time” (23).

In striving to build community and trust, individuals must acknowledge the importance of interaction and intimacy. In *Why Study the Media*, Roger Silverstone (1999) describes community as “a version of home [...] but it is public not private, [it] is to be sought and sometimes found in the space between the household and the family and the wider society” (97). These notions of public sphere are contrasted by mobile privatization and its isolating characteristics. Kazys Varnelis and Anne Friedberg (2008) note “we gather at the communal watering hole as we always did; only now we don’t

reach out to those around us. Instead, we communicate with far-flung souls using means that would be indistinguishable from magic for all but our most recent ancestors” (16). Although mobile devices may encourage independence from society and socialization, it is evident that technology cannot provide the same sense of community that face-to-face interaction does. As described by Bugeja, “media and technology may inspire many things but not trust” (Bugeja, 2005: 63).

2.7 Impacts of Mobile Device Use

“[Mobile devices] can even more effectively be used to shield oneself from wider surroundings by escaping into the narrower realm of highly familiar, predictable and self-controlled social relationships” (Geser, 2006: 10).

“Mobility is a dominant discourse of the twenty-first century that reframes the ways we understand notions of place, space and movement” (Berry & Hamilton, 2010: 111).

Mobile devices and their associated technologies are continuously altering the ways in which individuals “coordinate everyday life, in which youth interact, in which business is done, and the ways by which we attain and maintain contact with others” (Ling, 2001: 83). As such, mobile devices initiate innovative senses of rapidity and connectivity to social life. In this respect, Sadie Plant (2001) notes, “the mobile can facilitate the emergence of a new private world, a virtual community which can be pulled together in a matter of moments” (22).

Robert Putnam maintains that over the course of the last 50 years, social life has been dramatically impacted by the rise of technology. Accordingly, the rise of various social trends tends to isolate individuals from one another, more and more. In contrast to Putnam’s romanticized notion of social capital, mobile devices often present us with the counterpoint – individualization. Conflicting with ideas of social capital, alongside its inclination for conviviality, individualization doesn’t embrace community living. Richard Ling (2004) notes, “instead of the coalescing of social groups, there is a centrifugal

tendency and the push toward atomization” (179).

In line with such, Curt Suplee, formerly of the *Washington Post*, asserts the paradox that the current advent of communications technologies increases interaction while reducing intimacy. The science and technology writer affirms “we have seen tenfold increases in ‘communication’ by electronic means and tenfold reductions in person-to-person contact” (Eitzen, 2004: 643). John L. Locke (1998) makes a persuasive contention in his book *The De-Voicing of Society*, musing that e-mail, voice mail, mobile devices and Internet chat rooms are depriving individuals of ordinary social talk. Accordingly, the result as explained by Locke is that “we are becoming an autistic society, communicating messages electronically but without really connecting” (Eitzen, 2004: 643).

In speaking to the potential of mobile devices, Hans Geser (2006) notes that they “reconnect [...] the individual with a smaller, tighter social world, one which is perhaps solipsistic in its concentration on small individual social networks, oblivious to the larger institutional society surrounding it” (8). Geser also argues that mobile devices, particularly cellular phones, achieve this “both as an empowering technology, putting communicative power into the hands of the individual, and as a consequence of its mobility, which removes communication across society from stable and formal institutionalized channels into a de-centralized, individualized network” (8). Mobile devices and acts of communication we engage in using them divert attention from real environments to virtual ones – thus decreasing communal awareness. Even more regretful, Bugeja notes, the mobile device upsurge has occurred (and will continue to flourish) during a phase of “unreliable media coverage about community, rampant housing development in suburban and rural areas, and corporate focus on ecosystems rather than on community service” (Bugeja, 2005: 166). Accordingly, the amalgamation of these issues will inevitably reduce civic engagement and concurrently weaken the influence of neighbours on communal values.

Bugeja discusses the dominoes of technology, which are directly applicable to mobile device users. These mobile technologies filter vital interpersonal signals – “from

eye contact to hand gesture – amplifying or deleting factors that change our perception of the world and each other” (Bugeja, 2005: 181). He notes:

(1) The more technology we use, the less we interact with others in real habitat. (2) The less we interact, the more we rely on technology to entertain ourselves and communicate with others. (3) The more we rely on technology, the less sure we are of boundaries involving space, time, and identity. (4) The less sure we are of boundaries, the more we intrude on others or misinterpret messages. (5) The more we intrude and misinterpret, the less stable our relationships. (6) The less stable those relationships, the more we replace them with virtual ones. (7) The more we fulfill our needs electronically, the less privacy we experience. (8) The less privacy we experience, the more influence marketing has on behaviour. (9) The more such influence on behaviour, the less sound our judgment becomes, intensifying our search for acceptance. (10) The effect? We seek self-help, exposing ourselves to more media and technology, beginning the cycle anew. (181)

Mobile technologies reflect and affect both the cultural and social world in which they are situated. Accordingly, the position of technologies within public spaces can enlighten as to social practices operating within society, as well as the significance of the technologically mediated experience. As portable media devices become increasingly ubiquitous and tailored, they continue to probe and alter everyday cultural practices and spaces, and are thus upsetting divisions and dichotomies of public and private space. Based on the diverse literature explored in this thesis, it is clear that the effects of mobile devices on the public sphere are multifaceted. Accordingly, these varying components inform my research in facilitating my exploration of the motivations for mobile device use, the interactions hindered or augmented by mobile devices and smartphones, and finally the relationship between mobile devices and the ensuing renegotiation of the public sphere.

"[Qualitative] data analysis is the process of bringing order, structure and meaning to the mass of collected data. It is a messy, ambiguous, time-consuming, creative, and fascinating process" (Marshall & Rossman, 1990: 111).

"Qualitative data analysis is a search for general statements about relationships among categories of data" (Marshall & Rossman, 1990: 111).

CHAPTER THREE: METHODOLOGIES

3.1 Sampling

According to the Canadian Wireless Telecommunications Association, "nearly half (48%) of mobile phone users between 18 and 34 years old have a smartphone. This group is more likely to have a smartphone compared to those 14 to 17, or 45 years or older. In the 18 to 24 year old group, smartphone adoption is 55%" (CWTA, 2011). Hence its widespread adoption of mobile devices, this group will be most revealing for data collection; accordingly, this particular study has concentrated exclusively on individuals between the ages of 18 and 34.

In order to fulfill my research demands, I interviewed seven participants from the Toronto area, between the ages of 18 to 34, who have identified as moderate to heavy mobile device users (See Table 1). Gary King, Robert Keohane and Sidney Verba (1994) assert that arbitrary selection is not commonly suitable for small sample research, and advocate for focused, purposeful choices in order to exploit disparities in the assortment of illuminating variables. Consequently, the sample was consciously handpicked to encompass a variation in regards to sex, age, class, income and level of education (King, Keohane & Verba, 1994; Rettie, 2007).

I met with each participant, individually, between January 1st, 2012 and January 17th, 2012. Given the open-ended structure of the interviews, they each facilitated their own distinctive discussions. In allowing the participants to converse freely about their experiences, most of the interviews were about an hour long. In order to verify my findings, I also kept a reflective journal of the interviews and the subsequent data, so that if need be, I could go back and cross-reference by findings.

Table 1: *Subjects of Qualitative Interviews*

NAME	SEX	AGE	OCCUPATION	PHONE
Angelo	Male	29	Graphic Designer	Samsung (Android)
Elizabeth	Female	26	Supply Teacher	iPhone (Apple)
Jessica	Female	21	Undergraduate Student	BlackBerry (RIM)
Bruno	Male	29	Marketing Manager	iPhone (Apple)
Alexandra	Female	23	College Student	Blackberry (RIM)
Isabel	Female	30	Prosecution Clerk	Blackberry (RIM)
Matthew	Male	23	Undergraduate Student	Blackberry (RIM)

3.2 Data Collection

According to Norman K. Denzin and Yvonna S. Lincoln (2005), “Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry” (10). Similarly, Denzin and Lincoln note the aptitude of qualitative research in seeking “answers to questions that stress how social experience is created and given meaning” (10). David Silverman (1997) maintains that open-ended qualitative interviews aid the researcher in acquiring respondents’ insights on interaction and their justification of choices. The plan of study for my own research strived to do just that – to comprehend the ways in which participants renegotiate the boundaries of public and private space, through their mobiles and technologically mediated experiences.

As I am primarily interested in the individual experiences and stories of my participants, qualitative research will help to answer the most critical questions – the “how” and the “why” – using open-ended questions and probes. Stephen L. Schensul, Jean J. Schensul and Margaret D. LeCompte (1999) assert, “semi-structured interviewing and observations offer the most systematic opportunity for the collection of qualitative data” (164). In order to examine the ways in which mobile devices act as an extension of

the self, reshape the public sphere and affect face-to-face interactions, the interview script had to incorporate a wide range of questions pertaining to both usage and public space. Through my interviews, I have contributed to the growing body of knowledge on the relationship between mobile devices and the public sphere, through a compilation of robust qualitative data.

3.3 Ethics, Rules & Regulations

On October 24, 2011, prior to conducting any interviews, I obtained a certificate of authentication and completion of the “Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)”. Accordingly, all participants and interviewees were required to sign consent forms that granted permission to not only conduct the interviews, but also to digitally record them, and subsequently to use them in an analysis and research document. In order to protect anonymity, names mentioned throughout the transcript, including that of the participants, have been replaced with pseudonyms. Accordingly, participants were also given the opportunity to decline any questions, or to even withdraw from the study, without affecting their relationship with the researcher, York University, or any other group associated with the project. As of December 1, 2011 this research project has been reviewed and approved by the Human Participants Review Sub-Committee, York University’s Ethics Review Board, and it conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. In order to account for any disparities, legal woes or ethical mishaps, the interviews were transcribed verbatim and hardcopies of said interviews are available upon request.

3.4 Transcribing the Interviews

In keeping with ethics and investigative responsibility, the interviews were recorded. The interviews were then transcribed – this included both questions asked by the interviewer, and the answers given by the participants. The subject’s answers were in no way edited or corrected, and thus are replete with pauses, sounds and live reactions.

To accompany each transcript, every subject has a corresponding “facesheet” that comprises basic identity details, alongside any relevant information pertaining to the data generation process. This auxiliary data might include any surprises, shifts in tone and inflection, personal feelings, insights, locale of the interview, overall length and any notable transcription details (Lofland et al., 2006).

3.5 Data Analysis

From my selection of interviews, I strove to identify emergent patterns, themes and categories relevant to qualitative data generation. After having devised a series of working and surfacing prototypes for close analysis, the next step required individual scrutiny of the interviews, alongside research of pertinent literature that spoke to the surfacing patterns. As such, I began my analysis by looking at the body of work on mobile devices in my literature review. Focusing on device usage and notions of “public,” provided a body of work from which to assess data from the interviews.

In examining the interviews, alongside other accompanying data sources, several common themes emerged. In turn, these themes were used as a basis for analyzing against preconceived notions. Exceptions to these dominant themes were also noted, and subsequently mentioned. Such themes were recognized through a series of close and recurring readings of the transcripts. To verify announcement, inflections and general tones, each transcript was read while the digital recording played in the background. Themes and issues were identified in regards to topics mentioned and presented by the participants, together with the words, phrases and expressions they used.

3.6 Methodical Limitations

One of my potential concerns with my own research is the structure of qualitative research, and the subsequent perceived lack of accuracy inherent in it. Denzin and Lincoln (2005) note directly, “the work of qualitative scholars is termed unscientific, or only exploratory, or subjective [and as such] researchers have no way of verifying their truth statements” (8). There are several other related shortcomings of qualitative

research, including the “inability to generalize a larger population, to confirm theory or to make any claims to objective truth in general” (Davis, 2010: 38).

In addressing concerns of authenticity and truth in qualitative research, one way to combat apprehensions is through triangulation and analysis. William F. Owen (1984) was fond of a three-fold method of identifying something as relevant and important in his data, “recurrence, repetition and forcefulness” (Owen, 1984 as cited in Davis, 2010: 38). “Recurrence” occurs when “at least two parts of a report had the same thread of meaning, even though different words indicated such a meaning,” whereas “repetition” can be identified as the “explicit repeated use of the same wording,” (Owen, 1984: 275). Similarly, “forcefulness” can be a written or verbal inflection that “serves to stress and subordinate some utterances from other locutions” (275). Using these measures, I can strive to establish a better sense of authenticity behind by qualitative data, by ensuring coherent and thorough data analysis.

Another primary concern with my research is related to the scope of the project, and the ability to concentrate on relevant material. The ubiquity of mobile devices in the new media landscape has subsequently nurtured a plethora of literature pertaining to several different cultural and technological subjects. Accordingly, I will face the challenge of having to maintain my focus and investigating solely what pertains to my research – mobile devices as they contribute to the renegotiation of boundaries of public and private.

Approximately 27.1% of the Canadian population is between ages 18 to 34 (Statistics Canada), thus my research demographic makes up more than a quarter of the Canadian population. However, while my target population is very large, the sample size I am restricted to, for time and resource purpose, will be very small.

3.7 Methodical Strengths

Despite methodological concerns with the possible authenticity and validity of qualitative research, this type of inquiry is extremely useful for the complex nature of my study. According to Robert Yin (2010) qualitative research “is driven by a desire to

explain events, through existing or emerging concepts” (8). Similarly, Robert E. Stake (2010) describes qualitative research as “interpretive, experience based, situationalist and personalistic”. Stake’s overview is directly applicable to the type of information that I am looking for – personal and experience based accounts of the participant’s mobile device usage, thus making the employment of qualitative methods a strengthening factor to my research. Similarly, Matthew Miles and Michael Huberman (1994) explain that another facet of qualitative data is its richness and holism, “with strong potential for revealing complexity; such data provide ‘thick descriptions’ that are vivid, nested in a real context, and have a ring of truth that has a strong impact on the reader” (10). In line with my methodological choices, Naomi Baron (2010) posits that semi-structured interviews with open-ended questions “afford subjects the opportunity to express whatever is on their minds. Through open-ended questions we gain a broad perspective on subjects’ attitudes, rather than prejudging what parameters they might find important” (7).

Traditionally, Canada has seen slower mobile adoption rates in comparison to other countries, attributable in part to the relative inexpensiveness of landline telephones. This telecommunications landscape however, has undergone (and is continuing to undergo) considerable change. According to the Canadian Wireless Telecommunications Association, “the number of cell phone subscribers increased from 3.5 million in 1997 to 22.8 million in 2009” (CWTA 2008). As one of my prime devices of study, it is clear that the mobile phone is becoming increasingly prominent, and accordingly the effects of this ubiquity need to be explored, especially where it pertains to the reshaping of the public sphere. Despite the fact that this type of research has been conducted in the past, (Crane, 2005; Davis, 2010; Groening, 2008; Lever, 2007; Wellman, 2006) it has yet to be done in Toronto, and accordingly not only is my research germane, but it is also timely based on the ubiquity of mobile devices.

"[Mobile devices] can even more effectively be used to shield oneself from wider surroundings by escaping into the narrower realm of highly familiar, predictable and self-controlled social relationships" (Geser, 2006: 10).

"Intimate talking, the social call of humans, is on the endangered behaviours list" (Locke, 1998: 19).

CHAPTER FOUR: RESEARCH QUESTIONS

In James Harkin's (2003) *Mobilisation: The Growing Public Interest in Mobile Technology*, the author posits "the sense of attachment that we feel towards our phones lies more in the imagined connection concealed within it than in the value of the actual connections it facilitates" (16). In contrast, Lee Humphreys (2005) explains that wireless technologies "may both privatize and publicize, atomize and collectivize" (383). As a result of these two contrasting opinions, only further research can explore the ways in which mobile technologies both affect and reflect the cultures that use it (383).

On a small scale, I seek to understand the usage patterns of contemporary mobile device users. I want to explore the ways in which these individuals make sense of their usage, constant availability and the mobile as an extension of their senses. As a result, there are several underlying research questions that I seek to uncover through my qualitative inquiry. Accordingly, there are several theories that inform these research questions that have been mentioned as a means of framing this thesis.

I am particularly interested in exploring the role mobile devices play in individuals' lives, and how this has changed over time. It seems likely that as technology improves, individuals would find more use for their devices, thus increasing the usage over time. As such, my first research question is:

- **RQ1:** *What motivates individuals to use mobile devices and in what capacity?*

Where the first question asks "what" in regards to mobile usage, my second question investigates "how" in regard to the impact on social engagements. My primary interest lies at the intersection of what the ubiquity of mobile devices might mean for the public

sphere, and accordingly for face-to-face engagements. Hence, my second research question asks:

- **RQ2:** *Do mobile devices, specifically smartphones, facilitate an increase, decrease or no change in social interactions?*

My final research question is an intersection between my first two queries that strives to uncover any potential mutable relationship between the mobile device and the public sphere. My final question asks:

- **RQ3:** *What is the relationship (if any) between mobile device use and the renegotiation of the public sphere?*

My research questions are designed to provide substantial qualitative data that contributes to the extensive body of research suggesting that mobile devices hinder face-to-face interactions and intimacy, while augmenting other communicative interactions (Crane, 2005; Davis, 2010; Groening, 2008; Lever, 2007; Wellman, 2006).

My first and second question will be centered on uncovering the primary uses of mobile devices, and they will also explore the main locations of usage. These questions will primarily be used to explore the prominent notion of technologically mediated experiences in blurring the boundaries between private and public. This type of question is designed to approach not only why individuals adopt mobile devices in public places, but also more importantly what they are using the devices for, and how this is inevitably changing preconceived notions of the public sphere. The third question focuses on the structure of mobile devices as entities of privacy and individuality. Ultimately, this inquiry will strive to uncover the ways (if any) in which users transcend the intimate design of these personal devices, to surmount or conform to the isolating potentials of personalized media consumption.

"I think it just totally individualizes our society even more than it already is" (Alexandra, 2012: 18).

"It's evident that some people, they become socially awkward. They don't know how to communicate with people because they communicate through a computer" (Isabel, 2012: 23).

CHAPTER FIVE: FINDINGS & ANALYSIS

5.1 The *Circuit of Mobile Device Use Model*

"As a new type of 'socialness' emerges with a reconfigured social network grounded on distant connectivity [...] the structure of the public sphere faces transformation" (Lim & Lee, 2010: 244).

The contemporary Western person is, primarily, a mobile individual (Cresswell, 2006: 15). Timo Kopomaa (2004) muses, "as nomadic objects, mobile phones are a prime illustration of mobility, which is so characteristic of the postmodern way of life" (270). The aspiration for privatized experience has been exemplified extensively through the history of personalized media use. To explore and contextualize the everyday usage of mobile devices, and the subsequent impacts on the public sphere, it is crucial to not only pursue an inquiry into these devices, but also of their actual uses. Mobile devices have facilitated a change in human capacity "in terms of memory and concentration," while also generating novel forms of "emotional experiences such as duplicity and anxiety" (Rippin, 2005: 1).

As is confirmed by the descriptive material and responses of the seven participants in my qualitative study, mobile devices have a strong effect on the reshaping of the public sphere, and subsequently on the decline of face-to-face interaction. Within these seven interviews conducted, about eight salient themes emerged through data analysis. From these themes, I have developed a theory that I have termed the *Circuit of Mobile Device Use Model*. This five-component model explores the usage of new media technologies and the subsequent conversion to private public spheres (See Figure 1).

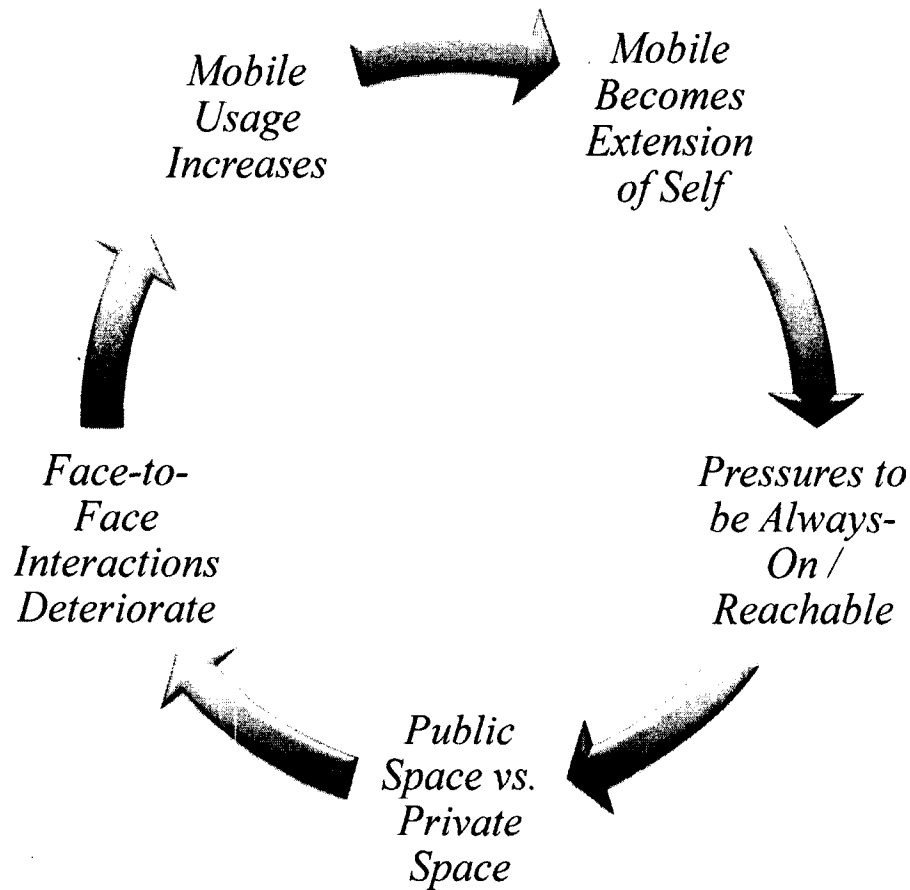


Figure 1: Circuit of Mobile Device Use Model

As Richard Ling (2004) asserts “the adoption of a mobile [device] means that we have to make adjustments and rethink how our ‘mental furniture’ is arranged” (23). Based on my findings, I have uncovered five major components associated with my proposed framework. In the form of a detrimental cycle built on dependency and reliance, these five themes help to understand the ways in which individuals and the public sphere alike have been impacted by the rise and ubiquity of mobile devices. The first step of the *Circuit of Mobile Device Use*, posits that as technology improves and becomes more converged, usage subsequently increases. Users admitted to using their devices more regularly, and for a wide variety of purposes, creating a sense of enslavement to the technology. Interestingly, this first step goes on to query ideas of hegemony – does the user control the device, or does the device exert a sense of control over the user?

As a result of the rise in usage and subsequent reliance on the device, users experience a blur between where their body ends, and where the technology begins. As exemplified in all of my participants, mobile devices are used as an extension of the user and their senses. Some use the devices as extensions of their voices to reach out to other individuals, whereas others use the device as an external memory supplement. As the boundaries between the body-tool relation become blurred and the device is perceived as an appendage, the user constantly has the device on hand, resulting in a change to constant availability, anytime, anywhere. This notion of 'always-on' comes in three forms; the mobile is always on the user, the user is always "on" and available for perpetual contact, and the device is never powered off. As the 'always on' individual moves into the public sphere, they subsequently reshape its properties, as they engage through technologically mediated experiences, thus turning public places into private encounters.

Mobile users take to the public sphere, engaging in mobile conversations with absent others, and accordingly there is a decline in face-to-face conversation. Similarly, as these users engage with co-present others, the mobile device still has the potential to disrupt face-to-face interactions, and often takes precedence in these scenarios. Even if calls or notifications are deferred, they "will be acknowledged, the [device] will be touched, glanced at, apologized for" (Gordon, 2002: 18). Paradoxical, mobile devices promise communication over distances, "yet [they] interrupt communications between those who are face-to-face" (18). As users experience a decline in face-to-face interactions they subsequently turn to their devices as a means of entertainment, communication and filling dead time; thus beginning the cycle anew.

The *Circuit of Mobile Device Use Model* encompasses more than merely a series of discrete variables of mobile usage, but rather an all-encompassing bundle. The model exemplifies that modern mobile device usage is beyond conventional. Similarly, the model is compulsory in that it provides a platform for assessing not only usage, but its subsequent effects on interactions.

5.2 My Mobile Device Usage Has Increased

*"I just wanted a device that could pretty much do,
I don't know, could pretty much do everything.
It's like a handheld computer" (Elizabeth, 2012: 1).*

The starring theme of the *Circuit of Mobile Device Use Model* begins with the rise in device usage, as repeatedly described by users. One of the first inquiries asked participants to consider their personal mobile use today, and how it has changed since they acquired their first mobile device. For all of the participants, the mobile devices they were currently using were not first generation; most users had been through three or four devices, prior to acquiring their current appliances. For many, their current mobile devices not only act as their central means of communication to the outside world, but have also replaced several other devices, including mobile browsers, cameras, alarm clocks and perhaps most important, personal messaging devices. Accordingly, Richard Ling (2004) notes, "mobile telephony is moving away from its traditional base into new, uncharted waters" (22).

As a result of this surrogacy and substitution, many participants expressed a heightened sense of attachment to their devices, some even "felt the mobile phone was a part of them" (Walsh, White & Young, 2008: 88). When asked about why they had chosen the move away from conventional two-dimensional mobile phones and into the world of smartphones, all of the participants expressed the desire for a multi-functional device. Elizabeth, a 26-year-old school teacher, summarizes most of the participants responses, noting, "I just wanted a device that could pretty much do, I don't know, could pretty much do everything. It's like a handheld computer" (1).

5.2.1 Text & Browse vs. Talk

Throughout the interviews, each of the participants discussed the technological aspect of their current devices being much faster, portable and all encompassing. The participants also noted the rise in their own reachability and availability as a result of how much more they used their devices. Perhaps the biggest changes seen in the last ten years in mobile technology involve the rise of the text message in lieu of phone calls, and the

emergence of mobile browsing. The multi-dimensional capabilities facilitated by the progressive and modern smartphone can be exemplified in Bruno, a 29-year-old marketing manager's mobile habits.

I mean, my phone pretty much doubles as a second computer really [...] I use my iPhone for pretty much anything whether it's personal communication, business communication, both voice and through text message or anything like that. I use it for surfing the Internet. I use it for social media, so Facebook, checking my status, doing updates, commenting on stuff, checking Twitter feeds, checking the weather. (3)

Despite the fact that texting is perceived as a very personal, portable and private means of communication, it is often used in rather public places. Marsha Berry and Margaret Hamilton (2010) explore the place-making activity and seclusion afforded by text messaging. They note that while in public places, like trains or buses, "fellow passengers are not afforded the opportunity to eavesdrop of personal matters. [...] Texting is a form of place-making that preserves public face and places no expectations on others to 'ignore' an event that has just taken place or to assume a mask of not listening" (121). Over the course of the last four years, although the scenery and setting may have changed from private house parties, to bars, to outdoor venues, I have experienced the same customary ritual just after midnight on New Year's Eve. Following the initial jolt of chaos and the conventional hug and kiss exchange, it is now commonplace to find virtually everyone around you engaged elsewhere, "peering down at their mobiles and tapping furiously on the keys" (Harkin, 2003: 19). Rogers Wireless confirmed that SMS traffic at midnight on New Year's Eve of 2011, "will double, [...] thus predicting that customers will send about 6,000 texts per second, up from 3,100 texts on a 'normal' day" (Hardy, 2011: 1).

Participants were asked to consider what mode of communication was most favoured, and for what reasons. All seven participants expressed the desire to communicate primarily through text messaging and messaging utilities such as iMessage or BlackBerry Messenger. All of the participants documented the simplicity afforded by messaging utilities, primarily in its potential to connect individuals, whether they are

communicating to check-in, make plans, or ask a simple question. In fact, most of the participants said that the primary use of their smartphones was for messaging. Isabel – a 30-year-old Prosecution Clerk for the City of Toronto – explains, “It’s mostly for messages. I don’t actually talk a lot on it [...] It’s just easier to get through to people. Also, for the reason that if I just want to [...] ask someone a question, I don’t have to call them and exchange pleasantries first” (3). Naomi Baron (2008) muses that the text message provides users the opportunity to communicate with personal correspondents, “while keeping a proper distance and sense of privacy with respect to bystanders” (132). Accordingly, Alexandra, a 23-year-old college student, examines the ease and individualizing properties of texting, explaining, “you can text when you’re on the subway, and without disrupting people around you. It’s just such an easy way to communicate with other people” (3).

Contemporary mobile devices and smartphones offer improved coverage, inexpensive and expansive subscription plans, and all-encompassing features, thus users are increasingly dependent on their devices to keep them connected on-the-go. Angelo, a software design and development entrepreneur, muses, “I can probably say I would have maybe three or four conversations a day. [...] Yeah, probably on and off, ongoing. I would say maybe 10-20 texts per conversation, maybe three or four conversations per day” (2). As is evident in the nature of such ongoing conversations, mobile messaging changes the nature of discussions. Mimi Sheller (2004) posits, “rather than conversation being set aside as something one does at certain moments, for a delimited stretch of time, usually in private space [...] there is now a constant flickering of conversation” (49).

Where messaging was the preferred mode of communication among participants, most also commented on its ambiguous, and often detrimental nature. Alexandra notes:

I mean, you can say one thing with your voice and have it mean something completely different than words just written. [...] I think there is something about someone’s face and their tone and the way they even space their sentences and everything in between that just can totally transform a message into something completely different than what it is when you just simply read it. (17)

Similarly, several of the other participants acknowledged tailoring their “mode of communication” selection to best fit the nature of the conversation. Matthew, a 23-year-old Media Studies major asserts, “Deciding the means of communication is purely based on the type of message I want to communicate. If it’s something brief a text or IM will suffice, if more complicated it’s easier for me to call someone, that way I can avoid any miscommunication” (4). Similarly, Elizabeth acknowledges that “Everybody I know texts [...] But when it comes to having a more in-depth and personal conversation or if it’s a personal matter, I would prefer to call somebody (2). Although texting as a means of communicating trivial and minor details can be seen as easy, and both cost and time efficient, it inevitably contributes to the deterioration of conventional conversation standards. Salutations, pleasantries and civilities that offer a sense of comfort, and work to inspire a sense of trust are absent in these interactions.

5.2.2 Conventions of Mobile Etiquette

Neglecting a co-present other to engage in a thread of communication that becomes introduced via a mobile device, is evidently problematic and discourteous, and yet widely admissible in today’s society. Most participants commented on the change in the nature of interactions as a result of the integration of mobile messaging. With the rise of messaging and browsing capabilities facilitated by contemporary mobile devices, alongside the flexibility and ease of communicating via messages, it is undeniable to question the ubiquity of this communication medium. Despite its potential to prevent or interrupt face-to-face interactions, participants spoke of the permissiveness of both texting while in public, and with co-present others. Angelo asserts:

If this was more of a social setting and we were just sitting having coffee and you pulled out your phone and started texting someone, I wouldn’t find it offensive. But I think if you look back 20 years, if you and I were having coffee and you started talking to the person beside me and were continually having a conversation with me and that person, I would definitely find that offensive. I think even now, if I felt like you were devoting your attention to someone personally, I would probably be more offended than if I saw you texting, which technically is the same thing, but I think it’s just

become normal and I think that's somewhat unfortunate but, you know, it becomes allowable. (9)

5.2.3 Mobile Browser as a Go-To 'Person'

All of the participants discussed the usefulness and self-sufficiency facilitated by the browsing capabilities of their devices. Angelo explained that he uses his device "sometimes to check sports scores. Sometimes to look up addresses. Sometimes to look up locations if I'm looking for a place to eat. I'll use or things like that [...] Um, I think that in terms of accessibility, it's always in front of me, making it my first go-to source" (3). In line with the heightened potentials of contemporary mobile devices, many of the participants, like Angelo, confessed to making their devices a priority in regards to information seeking. When asked about whether they were likely to call a friend or family member to ask for directions, all of the participants said that this would most likely be a second choice, favoring instead to use GPS, or search engine functions on their devices. Angelo muses, "In terms of calling somebody, I know I'd have to place a phone call. By the time you get to that point, by the time you track that much information, you're probably just as good looking it up [...] I find it easier" (3). Similarly, Jessica, a 20-year-old university student asserts, "Sometimes when you ask someone, their directions might be hard to understand. They might not be too specific" (4). These notions of self-sufficiency through mobile devices correlate with Juliet Schor's (1992) assertions that "once people become acclimated to the speed of the computer, normal human intercourse becomes laborious" (23).

There are inevitably shortcomings associated with the upsurge of mobile device use. Many participants complained about how dependent they have become on their devices; several participants reported feelings of anxiety and disconnect when they were without said devices.

I wish I wasn't so dependent, for the lack of a better word, on any type of mobile device, [...] Now, you can do everything online. You can go shopping. For the most part, I think that if people don't have to leave their house, they won't go. Not saying that I would ever be one of those types of people because I enjoy getting out and going

to do things and that type of stuff, however, I'm sure there will be a point in time where if I feel like I don't have to do anything outside of the house that I can do inside my home, chances are I would.
(Elizabeth, 2012: 21)

Mobile devices are perceived as a double-edged sword, acting as an extension of the user, while subsequently moving public interactions into private domains.

5.3 My Mobile is an Extension of Me

"I feel like totally connected to it. If I don't have it, I feel like something is missing" (Alexandra, 2012: 8).

As mobile technology becomes an integral part of an individual's day-to-day life, not only are boundaries of public and private traversed, but there is also an apparent blur between where the individual's body ends, and the technology begins. Accordingly, the second component of the *Circuit of Mobile Device Use Model* incorporates the perception that as mobile use increases, the device in turn becomes an extension of the user. Distinct from desktops, landline phones and other immovable technologies, mobile devices more closely bear a resemblance to tools or prosthetic devices as "extensions of the body" (Pertierra, 2005: 25). As the first theme demonstrated, for each of the participants, having access to their mobile devices and its varying capabilities anywhere, at any time, is exceptionally important. Regardless of whether the user is connecting to another individual, or using the device to browse, listen to music or read, each of the participants had constructive reactions to being connected. Accordingly, Michael Arnold (2003) notes that "as we are able to do more and more (through the application of technology) we perform fewer and fewer" (241). It is undeniable that the proliferation of mobile devices has challenged conventional conceptualizations of the relationship between communication technologies and the body (Campbell & Park, 2008: 373). Lara Srivastava (2006) compiles a series of insightful observations about the body-tool relationship of the individual and the mobile:

The sheer physical proximity of this technical device to the human body cannot go unnoticed. Most users are no more than a metre away from their mobiles, at any time of the day. Many sleep with it near their pillow, and use it as an alarm clock. This distance will only be shortened with developments in wearable wireless computing. The Japanese, for instance, have released a mobile phone that enables users to listen to calls inside their heads, through a mechanism for the conduction of sound through bone (Srivastava 2004). The mobile phone has indeed become the most intimate aspect of a user's personal sphere of objects (e.g., keys, wallet, money etc.). It seems to give users the impression that they are constantly connected to the world outside, and therefore somewhat less alone. (9)

When probed about how they might feel if they were to lose their devices, or leave them at home for an entire day, each of the participants expressed a sense of anxiety, paranoia and disconnectedness. Alexandra noted:

I would not be happy at all [...] There have been days where I have gone to work and forgot my phone, like a year ago. I remember feeling just entirely disconnected and really, really bothered by it. My whole mood was off. It's just, like, it's weird when I don't have it. It feels like I'm missing an extension of myself [...] I feel like totally connected to it. If I don't have it, I feel like something is missing. (8)

Similarly, the majority of participants expressed feelings of detachment and disengagement from their extended environments, communication and information wise. In the most basic of explanations, Jessica illuminates, "I would definitely feel like I'm not connected without my BlackBerry" (10). Alexandra illuminates this sense of disconnection further:

Everything is still happening around you. You're just removed without your phone [...] I feel like I'm on the outs, like I don't know what's happening. I feel completely disconnected from the news, from, I mean, seeing what's happening on Facebook [...] And because everyone else is so consumed by texting or BBM'ing, it's difficult to hope that someone will want to call you if you don't have your phone, that everyone's ways of interacting will change just because you don't have your phone with you right now. (20)

Similarly, Bruno expressed a sense of dependency and fretfulness of being without his smartphone for a weekend, after forgetting it at the office. He explains, “I use my work phone as my personal phone as well. Everyone has that specific number to reach me. All my numbers are stored on that phone. I would need it” (11). Evidently, as mobile technology becomes an integral part of an individual’s day-to-day life, not only are boundaries of public and private traversed, but there is also an apparent blur between where the individual’s body ends, and the technology begins.

5.3.1 *The Personalized Mobile*

Several participants explained that their mobile devices were deliberate extensions of their personalities – either through what was already encompassed in the technology, or through external, tailored entities. Angelo states, “This particular device, [Android Samsung Galaxy 2 LCD] offers the new LTE network with Rogers which is super, super fast and makes browsing is really quick [...] It’s important for someone in my industry to have that” (4). Similarly, Bruno discussed his very deliberate choices to only use Apple products. In thinking about mobile devices as extensions of the self, some participants also articulated the personalization of these appliances. These individuals may buy covers, or ringtones and wallpapers to express a part of them – be it their favourite colour or musical genre. Some of the participants expressed these types of behaviours. Elizabeth, explains:

I’ll buy phone covers for my phone and it’s not like oh, this is a phone cover that I think is nice. It’s a phone cover that obviously I like so I guess the detail kind of reflects some part of me [...] I also have two fortune cookie fortunes that I had from my first date with my significant other stuck between my clear faceplate, so that I always see them. (10)

Jan Blom and Andrew Monk (2003) discuss the theory of personalization of appearance through mobile phones. They assert that devices “are now sold with replaceable color covers. Operator logos and ringing tones can be downloaded from the Internet. Extensive changes can be made to the appearance of the [interface] as well” (195).

5.3.2 *My Stronger, Mobile Memory*

Regardless of what in particular they use their mobile devices to remember, every participant described their devices as an extension of their memory. Federico Casalegno (2004) notes that “telecommunications and information technology have modified the process of accessing and storing data, and consequently, they have also modified our relationship toward knowledge and memory” (314). Angelo explains the dependency of the user on the device as a memory tool, noting “I’m less keen to remember directions and addresses and stuff because I have a GPS on my mobile now that can get me there” (19). As a result of speed dial and electronic phonebooks, all of the participants admitted to knowing fewer phone numbers today than they did ten or twenty years ago:

When I was sixteen, I probably could have told you [...] twenty or thirty numbers off by heart, but now, you know, as those numbers change, as people get new phones, I have no need to remember. I don’t even know my girlfriend’s cell phone number off by heart. That’s pathetic [...] If you had asked me ten years ago or now, there may be a difference in how many streets I know or how many routes I know, whereas now, it’s easy to rely on just using your phone as opposed to actually saying okay, well, I have to take this street, that street. [...] It is an extension of yourself because it’s an extension of your memory in a way because you’re not really a full person now if you don’t have your cell phone. If I was to lose my cell phone tomorrow, you know, you see people in a panic because you think of all the information that you’ve accumulated. That’s sort of like a percentage of what you know is now on an individual device. It’s not in your head, necessarily, anymore, so now you need to be aware of, you know, now I know if I have to recall, like I said, an address or who sent me money for such and such, that’s all in my phone. That’s not in my head. So I lose my phone and yeah, I have definitely lost an extension of me, for sure. (Angelo, 2012: 20)

Similarly, Bruno discusses how he uses his iPhone 4 to take a photograph of a note or image that he might need to come back to later. This is an exemplary practice that demonstrates using mobile devices as a conscious extension of memory.

I usually take a picture of [things I need to remember] whether it’s like a note that I scribble on a piece of paper that I want to throw out, or someone gives me something and I just want to take a snapshot of it so it’s always permanently engrained there. [...] I

would say it has definitely aided in memory and I think as well as organization, whereas, you know, as an actual example at work, we use a whiteboard a lot to write a lot of marketing techniques or equations or mathematical pricing, all that kind of stuff. Where it would get erased immediately, I would take a snapshot of it so I can go back, so if I want to re-type it or if I want to just go back to refresh my memory on what the conversation was. (4)

5.3.3 *Asleep, but Always Connected*

Nearly all of the participants reported that while asleep at night, their devices were always by their bedside, on a nightstand, or on the floor – always on, never off. In considering some last minute, pre-bedtime rituals, many people remove their wristwatches and jewelry, placing them on a nightstand or table so as to quickly and easily adorn themselves in the morning with these same items. In this way, mobile devices can be perceived not only as extensions of the self, but as forms of body jewelry and accessories. Angelo, who experienced the peculiar incident of texting in his sleep, deliberates:

I think people have a tough time disconnecting. I think when you've become so connected to your mobile at all times, you use it for work, you use it for pleasure, you use it for browsing, pictures, media, you know, doing all these things with your device, so it has become the centre of your world in a way. So I feel kind of, you go to sleep and you leave it beside your bed and it's like you've never really disconnected from your phone, from your waking self. (7)

The proximity of mobile devices to the human body, alongside the desire to have them continually close by, leads to a state of being tethered or always on. Accordingly, Catherine Middleton (2007) notes “mobile device usage begets more mobile device usage [...] the more that individuals make themselves electronically open and available to others, the more this availability will be exploited” (173).

5.4 From Off to Always On

"It's definitely stressful because, you've set out a reputation that you're always reachable" (Jessica, 2012: 12).

The midpoint of the *Circuit of Mobile Device Use Model* encounters the matter of being always on. As the boundaries between the body-tool relation become blurred and the device is perceived as an appendage, the user constantly has the device with them, resulting in a change to constant availability, anytime, anywhere. This notion of being 'always on' was rampant throughout each of the participant's dialogues. What was particularly illuminating about this concept was its threefold significance. As exemplified in the interviews, the state of being always on can be linked to the notion of never powering off mobile devices, always having the device on you, and finally the constant availability and accessibility of the user. Accordingly, participants were asked to consider the uses of their mobile devices, and divulge the ways in which they consider themselves to be 'always on' through the device.

5.4.1 Landline vs. Mobile Device

The most enthralling facet of the mobile device is its liberating potentials; no longer are users restricted to physical locations. Instead, mobiles make us personally. Accordingly, Ling asserts, "more than instant messaging, a visit to Facebook, e-mail, or land-line telephony, the mobile phone is an instrument of the coterie" (169). While participants used their gadgets for varying purposes, they all elucidated that these uses were much more intricate than capabilities associated with stationary landline phones. Beyond having the same calling functions as a landline, many of the participants discussed the affordances of having the phone on them while they are on the move; thus allowing users to connect to remote others and content, anytime, anywhere.

All of the participants explained that they are more likely to give out their mobile numbers, as the device is always close by, thus making them more accessible. Bruno explains:

Not too many people have my landline number just because um, you know, odds are we're probably not even home at the time and it's just more convenient because our cell phones are always in our pocket or something, so easy access [...] When I think of my mobile phone I think of something I can take anywhere. This number will let you reach me whether I'm in Canada or in Europe or wherever. It's freedom. It's flexibility. It's being able to just be reachable at any time whereas you're not tied to one fixed location. (2)

As Bruno notes, no matter where the user is, the mobile device makes the individual personally addressable – you are not calling a place, but instead an individual directly. As Joshua Meyrowitz (1985) explains, “when we communicate through telephone, radio, television or computer, where we are physically no longer determines where and who we are socially” (115). Whereas an individual might leave his or her house twenty years ago, and miss a call, today the individual can be reached virtually anywhere through their ‘always-on’ devices.

5.4.2 Message Read: Pressures to Reply

Messaging utilities like Apple's iMessage and BlackBerry Messenger provide users with the beneficial prospect of knowing when their messages have been successfully delivered to other users, as well as informing them of when the messages have been read. Alexandra explains:

My BlackBerry is sort of like a double-edged sword. I love that I can be in touch with whoever I want, whenever I want, especially with BBM [BlackBerry Messenger]. I also like knowing when someone has read my message or whether they're ignoring me [...] But at the same time, I also hate that part of it because I feel like I'm never alone in my own space. I feel like I'm constantly available to people and even if I'm ignoring them then there's this idea that they will know I'm ignoring them because everyone knows that I always have my phone with me. So it's what I love and what I hate at the same time. (5)

In *Understanding Media* (1965), Marshall McLuhan observes that an incoming call begets and provokes an undeniable expectation, even perseverance, thus ultimately compelling users to answer it immediately. Similarly, Robert Hopper (1992) coined a

phrase known as ‘caller hegemony’ to suggest, “a defining characteristic of phone conversation is the asymmetrical relationship between the caller and the answerer on a telephone” (Hopper, 1992 as cited in Banjo, Hu and Sundar, 2008: 128). Caller hegemony is upheld by the social norm of giving an alert-ridden phone high priority, “the norm is to answer an incoming [alert] (Hopper, 1992; Humphreys, 2003; Bergvik, 2004)” (Banjo, Hu & Sundar, 2008: 128).

Messaging utilities incorporated in smartphones subsequently contribute to users being ‘always-on’ providing them with very minimal opportunities for disengaging. Alexandra notes, “You’re always available to people even when you don’t want to be” (9). Among several other participants, Jessica expressed her concerns about the pressures of being always available to those around her, explaining that just owning a BlackBerry emits a sense of constant availability.

When things get really stressful, so for example around exams, you’re still expected to be reachable by, you know, family, like my parents expect me to call often, or by my employer who expects a response quickly. It’s definitely stressful because, you’ve set out a reputation that you’re always reachable. (12)

As users ascribe to a sense of permanent availability, they express a desire to have others do the same. All of the participants, but one, voiced a sense of frustration with users who failed to respond to messages or calls in a timely manner. In discussing sentiments towards delayed response times, Isabel mentions, “It frustrates me just because [...] I think I’m pretty good at responding so I do kind of expect the same in return, but I also understand that some people’s circumstances might be a little bit different” (14). Correspondingly, in a spirited but sincere tone Isabel questions, “How do you go a few hours, or even a whole day without looking at your phone?” (14). Many participants also discussed a sense of pressure to reply based on the sole fact that the individual messaging has the potential to recognize that the message has been read. Jessica notes, “I feel a sense of urgency or pressure if I know that I’ve read someone’s message and let’s say they are waiting on a reply from me. I feel like because they know that I’ve read it, I should answer them” (4).

5.4.3 *Always On; Never Off*

As mobile devices perpetuate a sense of constant availability, users experience a sense of inevitable anxiety when said accessibility is hindered. Throughout the interviews, perhaps the component that I found most staggering, was the one that contributed unanimously to the nature of being always on. Of my seven interviews, each participant candidly admitted to never actually powering off their mobile devices, thus giving a whole new dimension to 'always on'. Alexandra explains, "I honestly can't remember the last time that I've turned my phone off [...] I've even gone to the hospital to visit family members and where they tell you to turn your phone off and I'll just put it on silent" (12). Michael Arnold (2003) asserts that "even if the phone is never used, it can be carried at all times, and the very fact that it is possible to communicate, of itself carries a link that reinforces connectedness" (245).

Most of the participants attributed the decision to never power off their devices to a sense of uneasiness about potential emergencies in which someone may need to reach them. Accordingly, in situations where the devices would best be suited off, participants admitted to simply changing the alert type to silent, so as to not disturb anybody, and still allow for a flow of perpetual contact. Isabel explains this further, noting "I don't turn it off if I go say to church, or the hospital even. I might leave it in the car, or put it on silent [...] The issue is like, I don't know, something could happen to someone that I care about and they'd be trying to get a hold of me, but I'd be unavailable" (16).

In line with the anxiety of having to power off the device, participants also expressed concerns with missing messages, calls or other notifications on their mobiles, while they are engaged elsewhere. Many participants expressed concerns with constantly checking their mobiles while working, or while out in public. Isabel explains, "at work my BlackBerry is usually on silent. One of the first things I do when I get back to my desk if I'm away from it, is open my drawer and see if my alert light is flashing" (9).

Similarly, many of the participants disclosed that when they were occupied with a task that required their immediate attention, they would switch from more discrete alert types, like silent to vibrate or ring. Alexandra describes this sense of restlessness, noting,

“Sometimes if I’m waiting for someone to respond to me, or if I’m doing things around the house and I just want to hear if it goes off, I’ll put it on vibrate or ring. I don’t want to miss anything (7). Similarly, Jessica divulges that same sense of anxiety in a public setting: “Sometimes if I’m in the middle of a conversation with someone, like over BBM or text messaging, and I’m in a more social environment where I can’t really always be looking at my phone, I’ll put it on vibrate so if I feel like it’s vibrating, obviously I’ll attend to that” (9). Evidently, as mobile devices perpetuate a sense of constant availability, users experience a sense of inevitable anxiety when this accessibility is hindered. Users exert a sense of control over the device by refusing to power off, while reciprocally a sense of hegemony is inevitably employed by the device itself over the user. Thus, a curious case of uncertainty is presented over who the slave to the master is – the device to the user, or the user to the device.

5.4.4 ‘Always-on’ You

As aforementioned, mobile devices are in many ways perceived as extensions of human bodies. Perhaps one of the reasons for this, beyond its potentials to extend the senses and perceptions, are how close the devices constantly are, to the human body. Adding yet another layer to the definition of ‘always on,’ mobiles are essentially ‘always on you’; according to all of the participants, they were never more than a few feet away from the body, at most. Bruno manages to encapsulate the responses of all the participants in noting, “My phone is always on me, whether it’s in my pocket or close by, like on a ledge or something” (7). Elizabeth provides a further explanation of this:

If I’m wearing like a sweater, like today I’m wearing a hoody with pockets, I’ll usually keep my phone in my pocket if I’m walking around and stuff. If I’m lying on the couch, it’s usually within 3ft, approximately. If I’m on the couch, it’s on the floor beside the couch. If I’m in my room, it’s on my dresser. If, you know, if I’m in the kitchen, it’s on the table in the living room right next to it. It’s not always necessarily there beside me/beside me, but it’s close to me. (7)

The proximity of the mobile to the body works to aggravate the aforementioned sense of

anxiety, as all but one participant articulated encountering ‘phantom vibrations’.

Alexandra explains:

[I’ve] experienced them where I’m falling asleep, and I’ll have my phone on silent, but I’ll be 100% convinced that I just heard it vibrate on my nightstand and I’ll wake up and there’s nothing there. [...] And in my pocket, too, I’ll feel like I have physically felt it but nothing will have gone off [...] It’s probably just my mind thinking there’s a message there and sort of telling myself that it is. Especially if I’m anxious and waiting to hear from someone, it happens a lot more. I guess maybe it’s my physical self, convincing my mental self that there is something waiting for me. (8)

Elizabeth, Angelo and Isabel similarly acknowledged a heightened act of experiencing phantom vibration, and subsequently checking on their mobiles while anticipating a response or call from a remote other.

5.5 Reshaping Public Space

“I think public space is essentially public. [...] It’s a lot like the Internet in a sense, where you sort of have the freedom to go where you want. You can pick up, drive anywhere you want” (Angelo, 2012: 14).

Whereas the themes in the *Circuit of Mobile Device Use Model* discussed thus far affect the user primarily, the remaining two themes explore the impact on the general public. The fourth theme explores the ways in which mobile devices alter the dynamic between private and public space. Michael Bugeja (2005) muses that modern media and technology are transportable, and have subsequently followed us outdoors into the public domain. He asserts, “[mobile devices] are ubiquitous reminders that humans in the twenty-first century dwell in more than one place at any time, splitting consciousness to multitask in parks, cars, schools, restaurants and malls” (40). Similarly, Mizuko Ito and Daisuke Okabe (2005) regard mobile devices as a form of technology that challenges and subsequently changes the way people comprehend public spaces and engage with one another (Ito & Okabe, 2005 as cited in Berry & Hamilton, 2010: 112). All of the

participants discussed mobile usage in filling dead time, when waiting for public transportation or while anticipating someone's arrival, thus stripping public space of a sense of "interaction, transaction and communication" (Drucker & Gumpert, 1993: 297).

5.5.1 Defining Public Space

Todd Gitlin (1998) idealizes the public sphere in commenting on its "roundness, fullness, [and] ripeness: the image of the public sphere conveys the sense of a planet, a fruit, something complete" (168). Today, users tend to disavow public space through their prioritization of their own "technologically mediated private realm" (Bull, 2001: 192). When asked to define public space, most of the participants expressed overlapping measures and notions. Many of the participants correlated public space with ideas of community. Alexandra notes,

I mean, growing up, I always thought of public space as a communal area where there were multiple streams of communication happening [...] There's diversity, different people maybe helping each other if they need help, conversing with people that they're with. It sort of seems like this enormous domain to me where there's just completely, like, just totally open streams of communication. (12)

Similarly, in defining public space, most participants used the simple dichotomy that public space was anything that wasn't considered private space. Elizabeth expressed, "public space is anything that you do that isn't private" (13). Similarly, Bruno muses, "Public space, I would say [is] anywhere outside my home or office. So whether I'm on the street or in a restaurant getting a coffee, at a soccer game, that sort of stuff [...] there are other people there" (13). Similarly, Matthew asserts, "Public space to me is anywhere members of society are allowed to be. Obvious examples are malls, parks, community centers, and grocery stores perhaps. Essentially, anywhere outside your home that is not private property" (6).

Angelo formed an interesting metaphor for what public space meant to him. Beyond asserting that it was "anywhere outside of your home," just as Matthew and Bruno had mentioned, he asserts:

I think public space is essentially public [...] It's a lot like the Internet in a sense, where you sort of have the freedom to go where you want. You can pick up, drive anywhere you want. You don't have any restrictions about where you can go. So I think, to me, a public space is anywhere outside your home. I can come to Starbucks and sit and have a coffee, or maybe I come to Starbucks and I don't have a coffee. (14)

In line with this idea of public space, many participants ascribed notions of freedom and sovereignty. As a result of the independence and autonomy afforded by public space, individuals have the opportunity to interact, or isolate themselves. With the rise of mobile devices, it is evident that interactions take place in public spaces, but not necessarily with those in close proximity. Instead, users connect with remote others. As a result of these distant interactions via communications technologies, users inevitably engage less with their immediate physical environments, thus reshaping conventional ideas of public space.

5.5.2 Private, Public Spaces Redefined

Over the course of the last ten years, the dynamic of public space has changed immensely. Sherry Turkle (2008) notes that today, "a neighbourhood walk reveals a world of madmen and women, talking to themselves, [...] little concerned with what is around them, happy to have intimate conversations in public spaces" (122). As a result of the abundance of private conversations in public, "neighbourhood spaces themselves become liminal, not entirely public, not entirely private" (122). Accordingly, each of the participants mused about the change in the dynamic of public space over the course of the last decade. Alexandra discusses an interesting shift from public to private space in which her mobile device facilitates a perpetual connection to her loved ones. She openly asserts that these connections are far more important to her than any other arbitrary interactions she might encounter in public space.

I think because a lot of the important people in my life aren't where I'm living. I constantly want to be available to them and I constantly want to know what's happening in their lives. And I think a lot of it, too, a lot of my time is spent in public and I would rather be in

communication with these people that are important to me and are in my life versus having to listen to other people's conversations on the subway or on the bus. It's a way of always keeping my little private personal life, like, always being in that circle and not having to sort of extend out into the social world, which sounds really strange. (9)

Jane Jacobs (1961) asserts "the thing that makes the public sphere vibrant is the continual contact with unexpected forms of interaction" (Jacobs, 1961 as cited in Ling, 2004: 193). As participants exemplify a personalized and mediated world in the public sphere, these unexpected interactions are fleeting.

Angelo acknowledges experiencing a loss of place through public mobile use, asserting "people are probably less engaged in their environment when they're on a device" (10). Similarly, Alexandra describes an analogous loss of geographical space illustrating the occurrence of being in a bubble while in public space with the help of her mobile.

I think it just goes back to once you're in that bubble, you forget you're in public. You can kind of create your own personal space and world with all of your devices, and your mind and what you're thinking about and who you are talking to, and what you're looking at on the Internet, and whose Facebook you're creeping, and what tweet you're reading, and just totally forget that you're standing in the Eaton's Centre. (15)

Several participants attributed ideas of public space to healthy notions of community. As such, the subsequent decline of public space inevitably has adverse effects on notions of communal living. In discussing mobile devices in public, Alexandra notes:

I definitely think there was an ease in knowing that if you really did need something or you needed help or you wanted to just smile at someone, that they would at least, their eyes would meet yours and they would maybe smile back. But now, I mean, it's like, I walk into a restaurant and just see everyone texting or doing something on their phone, just always consumed by it. So I just think the public space is totally redefined. It's not like a communal space where you can rely on each other, really. (18)

For some participants, like Matthew, the deterioration of public space is apparent in very small ways. He notes, “When you hear someone on the phone swearing up a storm about his or her girl or boyfriend, the public just doesn’t feel public anymore” (8).

Accordingly, many participants described a sense of irritation and annoyance with the surplus of private conversations pervading the public sphere facilitated by mobile devices.

5.5.3 Anti-Private Conversation in Public

As mobile device users engage in private conversations in focused settings, they are removed from their immediate environments, and stripped of both communal involvement and interactions with co-present others. Although all of the participants admitted at one point or another to using their devices in public, only one admitted to placing calls regularly. Almost all of the participants expressed a sense of dissatisfaction and frustration with others use of mobile devices in public places. Bruno mentions, “I have an issue with people who are really loud and obnoxious on the phone in a confined place like a subway or a bus or something like that where they have no regard for anybody around them. They talk like they’re sitting in their living room. That’s annoying” (14). The analogy Bruno suggests about these individuals acting as though they are in their living rooms correlates directly Kopomaa’s (2000) ideas of the “common living room”. Kopomaa muses that through mobile devices, the public sphere tends to become a “common living room” and there is now “the contrary problem of protecting the public from uncontrolled intrusion of privacies” (Kopomaa, 2000 as cited in Geser, 2004: 36).

It appears as though the participants who expressed a sense of annoyance and frustration merited these feelings on the basis that voice conversations essentially deprived them of a sense of public. Instead, these types of interactions conferred them with an unwanted private experience of a co-present individual. Where voice conversations were seen as a nuisance, none of the participants cited a problem with

individual's texting in public, as this medium is far more quiet and unobtrusive.

Alexandra said:

I absolutely hate it when people talk on their phones on the bus. It drives me crazy. I think it's rude. It's inconsiderate because no one wants to hear your conversation, and a lot of the times, people are talking about really personal things, almost like they're forgetting they are in a public space. And I think it's just, not common courtesy to do that. I don't mind texting, though. I do it. And that's not why I don't mind it. I just think it's something that's quiet and people are carrying on their lives. I mean, everything is so fast paced. You need to do things while you're moving so at least it's a bit more courteous to do it that way. (14)

Akin to the idea of mobile conversations being bothersome to other members of the public sphere, a few participants mentioned dissatisfaction with individuals who were unable to multitask while on their devices in public. Jessica explains further: "A lot of people, people who are unable to multitask, [...] let's say they are walking in the mall and they're on their phone, chances are they are going slower and in everyone's way. That's a little bit of a problem for me" (15).

Although participants expressed deep concerns with private conversations in public places, many discussed their reactions in having to take an absolutely necessary call. Most of the participants described a change in both their body position and volume, not only to create a sense of privacy, but also as a means of signaling to others that they were on a call. Lee Humphrey's (2005) posits, "cellphones can become a tool for both artificially creating privacy as well as means of publicizing privacy" (373). Scott Campbell and Yong Jin Park (2008) similarly discuss the construction of "symbolic fences" through which "various forms of nonverbal behaviour during a phone call, such as turning away from others, diverting one's eyes, and speaking quietly (Campbell, 2004; Ling, 2004; Murtagh, 2001; Paragas, 2005)" (378). Isabel notes, "I usually cover my mouth, and my head would probably be down. [...] I would be talking a lot lower, and as soon as I would notice the conversation was taking a really personal turn, then maybe I would probably say okay, I'm going to have to call you back now" (18). Similarly, Angelo asserts "I would probably try to crouch down and keep it as discreet as possible.

Mostly, just not to interrupt other people. But you know, you're in a public space and you probably don't know any of these people, so I don't think it so much has to do with privacy, but I think that just in general, being respectful of other people's public space is important" (15). Sadie Plant (2001) explains that individuals who establish a sense of introversion and enclosure are known as 'spacemakers'. Although participants expressed a variety of frustrations pertaining to the rise of mobile device use in public spaces, the most perplexing and troubling hindrance of all is the decline in face-to-face interactions.

5.6 The Decline of Face-to-Face Interactions

"To be able to see the person you are talking to is a lot more comforting and a lot more trustworthy than a voice without a face or words on a screen" (Matthew, 2012: 5).

The final theme of the *Circuit of Mobile Device Use Model* deals with the aftermath of the first three phases. As mobile users take to the public sphere, engaging with their mobiles, and with absent others, there is a conversion of face-to-face interactions. Similarly, as users engage with co-present others, the mobile device still has the potential to disrupt face-to-face interactions, and often takes precedence in these scenarios. With the rise in omnipresence of mobile devices, Michael Bugeja (2005) notes "slowly, almost imperceptibly, some of us are losing the ability to interact meaningfully with others, face-to-face, because we opt for on-demand rather than physical contact, relying on technology to mediate our thoughts, words and deeds" (41). Accordingly, Bugeja emphasizes the importance of physical engagements, as "human beings are meant to interact with each other face-to-face in physical habitat, developing language and social skills" (41).

The overarching theme encountered throughout my interviews comprises the final step of mobile device ubiquity; the transformation of face-to-face interactions as a result of the reliance on mobile devices. Many participants discussed the importance of face-to-face interactions in maintaining healthy social skills, and enforcing notions of confidence and trust in other human beings. Matthew asserts, "To be able to see the person you are

talking to is a lot more comforting and a lot more trustworthy than a voice without a face or words on a screen” (5). With the convergence of mobile media, alongside the abundance of applications accessible through mobile Internet, face-to-face interactions can become a rare, jeopardized facet of communication. Angelo explains:

You’re in a public space and you sort of have this private world in your pocket at all times and I think that gets bigger and bigger. And it allows you to consume more information but, you know, yeah, probably at the expense of public interaction to some degree. I see it as a positive in terms of connectivity, but anybody who is using their phone as a replacement for face to face, that’s probably a hindrance, probably a negative. (21)

Many participants have attributed the change in face-to-face interactions to the rise in technological convergence. Several participants commented on the double-edge sword of having several services such as shopping, banking and appointment bookings available over their devices. Although a luxury, these services eliminate a plethora of vital daily face-to-face interactions – exchanges which were formerly used to inspire trust.

5.6.1 *The Importance of Face-to-Face Communication*

Modes of face-to-face interactions are incessantly in opposition with mediated forms of experience, “with users often finding the simulated more attractive than face-to-face” (Bull, 2001: 192). Although participants discussed the convenience and ease afforded by mobile technology in facilitating communication, all of the participants concurred that there is no better form of interaction than face-to-face. Elizabeth notes:

I think it’s better to communicate face-to-face because that way you get to see how the person is saying something, and when you respond to what they say to you, you get to see how that person reacts, right, and that’s really what face to face communication is about. It’s about feeling connected to somebody. (19)

In line with the importance of face-to-face communication as a means of inspiring trust and confidence, is the inopportune miscommunication afforded by communication technology. Isabel notes the ineptness of non-face-to-face interactions, asserting, “It’s

evident that some people, they become socially awkward. They don't know how to communicate with people because they only communicate through their mobiles" (23). Similarly, Elizabeth explores not only the socially awkward nature of individuals who depend heavily on communication technology as a primary source of interaction, but also the rise in miscommunication facilitated by the devices.

Akin to the belief that face-to-face interactions are most ideal, Angelo explains the relevance of strong communication skills that can only be driven by strong physical engagements.

I think when you go, let's say for a job interview or you go for, a job interview is a good example. So you're sitting interacting with someone. I think if you don't have, I want to say practice really, if you don't have practice talking to people, interacting with people, even you go for a coffee, I'm the type of person that would talk to the person at the desk or when I'm doing grocery shopping, as they're checking out, I'm talking to people. So I think you're kind of always working on your personal skills. So yeah, definitely, if you're reducing the amounts of interactions you're having with people, then I think you're probably hindering your personal interaction skills in some way. (18)

Similarly, Jessica explains the importance of face-to-face interactions, in noting that human beings are not entirely self-sufficient:

I don't want to quote this directly, but I guess "no man is an island," right. You can do everything by yourself up to a certain extent, but there is going to come an instance where you're going to have to be face to face with someone and, you know, I feel like it will be weird because you won't know how to act. Also, I just feel like you can't maintain a relationship of any sort over a mobile device. (18)

Several participants mentioned ideas similar to the one put forth by Jessica; human beings need healthy physical interactions in order to establish bonds of trust, and to inspire confidence. These two appliances are crucial to the richness and vitality of the public sphere. Similarly, Michael Bugeja (2005) notes that in order to experience a growth in the vitality of the public sphere, "we must use media and technology to *expand* community rather than be used to *replace* community" (112). If used appropriately and

responsibly, media and technology can endorse our morals and values, enhance and expand knowledge and ultimately improve the quality of life (112).

5.6.2 *The Challenge of Absent Presence*

Leysia Palen, Marilyn Salzman and Ed Youngs (2001) believe that when engaging with mobile devices in a public place, users take on a conflict of social spaces. When users are engaged with their devices, “they are simultaneously in two spaces: the space they physically occupy, and the virtual space of the conversation” (121). In Kenneth Gergen’s (2002) aforementioned ‘absent presence’ individuals are physically present, but absorbed by a technologically mediated world elsewhere. All of the participants expressed habits of engaging with their mobiles, whether messaging, calling or using a variety of applications, while in the presence of others. In turn, they also reflected on co-present others doing the exact same thing. The conundrum with this type of behaviour inevitably relates to the decline in face-to-face interactions as individuals connect with remote others.

Gergen notes, “the erosion of face-to-face community, a coherent and centered sense of self, moral bearings, depth of relationship and the uprooting of meaning from material context: such are the repercussions of absent presence” (234). In discussing the nature of absent presence and conventions of interaction with remote individuals, Alexandra notes:

There’s constantly, like, there have been times when I’ve been sitting there and both my partner and I are texting, or my friends, all four of us are sitting there texting other people. And there have been times they’ve been actually texting each other when we’re sitting in front of each other. So it definitely does mess with the face-to-face interaction. I think it hinders it a lot. (10)

Similarly, Alexandra makes a legitimate argument in noting “cell phones can make you feel like you’re sharing a moment with someone when you’re not even there” (17). On the nature of the subject of absent presence, Jessica explains the paradoxical scenario asserting, “it adds a sort of weird dynamic because everyone is in the same space but for

the most part, these days, we're not communicating with each other. We're in communication but with people through our devices" (15).

5.6.3 *The Decline of Intimacy*

Similar to the paradox facilitated by the Internet, mobile devices "increase opportunities to create and maintain social ties but tends to reduce in-person social contact" (Matsuda, 2005: 128). Many participants discussed the decline of intimacy facilitated by the ongoing use of communication technology and mobile devices. Although participants admitted the ease and efficiency of maintaining a relationship with individuals was far greater now, based on the ubiquity of mobile technology, the connection isn't at all stronger or better.

I would say generally speaking, we probably are connected to more people over a long period of time now than we ever were. [...] I would say it was maybe 15 years ago, it was probably easier to sort of drop off friendships because you just didn't have the time to get together or didn't have the time to see a person, whereas now, because you have the option to text, I think it kind of keeps you connected to people a little easier. I think if anything, it's easier to arrange in person meetings with someone because you're texting so it's like hey, whatever, let's meet up, whereas before, I'd have to call you and if you weren't home then, you know, the next day I forgot about it and then we never got together and that was that, right. (Angelo, 2012: 17)

Evidently, there is a paradox generated by communication technologies; interaction has increased, and yet intimacy has declined rapidly. *New York Times* columnist Robert Wright notes "technological change makes society more efficient and less personal. We know more people more shallowly" (Wright as cited in Baron, 2008: 223).

Keeping with superficial and trivial modes of communication facilitated by mobile devices, Bruno discusses the decline of face-to-face interactions as they are replaced with mobile engagements:

What I'm noticing, even with our cousins and stuff like that, like, the communication is very slim right now. Like, they text each other all the time, or they BBM each other all the time. Even if they're in the same room, they very rarely sit there and talk. They are always

focused, whether it's talking or playing on a game or something like that, on their phone or iPod or whatever it is. They don't really talk anymore. (18)

Similarly, Angelo describes relationships and connections as far deeper without the influence of disrupting mobile technologies. He notes, "If we were sitting here having a coffee, if we didn't have cell phones on the table, if we weren't checking cell phones, I think you'd have more of a connection with someone than if you had a cell phone probably" (11). It is now quite common that individuals encounter a paradox of pure communication as technological devices offer up ease and convenient modes of interaction. What is crucial to query however, are the socially isolating properties of these types of communication.

5.6.4 Mobile Devices Promote Isolation

In discussing the multifaceted capabilities of the modern mobile device, it is clear that the range in services, applications and varying modes of communication can promote a sense of self-sufficiency. As the mobile promotes a channel for isolation from the immediate environment, it psychologically shields its users from interaction and involvements with co-present others (Humphreys, 2005: 374). As a result of such, many users enable a sense of isolation through their devices. In discussing the decline of intimacy, coupled with the rise of individuation promoted by mobile devices, Alexandra notes:

There's totally just this way of isolating yourself and dividing yourself or kind of creating this divisive wall between yourself and other people because you're so consumed by this technology that's in your hand and who it can connect you to, and I think that it limits voice interactions. It limits face-to-face interactions. It impedes face-to-face interactions. It prevents you from feeling a sense of community or feeling like you belong to this public space that you're in. I think that it just totally can make you feel removed from this, from the public. It just, it creates a sense of privacy no matter where you are and I think it's very isolating, at least from the greater population. (16)

In line with such, Elizabeth discusses the plethora of services and applications available to users, which in turn promote a sense of isolation and autonomy.

You know, it's terrible, but you know how Apple has the commercial, oh, "there's an app for that," there's pretty much an app for everything. I think I read this morning, last week, or the last week of 2011, last week, yes, over 1 billion apps were downloaded [...] That means the chances of there being an app for anything and everything you can think of is out there and if you have an application that makes it so you can go to do your banking, so you no longer have to go to the bank in person. They have this thing, I don't know if there's an app for it, yet, or if it's available online, but if you can't get out to your groceries, you can call a number and tell them what you want. Somebody goes out, gets your groceries for you and drops them off at your house. There's another, you know, four or five people you'd be interacting with gone. Like, eventually, with the way that things are progressing and with the demand that society has, isolation, I think, is the only way that's left unless you're able to maintain those personal relationships [...] So, I think technology has the ability, to promote isolation and in fact drive somebody to that point. (20)

Although it becomes apparent that individuals are promoting a sense of remoteness and seclusion through their mobile devices, many participants explained that they may in fact just be engaging in what Sherry Turkle (2010) acknowledges as being "alone together". Although it may appear that users are in their own bubble, alone with their mobiles, they can in fact be e-mailing, messaging, navigating social media such as Facebook and Twitter, with a series of individuals. Accordingly, it is crucial to note that many of these isolating properties are in fact debatable and vary according to the user. Jessica notes, "Sometimes people may feel like, you know, if they're looking at someone sitting by themselves and they're not doing anything, oh, that person is alone and lonely, but not necessarily because they could be talking to their whole network of friends through their devices" (19). The problem here lies in the fact that as individuals are engaged in remote locations with far-flung others, they ignore their immediate environments. Bruno further explains:

I would say especially now, everyone is in their own bubble, whether they are in a subway with 100 people or at a bar or

wherever, everyone is in their own contained bubble. People don't venture out and talk to people anymore. It's just, whether, you know, like for example, if you go to a bar by yourself and you're waiting for your friends, you don't go to the bartender and order a drink by yourself, at least I don't, anyways, or start interacting with people that are there. I'd be more so likely to sit on a stool and text people and see where they are or wait in my car or something like that. (19)

The "bubble" as cited by Bruno, among other participants, "provides the individual with a space of comfort, familiarity, and security within what is primarily a realm of strangers" (Hampton, Livio & Sessions, 2009: 7). Accordingly, mobile devices have the potential to be used habitually as a means on shielding the individual from social diversity and urban public space.

5.6.5 "Do Not Disturb," I'm Using My Mobile Device

Today, literature on mobile devices establishes a daunting reflection of a genuinely public space, like a train station or restaurant, where tethered selves migrate together, but do not engage or interact with one another. Instead, these collective individuals interact with their mobile devices, connecting with absent others, and subsequently disconnecting with proximate beings. Most crucial to this notion is not solely the blurring of the private-public dichotomy, caused by users integrating their devices into the public sphere, but rather that the mobile itself has the ability to signify a virtual "do not disturb" sign.

It is undeniable that mobile devices have hundreds of intended uses, making phone calls, sending texts, taking photographs, listening to music and browsing to name a few. What is interesting about these devices, however, is the potential for inadvertent utilities; this includes the ability to ignore proximate others, while being immersed or imitating being immersed by the features or content of the device. Participants were asked to consider such unintentional functions. Interestingly, all but one discussed ways in which they had used their devices as a means of appearing occupied, thus ultimately avoiding face-to-face interactions with co-present others in public spaces. In perhaps the most straightforward explanation, Isabel explains, "I saw someone I really didn't want to talk

to and I grabbed my phone and just looked down at it like I was doing something” (19). Similarly, Matthew noted, “If I’m walking by someone and I feel like there might be a moment of awkwardness, I will definitely pull out my phone and pretend to read something. Excellent tool for avoiding awkwardness” (8). Elizabeth explores this habit further:

It’s really terrible, but I did it yesterday. I was standing in line at Wal-Mart and I saw this woman [...] she knows my parents, but I really didn’t want to say anything so I just pulled out my cell phone and started checking the news [...]. If I don’t want to talk to somebody or if I don’t really have anything to say, if I feel like a conversation is going to be forced or awkward, then yeah, I will pull out my phone. I won’t pull it out and pretend to make a phone call, but I’ll start to use an app to make it look like I’m occupied doing something. (15)

Elizabeth went on to make a rather relevant point – because of the expansive features of a contemporary smartphone, proximate others are unaware of what the user is doing with their device, unless they scan the screen for themselves. As such, individuals may be less likely to disturb you, if they see that you are engaged with your mobile because they really have no idea whether you are “playing Bejeweled or Solitaire, or whether you are doing something that seems relatively important” (15). In this way, Leopoldina Fortunati (2000) asserts that mobile devices can be used as a means to shield individuals from wider surroundings, allowing them to “[escape] into the narrower realm of highly familiar, predictable and self-controlled social relationships” (Fortunati, 2000 as cited in Geser, 2004: 10).

In line with using the mobile as a prop for deterring proximate others from engaging with the user, participants were also asked what seeing someone using a mobile device like a smartphone or a personal stereo device in public, symbolized for them. Having just been asked about their own practices and unintentional functions of using the devices as a means of avoiding interaction, most participants were transparent in their reflections. For Jessica, seeing someone using a mobile device, be it a smartphone or using headphones to listen to an iPod, “symbolizes [that] they are busy with something else, that they’re in their own bubble” (16).

Although all of the participants expressed the capacity to use their mobile devices as a means of avoiding interactions, several participants expressed their dissatisfaction and frustrations with not being able to find someone who appears unoccupied when they might need help in a public place.

I find it extremely frustrating when I might need directions or need something and I turn around and every single person is on their phone or listening to their iPod. I feel like I'm completely intruding on their private life even though they are in a public atmosphere [...] There are even times where I've had no idea [...] where I am and there's only one person around and they're on their phone and it's like I'm just standing there because I would rather have no clue where I am than bother this person who is clearly engaging in their own personal stuff. (Alexandra, 2012: 9)

Where headphones, and the illusion of deep concentration on the mobile device act as a deterrent for the interaction of proximate others, one of the participants raised a noteworthy argument about users who straddle a line between a personal mobile bubble, and an active, participating member of the public sphere. Elizabeth explains, "If somebody has got one earphone in and one earphone out, that's kind of them giving you that, yeah, I'm listening to music but if you do have something you want to say [...] you're still getting some of my attention because I don't have both of my earphones in" (21). She expressed this notion of making yourself available to others, while simultaneously engaging with your own prescribed auditory environment. "The fact that you always leave one out kind of is just letting people know you still want to listen to them" (21). No longer do we intentionally ignore people who appear to be in conversation with themselves, or focused on their hands, instead we look for ear plugs or devices that might signify the individual is using a mobile to converse or be present elsewhere.

"Communication technology is too good to be true, and nothing – even holography technology that simulates depth and dimension – can substitute for the real thing" (Bugeja, 2005: 32).

"Mobile technology is ubiquitous with regard to not only how many people use it but also where they use it. The affordance of mobility allows for virtually anytime-anywhere connectivity, making this private social resource a matter of public concern" (Campbell & Kwak, 2011: 208).

CHAPTER SIX: CONCLUSION

Don Idhe (1983) concludes that a "good" technology, rather than calling attention to itself, withdraws in use. The better a technology functions, then "the more likely it becomes that we may simply grow used to its functions and 'forget' that it is there and that it is a significant element of our mediated communication situation" (52). As mobile devices become omnipresent, users attribute them to their own bodies, forgetting in a sense that they are merely appendages and extensions. Accordingly, users are dependent on these augmentations, and negate engagements in their immediate environments, in favour of more stimulating, remote interactions. Despite the correlations and connections encountered throughout my research, it is important to acknowledge the disparity and the debatable nature of mobile device influences on both the public sphere and users. Communication technology, when used appropriately and responsibly, has the potential to bind individuals who may have had no prior platform for engaging with one another.

6.1 Concluding Remarks

The key overall themes in this research are exemplified in the *Circuit of Mobile Device Use Model* developed in this thesis. Users navigate through a variety of applications on their devices that in turn alter the ways in which they engage with media content, other individuals and the environments they are in. Accordingly, this first step of the model posits that as technology improves and converges, usage increases. Thus, users admitted to employing the devices more regularly, and for a varying range of purposes, establishing in a way a sense of enslavement to the technology. Particularly

relevant to this first step is its potential to question notions of hegemony – how much control does the user possess over the device, and in turn how much control does the device exercise over the user?

As a result of the rise in usage and subsequent reliance on the device, users move into the second prominent theme of the research, experiencing a blur between where their body ends, and where the technology begins. As exemplified by all of my participants, mobile devices act to some degree as extensions of the users and their senses. Whereas some used the device as an external memory tool, others saw the device as being an extension of their voices and arms to reach out to other individuals. In this manner, the mobile shifts from a mere mobile device into a private, personal and portable entity through which the user experiences and connects with the world.

As the boundaries between the body-tool relation become blurred and the device is perceived as an appendage to the body, the user constantly has the device with them, resulting in a change to constant availability, anytime, anywhere. The notion of ‘always-on’ comes in three forms; the mobile is always on the user, the user is always on and available for perpetual contact, and the device is never powered off. As aforementioned, because of the prominence of mobile communication devices, human relationships have shifted from once being episodic to always-on.

As ‘always on’ individuals move into the public sphere, they subsequently reshape its properties, as they engage through technologically mediated experiences, thus turning public places into private encounters. The once sharp and distinct delineation of public has changed substantially as users practice a sense of place polygamy in restaurants, train stations, buses and coffee shops alike are now commonly colonized by the private experiences of mobile users.

Finally, as mobile users take to the public sphere, engaging in mobile conversations with absent others, there is a decline in face-to-face interaction. Similarly, as these users engage with co-present others, the mobile device still has the potential to disrupt face-to-face interactions, and often takes precedence in these scenarios. Despite the fact that calls and notifications can be deferred, they are still often “acknowledged, the [device]

will be touched, glanced at, apologized for” (Gordon, 2002: 18). Paradoxical here, mobile devices promise communication over distances, “yet [they] interrupt communications between those who are face-to-face” (18). As users experience a decline in face-to-face interactions they subsequently turn to their devices as a means of entertaining, communicating and filling dead time; thus beginning the cycle anew.

The very nature of the term “circuit” implies several things; it is a system of diverse yet connected parts or devices, and implies a complete path with a specific current and flow. That being said, it is undeniable that circuits can be broken, detached and ultimately disconnected. In order to break the *Circuit of Mobile Device Use Model*, it is crucial to examine both media consumption and technology use in conjunction with one another. Scrutinizing their influence on users outlooks, values and beliefs are also of significant importance.

When asked about whether they would be annoyed, distressed or feel as though their privacy was invaded if a proximate other were to peer at the newspaper they were reading over their shoulders, all of the participants expressed impartial feelings. Most explained that it would make no difference to them, as the newspaper is a mass-produced commodity, readily available to the public. In contrast, when asked if their feelings would change if the medium in question were a mobile device, all of the participants conveyed a sense of privacy infiltration. Despite the fact that news applications on mobile devices transmit the same information that print articles do, users do not warrant the same sense of attachment to these disposable items.

Where newspapers are expendable commodities, mobile devices are often part of users most personal and private entities. As mentioned by participants, usage increases based on the multi-faceted functionalities of the modern mobile device, and accordingly users ascribe to the device as an augmentation of the apparently inefficient human body and mind. It is in this regard that users experience a sense of invasion that is so distinct with their personal, portable devices.

The small sample of significant mobile users, currently using a third or fourth generation device, that are far more sophisticated and intricate than their initial two-

dimensional devices, divulged substantial accounts of their mobile usage that have been both overlooked and negated in previous research; the *Circuit of Mobile Device Use Model* satisfies these voids. Where Sherry Turkle's (2008) "alone together," and Kenneth Gergen's "absent presence" comment on perpetual states of communication decline and attention deficits, they fail to assess the impact of mobile devices from start to finish. Rather than querying why mobile entities have such impacting potentials, previous research merely comments on how the user and proximate others are affected. Where previous models, theories and posit exceptional conclusions, they fail to make crucial relational ties.

The *Circuit of Mobile Device Use Model* reflects those highly engaged with technology. Where this study would benefit from a much larger sample size to account for disparities, and to incorporate users who do not heavily identify with their devices, it is undeniable that even with such a condensed size there is an emerging pattern. What is crucial to note, however, is that based on the body of literature that addresses mobile devices in the public sphere, previous research has failed to acknowledge questions that ask why, in favour of asking those that answer how.

Young adults have made for an exceptional group of study, primarily based on their widespread adoption of mobile devices. Accordingly this research proves that these individuals, despite being completely enamored by their technological devices, still facilitate the basic human desire to want to communicate. They still possess the need to be part of a circle of individuals, and have the desire to stay up-to-date on the latest news, gossip and mobile applications. This is the simplest form of evidence in acknowledging that communication has changed – it is not necessarily devalued, but the ways in which youth of today are tailoring their communication patterns cannot be overlooked. The research participants were specifically tailored so as to address explicit questions pertaining to the dominant literature within mobile research. Accordingly, the primary feature of the model itself highlights the relational elements encompassed within it – it does not stand as five separate entities, but rather is upheld by the impact one step has on the next.

Of particular relevance to the final step of the *Circuit of Mobile Device Use Model* is the decline of spontaneous and arbitrary social interactions. Whereas two decades ago one encountered a series of unprompted and random interactions on a daily basis, with a comprehensive continuum of individuals, there were indications that have now been confirmed by both this research and model that this seems to be changing. Accordingly, “we seem to be mobbing into a society where the social net is cast further afield but to a more similar set of individuals” (Ling, 2000 as cited in Geser, 2004: 10).

Hans Geser (2004) asserts that when technologies, like mobile devices, become ubiquitous, no definite inferences in changes in human interaction patterns can be portrayed. Instead, “much extensive and sophisticated research is necessary in order to assess how they are actually used, how they affect various kinds of social relationships, and how they become embedded in the evermore complex sphere of all other communication media” (42). The frequency of contemporary technology is very high; a decade ago, mobile phones acted as a landline on the go, today a ‘smartphone’ performs like a high-quality computer. Accompanying technological change is inevitably social change. The greater significance we give to these devices, the more engrained they become in our lives; the more engrained they are, the greater the impact potential. This thesis is an effort to comprehend some of the ways in which users communicate, or refrain from communicating with mobile devices, and how accordingly interactions are structured with them.

6.2 Suggestions for Future Research

Communication technologies and mobile devices alike, have and will continue to be a suitable area for scholarly research. As these technologies become more engrained in daily life, they assert their place in our world, and subsequently warrant more attention in our field. The ubiquity of mobile device usage as a means of connecting and entertaining creates a significant impact on users abilities to engage in their immediate public environments. As a result, users often attend to mediated engagements, as they appear more enticing than forms of public, face-to-face interactions. The data in this

study bears these notions out to some degree. Further research might help to facilitate and illuminate stronger correlations between users and their devices, thus it is recommended that a larger, more diverse sample be collected in future studies. In addition, duplicating the research through varying age groups might serve as illuminating in identifying where usage trends are similar, and where they differ across age categories. Also relevant to this study, the notion of being “always-on” is one that could be further explored as it encompasses a wide variety of boundaries, including private-public and work-personal life.

Categorized in the fields of communication technology and organizational communication, mobile technologies deserve much more research attention, strictly based on their growing ubiquity. Canalys’ reported in its detailed Q4 2011 USA based study that for the first time, “total annual global shipments of smart phones exceeded those of client PCs” (Canalys, 2012). Similarly, the share of adults in the United States who owned tablets has nearly doubled (up to 19% from 10%) between mid-December and early January of 2012 (Pew Internet, 2012). With this type of data, it is undeniable that mobile technologies are the most significant technological modernization since the television and perhaps even the Internet. Over the course of the next few years, it is believed that mobile device subscriptions will exceed the global population. Accordingly, as Jennifer Deering Davis (2010) notes, “outside of the organizational discipline, all areas of communication theory could benefit from incorporating more work on mobile technologies” (105). In considering such, studies in mobile technology seem particularly pertinent to social impacts in studies of health communication, interpersonal communication, educational and interactive teaching and also impacts on democratization.

There is a vital demand to continue studying issues related to mobile device usage and the reorganization of the public sphere. This study, alongside the other research encompassed in this thesis paper, evoke an increasingly intersected dynamic between public and private. Accordingly, more attention and research is needed to fully understand the aforementioned, and other possible implications of these blurred

boundaries. As research in this field becomes stronger and more potent, perhaps scholars and users alike will be able to develop practical mechanisms and recommendations for coping with mobile usage in the public domain.

Mobile technologies reflect and affect both the cultural and social world in which they are situated. Accordingly, positions of technologies within public spaces can enlighten as to social practices operating within society, as well as the significance of the technologically mediated experience. As portable media devices become increasingly ubiquitous and tailored, they continue to probe and alter everyday cultural practices and spaces, and are thus upsetting divisions and dichotomies of public and private space. It is undeniable that technological innovations encompass to some degree both costs and benefits, to users and society alike; what is most crucial to bear in mind, however, is the magnitude of those costs – the decline of vital physical interactions – and whether or not they are worth paying the ultimate price.

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Appendices 1: Informed Consent

STUDY NAME:

New Media Technologies and Mobile Privatization: The Remodeling of the Public Sphere

RESEARCHER:

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PURPOSE OF THE RESEARCH:

As mobile technology becomes an integral part of an individual's day-to-day life, not only are boundaries of public and private traversed, but also there is an apparent blur between where the individual's body ends, and the technology begins. Through my research, I will explore the social implications of ubiquitous mobile devices such as the Apple iPod and the smartphone. I am particularly interested in the ways in which this new media landscape permits the renegotiation of public and private spheres, highlighting the isolating properties of these technologies, and the ways in which they impede sharing practices and social interaction.

According to Quorus Consulting Group, on behalf of the Canadian Wireless Telecommunications Association, "nearly half (48%) of mobile phone users between 18 and 34 years old have a smartphone. This group is more likely to have a smartphone compared to those 14 to 17, or 45 years or older. In the 18 to 24 year old group, smartphone adoption is 55%" (Quorus Consulting Group, April 2011). Hence its widespread adoption of mobile devices, this group will be most revealing for data collection; accordingly, this particular study will concentrate exclusively on individuals between the age of 18 and 34.

For this research, I will recruit 5-7 participants from a variety of industries and educational background, in the Toronto area, between the ages of 18 to 34, to partake in semi-structured interviews. Despite the fact that this type of research has been investigated in the past, (Crane, 2005; Davis, 2010; Groening, 2008; Lever, 2007) it has yet to be done in Toronto. Although this research is relevant based on its location, it is primarily germane in that to date we have only speculated the effects of mobile devices on the public sphere. Ideally the study would uncover a variety of explorations including the ways in which mobile device operators use their technologies; the primary places of use; how these technologies have negotiated place – primarily public spaces; and the dependability on the devices. Ultimately, upon collecting the interview data and subsequently transcribing it, I will use my findings in my Master's thesis.

WHAT YOU WILL BE ASKED TO DO IN THE RESEARCH:

Participants will be interviewed for approximately 30 minutes to an hour (sometimes longer or shorter depending on the participant).

RISKS AND DISCOMFORTS:

There are no foreseeable risks, discomforts or inconveniences to the participants associated with this study.

BENEFITS OF THE RESEARCH AND BENEFITS TO YOU:

Despite the fact that this type of research has been investigated in the past, (Crane, 2005; Davis, 2010; Groening, 2008; Lever, 2007) it has yet to be done in Toronto, and although this research is relevant based on its location, it is primarily germane in that to date we have only speculated the effects of mobile devices on the public sphere. Although there are no monetary benefits for participants, they will experience the value of exploring the relevance of mobile devices in their own personal lives, perhaps shedding light on ideas and patterns they had not yet recognized. Similarly, the discussion may be telling of the participants dependency and relationship to their mobile devices.

VOLUNTARY PARTICIPATION:

Your participation in the research is completely voluntary and that participants may choose to stop participating at any time. Indicate that a participant's decision not to continue participating will not influence their relationship or the nature of their relationship with researchers or with staff of York University either now or in the future.

WITHDRAWAL FROM THE STUDY:

You may stop participating in the study at any time, for any reason, if you so decide. In conjunction with such, you may also refuse to answer any questions during the interview. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, York University, or any other group associated with this project. In the event that you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

CONFIDENTIALITY:

Participants in the study will remain anonymous, and accordingly the information supplied will be credited to a pseudonym. The information supplied during the research, can and will be used in my thesis, pending the approval of the anonymous participants. You as the interviewee have complete control over whether the entire interview, or only parts may be used. Accordingly, you may refuse to answer any questions in the study.

The interview data will be digitally recorded, and will then be transcribed for the purpose of reference in my thesis. Both the audio/digital files and the transcribed text files will be file encrypted, on a password protected computer, as well as in a locked cabinet in a locked room, to which only I, the researcher (Ana Rita Morais) will have access. The data will be stored indefinitely until there is technical disaster and files are lost or outdated. Confidentiality will be provided to the fullest extent possible by law.

QUESTIONS ABOUT THE RESEARCH?:

If you have questions about the research in general or about your role in the study, please feel free to contact the researcher, Ana Rita Morais either by telephone at (416) 736-2100, extension 40594 or by e-mail moraistr@yorku.ca.

This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, you may contact the Senior Manager and Policy Advisor for the Office of Research Ethics, 5th Floor, York Research Tower, York University, telephone 416-736-5914 or e-mail ore@yorku.ca.

LEGAL RIGHTS AND SIGNATURES:

I _____ consent to participate in *New Media Technologies and Mobile Privatization: The Remodeling of the Public Sphere* conducted by Ana Rita Morais. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature: _____
Date: _____

Participant: _____

Signature: _____
Date: _____

Principal Investigator: *Ana Rita Morais*

Appendices 2: Semi-Structured Interview Questions

New Media Technologies and Mobile Privatization The Remodeling and Deterioration of the Public Sphere

"To each his own bubble, that is the law today," (Baudrillard, 1993: 39).

INTRODUCTION:

About the Participant

- *name of participant*
- *age of participant*
- *gender of participant*
- *race/ethnicity*
- *level of education/occupation*

BACKGROUND INFORMATION:

The Beginnings of Mobile Devices

1. Tell me about the types of mobile devices you use – portable music players, cellphone/smartphone particularly. (what kind of mobile device do you have, how many, how long have you had them, how did you maintain them)
 - *how long have you had it/them?*
 - *why did you obtain it?*
2. Do you have a landline phone – if yes, how often/when do you use it (if no, when did you get rid of it – what made you stop using it)
 - *now consider the mobile phone – how does your understanding of this differ?*
3. What is the main use of your mobile device? (uncover extent of usage...)
 - *do you text?*
 - *do you take pictures/video?*
 - *do you browse?*
 - *do you use location based services – irony in this*
 - *do you play games?*
 - *do you listen to music?*
 - *what apps do you have?*
4. Tell me what you like most about your mobile device – what do you like least?
 - *technical/design/social/why did you pick the one you did?*
5. Would you say that it has replaced other entities? example: cameras, music player, computer, video game console, home phone etc.

- *do you have these other things/how do you use them*

USAGE AND OVER-USAGE?:

Changes Over Time

1. I am going to ask you a few questions about where you usually keep your mobile:
 - *when you are awake at home*
 - *when you are out in public*
 - *when you are asleep*
2. What is your default alert type? (ring/vibrate/silent) why? how does this change?
 - *how do you decide which means of communication to use (voice/text/im etc...)*
 - *phantom vibrations probe*
3. How would you feel if you left your mobile device at home, knowing you are going to be out all day?
4. Tell me about what you would feel like if you had to go without your mobile device for an entire week.
 - *would you consider your mobile devices an extension of your self?*
5. Naomi Baron, a linguist and professor of linguistics, talks about our current state of being “always on,” – constantly accessible by others, and constantly connected to our devices. would you consider yourself always on? Why or why not?
 - *what contributes to your being always on?*
 - *has this changed over the past few years? In what ways?*
 - *do you feel any pressure to be always on? Why or why not*
 - *ideas about reachability = anytime/anyplace*
 - *what implications might this have on face to face interactions?*
6. If you are with someone and you get a call/text, which interaction takes precedence – the mobile or face-to-face?
7. Do you ever turn your mobile devices off?
 - *when and why do you turn them off?*

PUBLIC USE:

In the Public Sphere/Face-to-Face Interactions

1. Tell me about what “public space” means to you.
2. Describe the feelings you have, if any about mobile device use in public – this can include your own personal use, or others around you. EXAMPLE: *How does it make you feel when someone answers the phone or is texting on a bus? Or Does it irritate you*

when someone's phone rings in a restaurant or theatre?

3. Tell me about your body reactions when receiving a call – if your phone rang right now and you needed to answer it, what might you do? would you turn away from me, put your head down etc.
4. Do you use a headset/headphones or ear piece with your mobile devices?
- *do you ever use this as a visible shield in public (ex. intentionally deter)*
5. In what capacity, if any, do you use your mobile devices for sharing? EXAMPLE: Do you ever play music and share it with someone close by?
6. How do you feel if someone is reading your texts over your shoulder or eavesdropping on a conversation you are having in public, on your mobile?
7. Do you ever use your mobile to talk with those in close proximity – say texting someone in the same room? If so, why?
8. Tell me about how you react when your phone rings/vibrates/receives an alert while you are immersed in a conversation with someone.
9. How do you think face-to-face interactions have been impacted since the rise of mobile devices? do you supplement face-to-face conversations with mobile engagements? dimensions of social engagement are often explained by face-to-face interactions with others and community involvement. how does the mobile phone uphold or alter this?
10. In what ways do you think the all-encompassing mobile of today has the power to promote isolation, if at all?
11. Would you say that mobile device use in public space, reshape the public into the personal and private? fulfill wait time in non-places with remote interactions?
12. Would you say that mobile devices change the dynamic of public places, as mobile device users can now create private experiences while in the public sphere?

CLOSING REMARKS:

1. After this interview, and the reflection on a variety of facets of mobile device usage, do you have any concerns about your own or others mobile phone usage? In what ways?
2. Is there anything that we haven't touched on, that you would like to mention about your relationship with mobile devices?
3. Do you have any questions for me?