NEW TOOLS, OLD VOICES: TEXT MESSAGING BY ADULT CELL PHONE USERS

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ABSTRACT

Text messaging use has exploded in the last decade, both in terms of volume and popularity, but the youth-centric approach of existing research has left adult texting use largely out of the picture. This study seeks to correct that gap by exploring the use of text messaging by adults aged 45 and older, asking why and how they text, and how the use of text messaging affects their social worlds. Relying on a number of individual interviews and small-group focused interviews, results found that study participants adopted texting primarily for the temporal efficiency inherent in the mode, but also that they tended to text asynchronously. Texting conferred a number of positive social functions on study participants such as increasing the frequency of inter- and intragenerational communications, facilitating feelings of community, and effecting greater control over mobile communications since texting enabled study participants to avoid the 'trap' of protracted voice calls.

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"I used to call people, then I got into e-mailing, then texting, and now I just ignore everyone." \(^{l}\)

Introduction

Text messaging has exploded in the last decade, both in terms of volume and popularity, so that a majority of cell phone users are now texting on a daily basis. But while the bulk of social science research has centered on the use of text messaging by the young, or the uses of text messaging as a therapeutic aid (for reducing drug use, or aiding in weight loss, for example), very little research has been applied to the use of text messaging by those who grew up in a pre-cellular telecommunications age. This study focuses on adult texters—specifically adults aged 45 and older who likely did not acquire their first cell phone until well past adolescence—in order to fill this gap in the existing research. By centering the research on adult texters, widening the locus of inquiry from adults outward (rather than existing research that focuses almost exclusively on youths and youth culture as the primary driver behind what is seen as a texting revolution) we will be better positioned to explore the effects of texting on adult social relationships. In

¹ Cartoon by Alex Gregory. Published in the *New Yorker* 8/2/2010.

addition, because control versus autonomy forms the central dichotomy of extant youth-centric texting research (reflecting the core concerns of youth), taking an adult-centric approach could lessen the primacy of this concern and enable us to explore the world of texting afresh.

This thesis is structured to provide a thorough overview of texting among adult users. We begin with a comprehensive survey of the research questions to be examined; explore the history of text messaging from its inception in 1992 to the prevalence of texting among adults today; look at the relevant sociological literature, studies from related fields, and explore newspaper, magazine, and ezine articles concerning adult use of texting; move on to a summary of methods used in this thesis for analyzing texting among adult users; take a substantial look at research findings; and finally, settle with valid conclusions.

RESEARCH QUESTIONS

There are three areas of investigation that this study proposes to focus on and that I will show are inextricably connected: 1) why adults text, 2) how adults text, and 3) how the use of text messaging affects an adult texter's social world. Subsidiary questions related to the three focus questions are as follows: 1a) Are adults texting to emulate their offspring and the newest hip fad of youth culture or 1b) are they texting because they anticipate a state of diminishing social contact as their work life ends or dwindles? 2a) Does the medium of texting affect *what* adults communicate and how it is perceived by others? 2b) Do adults mimic the style of younger texters or 2c) do they misinterpret how young people use their mobile communication devices? 2d) Are there physical barriers to

texting for adults that make the process arduous and confirm that texting is forever a young person's technology, or 2e) have adult texters appropriated the technology to suit their own specific needs or physical limitations? 3a) Has texting shrunk the generation gap between the mature texter and their younger contacts, or 3b) are adults also using text messaging to communicate intragenerationally? And finally, 3c) What is the affect of texting uptake on the perceived value and frequency of use of other communication forms?

This research should illuminate in rich detail the diffusion of texting technology throughout adult social life and go some way towards explaining why a technology that grew out of young people's use of it and appears out of balance with the high value adults place on verbal communications should be rising so rapidly both in popularity and use among adults. The research should serve to fill the gap in existing sociological literature that focuses almost entirely on the use of text messaging by young people, and might offer us practical applications for future use that could have policy implications as our society rapidly ages.

A Brief History of Text Messaging

Like many groundbreaking technologies, text messaging began with an altogether different application in mind. Borrowing the term SMS² from radio telephony, the first text message was sent on December 3rd, 1992 by Neil Papworth, a 22-year-old engineer for Sema Group, who used a computer to send the message "Merry Christmas" to the cell phone of a colleague. Despite the jolly personal nature of that first message, text

² SMS: short message service—often used as an acronym for texting. Contrasts with MMS: multimedia messages which may or may not include textual content.

messaging was originally conceived as a business tool, and the cost of sending texts was initially so high that most non-business cell phone users were priced out of the technology. Such was the limited initial use of text messaging, and the lack of promotion or even mention of the service, that the cellular communications industry was caught entirely by surprise when text messaging took off. Text messaging was seen by many as, "a user triumph" (Lacohée, Wakeford, & Pearson, 2003: 206), particularly for the young, who seemed to relish that the fiddly keyboards created a stiff barrier to uptake which had the advantage of putting off adults sufficiently so as to exclude them from the technology. "When we created SMS," noted Cor Stutterheim from CMG—one of the pioneering IT firms behind text messaging—"it was not really meant to communicate from consumer to consumer and certainly not meant to become the main channel which the younger generation would use to communicate with each other" (textually.org).

By 1995 cell phone users were sending an average of only 0.4 messages per customer per month, according to GSM world. Within ten years, that had shot up to 21 texts per month. Today, text messaging is the most widely used mobile data service. Based on data gathered by The Nielsen Company—who analyzed the cell phone bills of more than 60,000 US subscribers—American adults 18 years and older were sending an average of 446 texts per month in 2010, that's almost 15 a day. Even over a two and a half year period from January 2006 to June 2008, the rate at which American adults sent and received text messages grew exponentially, as the following table illustrates:

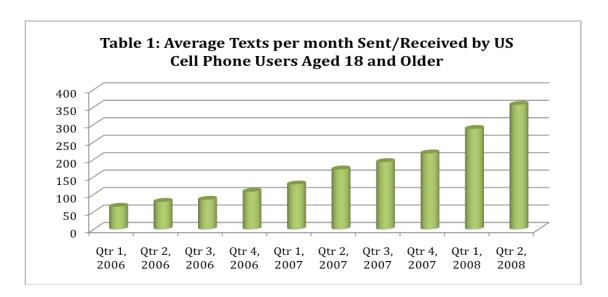


Table 1. Average Texts per month Sent/Received by US Cell Phone Users Aged 18 and Older. *Note.* The data are from The Nielsen Company, January 1, 2006 to June 30, 2008.

But the rate at which people text is not distributed evenly across all age brackets. In fact, far from it. When broken down by the Nielson Company into age categories, we can see that the younger the adult, the more they text, with older adults texting at a fraction of the rate of younger adults:

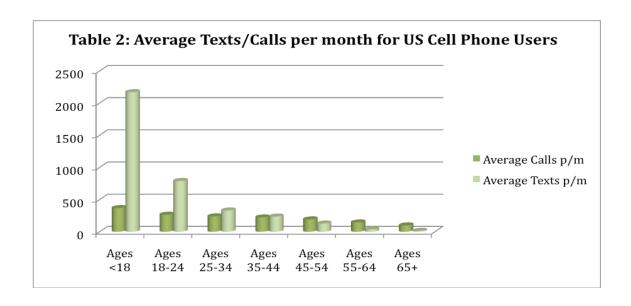


Table 2. Average Texts/Calls per month for US Cell Phone Users. *Note.* The data are from The Nielsen Company, January 1, 2006 to June 30, 2008.

What is most interesting about recent increases in use of texting by American adults is that over the last ten years as the number of texts sent and received has climbed dramatically, the number of minutes cell phone users spend *talking* has actually decreased, halving from over 3 minutes in 2004 to just over 1 ½ minutes in 2010, as the following table demonstrates:

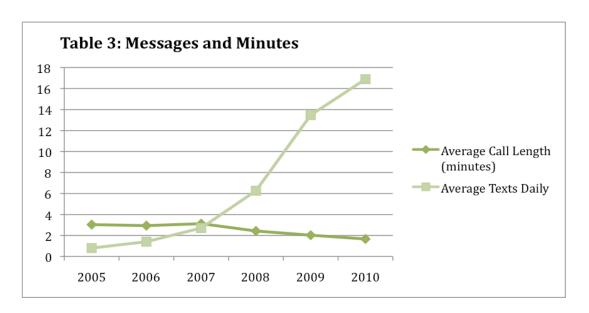


Table 3. Messages and Minutes for US Cell Phone Users, 2005-2010. *Note.* The data are from *Top-Line Survey Results, Semi-Annual Wireless Industry Survey (Mid-Year 2010)*, by CTIA.

It would be reductionist to suggest that the new technology of texting has driven telephone conversations out of favor (such as a hard-line technological determinist might) and I am not suggesting a causal relationship here, but the information may point to an important clue as to *why* people are adopting texting technology at such a rapid pace; namely, because texting is the most time-efficient method of communicating and sharing information using a telemediated mobile communications device.

An alternative theory that could explain the rapid uptake of texting, and one that is particularly pertinent in nations other than affluent America, is cost. Globally there

exists a divide between those that pay for cell phone service on a monthly basis and those that use pre-paid services—mostly the young and the poor. In many nations such as the United Kingdom, calls made to a cell phone are charged at exorbitant rates (although the cell phone user pays nothing), and so the idea of sending a short message for pennies has considerable appeal. It is no accident that texting is the most popular form of communication in poorer nations such as the Philippines (the texting capital of the world) or in nations with limited land-line service coupled with unstable electricity supply such as Senegal, and it could be pertinent for our older adult study population who may live on a fixed or reduced income as their work life ends or dwindles. However, as Lacohée *et al.* point out, "a strictly economic analysis of texting would not capture the rich social norms of the activity" (ibid, p. 206), which this thesis aims precisely to do by adopting a broad approach to exploring the *why* and *how* of adult texting, as well as the *effect* of texting uptake on their social worlds.

LITERATURE REVIEW

STATE OF DIFFUSION

The focus of academic texting research, as previously noted, has been largely on the use of the communications medium by adolescents, primarily because, as Mizuko Ito (2004) shows in her study of Japanese cell phone use, adolescents were the earliest adopters of the technology. In Japan, Ito explains, texting grew independently from cell phone use; adolescents, in particular young females, began using pagers as a preferred communications mode, which grew into use of SMS using a Personal Handyphone System, and then finally to texting using a cell phone. Interestingly, concurrent with this convergence of modalities on one device came a new social attitude: "Within a space of a

few years between 1995-98, mobile phones shifted from association with business uses to an association with teen street culture", Ito notes (p. 4), while emphasizing that today, "mobile phone use, and even mobile texting, are practices that span ages and genders" (ibid). This idea is confirmed most recently in data gathered by The Neilson Company (2010) who found that: "Mobile phone usage, while significantly lower for consumers aged 65+ compared to the younger set, is rapidly catching up . . . The mobile behavior of the next generation of grandparents is clearly in the "texting" camp."

Despite these trends it would seem that a common academic approach to exploring the diffusion of texting throughout society is to begin with the early adopters the youth—and posit that adults will catch up; this explanation is underpinned by the assumption that young people and adults use their phones in fundamentally similar ways, but this is not altogether what we find in the research. Castells, Fernandez-Ardevol, & Qiu question whether youth cell phone culture is, "an age-specific state of mind or the harbinger of new patterns of behavior" (2007: 16) but also find that, "age continu[es] to specify the type of use rather than the use itself" (p. 41). Amanda Lenhart (2010a) questions the ripple-up diffusion of cell phone culture in her overview of the PEW study, stating it will be interesting to see: "how much of [young adults'] enthusiasm for new gadgets is a time-of-life issue, and how much will ripple through the broader culture in the coming years". But in the body of the study, Lenhart, Purcell, Smith, & Zickuhr have doubts about this notion of diffusion from young to old, noting that older adults (30 years and over) are using another potentially faddish communications phenomenon—social networking sites—at a rate of only 40%, compared to 73% for online teens and 72% for young adults, stating that, "older adults have not kept pace" (ibid; emphasis mine) with

the social networking site use of younger people (as if it were somehow due to their slow, ageing bodies). And yet while the frequency of texting is far greater for the young than it is for older adults as Table 2 demonstrated (page 9 of thesis), adults are nevertheless adopting the technology at a rapid rate, rising from an average of 65 texts per month sent/received for the 1st quarter of 2006 to an average of 357 texts per month sent/received for the 2nd quarter of 2008³. But while adults may indeed be catching up in their frequency of texting, there has been no academic research that seeks to uncover the *type* of texting adults are doing, and it is hoped that in exploring *how* adults text this study will make a contribution to the body of sociological knowledge since texting practices coupled with increased use of the medium can be strongly assumed to affect the social world of adults.

COMPULSION TO PARTICIPATE?

Although Marshall McLuhan was writing in an 'electric age' rather than a digital one and could hardly have envisaged what lay in store for us all in terms of *mobile* telecommunications (much as the older adults in this study could not have), he was highly cognizant of the effects of new technologies on our beings and in *Understanding Media* he offers a number of interesting insights into this. For where it has been demonstrated that young cell phones users text with high frequency, it could be posited that adults will never share their enthusiasm for the medium, "for the reason of the electric explosion that compels commitment and participation" (1964: 5); while young people have grown up immersed in digital media, enthusiastically embraced the

³ Data based on the cell phone bills of 60,000 American Adults aged 18 and older, compiled by The Neilson Company, January 1, 2006 to June 30, 2008, (see bibliography).

omnipresent glare of social networking, and have their cell phones always on hand, for older adults this presents an abrupt change—both culturally and organizationally—from their own pre-digital youths. The compulsion to 'commit' and 'participate' which McLuhan presciently envisaged in the early 1960s might seem so at odds with older adults' sense of media involvement that they will never use their cell phones in the same way as young people do. Because modern media were seen as "extensions of man" (p. 6), McLuhan felt they would engender a "never-explained numbness . . . in the individual and society" (ibid) and it will be interesting to see if adults feel this sense of 'anxiety' that McLuhan presaged when we examine the personal and social consequences of texting uptake.

A CASE FOR TECHNOLOGICAL DETERMINISM?

One of the great strengths of Mizuko Ito's approach to understanding the diffusion of texting throughout Japanese society is that it specifically negates a theory of technological determinism (a strong form of which would reduce technology to being a driving force of change in social organization and cultural values). Rather, Ito finds that, "current patterns in mobile media evolved gradually through a set of incremental innovations that intertwined the social, cultural and technical" (2004: 4). Ito refuses to see an item of new technology as a foreign object that 'impacts' and 'transforms', rather she approaches technology and society holistically, sensing both that, "Technologies are objectifications of particular cultures and social relationships" (ibid), but also that they fit themselves "into the stream of social and cultural evolution" (ibid). Manuel Castells, however, appears to be conflicted over whether technology is deterministic or not. On the one hand, in the prologue to the first of his three seminal books on *The Information Age*

he explicitly negates it (albeit in a footnote): "Technology does not determine society: it embodies it. But nor does society determine technological innovation: it uses it" (2010: 5). But on the other hand he sees information technology as a force for change in and of itself, equating its radical nature with that of other technological revolutions: "Information technology is to this revolution what new sources of energy were to the successive industrial revolutions" (p. 30). In a later book more specific to telecommunications technology, Mobile Communication and Society, Castells, Fernandez-Ardevol, & Qiu take a far softer approach, conceding that, "Technologies, all technologies, diffuse only to the extent that they resonate with pre-existing social structures and cultural values" (2006: 142). Texting then, would have to fit with adults' extant social structures and cultural values in order for them to adopt it. But if texting was unthought-of by adults until fairly recently⁴ and even as late as 2006 Castells et al. found that, "old people are not used to communicating via SMS" (p. 147), what evidence do we have that texting 'resonates' with them? And what about this notion of cultural values? It can reasonably be stated that older adults place a high value on face-to-face interactions and voice communications (see Melenhorst et al. 2001; Robert Putnam 2000; Cody et al. 1999), but if older adults value *verbal* communication highly, how are texted communications going to fit into that paradigm? If texting uptake is strongly technologically deterministic then we would expect it to affect adults' social worlds significantly, driving a change in their social structures and cultural values.

⁴ Even by 2004 as Castells *et al.* note, the average American cell-phone user had a sparse idea of what texting even was (ibid, p.25).

When the social impacts of telephone use were first theorized, telephone company executives posited that it would lead to the creation of, "'Psychological neighborhoods'an epoch of neighborship without propinquity" (Putnam 2000: 168) and this is especially true for mobile telephones in which we call the *person* rather than the location. Shanyang Zhao (2003) expounds upon this concept of copresence to posit two essential dimensions: being together in the same physical environment (human-human relations), and technologically-generated copresence (human-object relations), mediated both through the *mode* of presence (for example virtual copresence) and through the *sense* of copresence (perceptions and feelings of being with others). When humans are physically proximal (corporeal copresence) there is the possibility of nonverbal communications, of sensing the other (Erving Goffman 1963), but when they are engaging in brief texted telecommunications this presents much more of a challenge. It could be argued, however, that the injection into texts of non-textual signs such as emoticons (©), textual signs such as :-), or non-standard English acronyms such as LOL could be an attempt to inject a range of feelings (e.g. happy) or behaviors (e.g. smiling, laughing out loud) into our new mode of communicating, not only heightening each other's awareness of our physical states and diminishing the absence of propinquity, but also indicating that the medium of texting does indeed affect the message. While it is well known that young people use emoticons and non-standard textual signs in their texts, that is not to say that young people 'own' the practice; this research should illuminate whether adults are adopting this practice, whether they are adopting it in the same way as young people do, and why they are adopting it; answering how and why adults text will be more than merely descriptive

if use of emoticons and non-standard textual signs is seen by adults as a mode of increasing a sense of proximity in an increasingly scattered world and—as they enter retirement—in an increasingly socially isolated world. If results show texting increases sense of proximity there could be useful applications for older adults leading to policy implications as our society rapidly ages.

There is one further dimension of copresence as a mode of being with others that is pertinent to this study and which Zhao mentions in brief: immediacy. Where phone calls allow for synchronous communication and voice mail presents an asynchronous communication structure, texting can be either synchronous or asynchronous depending on the temporal frame employed by texters in their use of it. It could be theorized that synchronous texting—where texters text-write back and forth in rapid succession—could feel more conversational than asynchronous texting; but whether that text 'conversation' serves to complement rather than replace existing preferred modes of communication remains to be seen. Robert Putnam notes that introduction of the telephone 'somewhat paradoxically', "had the effect of reinforcing, not transforming or replacing, existing personal networks" (p. 168). But where he writes that the telephone may have reduced loneliness, he also finds that it had the effect of reducing time spent face-to-face socializing; analyzing the temporal frame utilized by adults in texting behavior—how adults text—will tie inextricably to the *effect* of texting uptake on adults' social worlds if it can be shown that texting is affecting preference and frequency of use of other modes of communication.

Where adults use texting to communicate with their children or grandchildren, Carol Cooper (2009) finds a range of dichotomies concerning how parents and their offspring use, think about, and value their phones and offers some illumination on my third research question of how the use of texting affects an adult texter's social world. Cooper finds an international disparity in feelings about cell phone use, stating that, "the conflict between the teen's desire for independence and the reality of parental control through cell phone ownership and use" varies from nation to nation (p. 1). In a Japanese study by Yukiko Miyaki (2006), Cooper notes that parents often allow a teen to have a cell phone for safety and security reasons, but balk at how their offspring actually use their cell phones (making non-essential phone calls; talking for a long time with friends late at night) since it contradicts their own ideas about appropriate phone use. In a Danish study, Cooper sees another interesting dichotomy: while parents see the cell phone as a tool for communication, young people frame cell phone ownership in terms of identity. Specific to texting, Cooper finds in two studies that young people prefer to text among their contemporaries, saving phone calls for family (which plays into our claim that adults place a high value on voice communications). One important point she alights on is "technologically remedial" parents (as one student in a 2007 Texan study puts it), finding that if parents cannot adapt to the new rules of communication (whereby texting is the norm), "then the dynamics of staying in touch with parents will change" (p. 7). Perhaps adults are taking up texting not through choice, then (because who would 'choose' to do something that made them feel 'remedial'?), but because it has become a necessity for communicating with their offspring. If this were the case, we would expect

adults to use texting primarily for communicating with their younger contacts, and not for intragenerational texted communications. But if texting is at odds with the cultural value schemas of adults, particularly the high value they place on voice communications, Susan Baron (2009) finds that young people place a differential value on conversations, and like texting because it negates the risk of entrapment in an extended conversation, offering them new opportunities, "to exercise control over social interaction" (p. 4). It will be interesting to see if this notion of the 'risk' of a telephone conversation applies to adults; if texting effects greater control over social interactions for young people, making it their preferred mode of telemediated communication, can the same be said for adults, and what are the social consequences of this shift?

BENEFITS IN THE LITERATURE OF NEW TECHNOLOGIES FOR OLDER ADULTS

If our discussion of the literature on texting has tended toward the negative for adults—perhaps because of the youth-centric bias of extant social texting research, or because of the newness of texting for adults in which the benefits have yet to become apparent—social research focusing on use of other communications mediums by older adults note some concrete practical applications that could have interesting policy implications in our rapidly ageing society if they apply equally to texting. Cody, Dunn, Hoppin, & Wendt in their study entitled *Silver Surfers: Training and Evaluating Internet Use among Older Adult Learners* used a range of items to measure perceived social support in their pre-post test of older adults (average age 80.4). They found that, "Once trained, on-line adult learners experienced increased feelings of social support, connectivity, and reduced technology-related anxiety" (1999: 281). In terms of the effect of learning a new communications mode on older adults' social worlds, Cody *et al.* found

a number of 'significant' benefits, including: "increased connectivity with family members who may live far away, increased intergenerational communication . . . and the ability to feel mentally alert, challenged, useful and to feel 'younger'" (p. 270) and it will be interesting to see if these benefits transfer to texting uptake among older adults.

Although likewise researching in a pre-texting age, Melenhorst, Rogers, & Caylor focused on older adults' uptake of new communication technologies, noting that, in terms of preferred method of communication, "Both email users and non-users highly valued the personal visit" (2001: 224), that is face-to-face interaction. Older adults do not want to take the time to learn new communications technologies, they posit, because of their 'future time perspective' in which they, "realize their place in the life cycle, and experience their lifetime as limited, and, consequently, as precious. They tend to be present-oriented and are reluctant to spend their time in an unpleasant way" (p. 221). If learning a new technology such as email is seen as unpleasant, it is nevertheless ergonomically comfortable; texting on the small screen of a cell phone using fiddly keys couldn't be more difficult for older adults (and as mentioned before was one of what young people saw as the 'benefits' of the technology since it presented a barrier to adult uptake) and it will be interesting to see whether the physical limitations of the technology (or the present-oriented mindsets of older adults) deter adults from taking up texting. Answering why adults text in the face of this barrier could affect policy implications for its future use; perhaps for older adults the cell phone is not the ideal platform on which to engage in texted communications, or perhaps older adults have shaped the technology to adapt to their own specific needs or physical limitations.

MEDIA REFERENCES TO OLDER ADULT TEXTING

If academic texting research shares the same biases of Internet studies in that they have largely left adults out of the frame, the mainstream media have been quick to report on the growing phenomenon of older adults texting. A survey of news stories related to texting and adult cell phone users illustrate three different threads: that adults, particularly 'Baby Boomers', are lately adopting the technology; that there are some physical, linguistic, and technophobic-specific limitations on adults' use of texting; and that adults are frustrated by the frequency of young people's texting and tend to misunderstand how they use their cell phones. Reams of articles presented themselves concerning texting and driving that we will not concern ourselves with here, suffice to say that adults seem to be engaging in the practice much as younger texters are.

Exploring further my primary research question of why adults are texting, a Korea Times article noted that older adults have been taking up texting as a way of saving money. "The trend is now picking up amongst older wireless users," notes staff reporter Kim Tong-hyung, "as they look for inexpensive alternatives to voice calls to tighten their purse strings in a bad economy." In an ezine article aimed at the Baby Boomer market, reporter Marilyn Katz notes, "our kids seem to want us to text [...] They seem to prefer this method of communication over making actual phone calls. So we know that if we want to communicate with the kids, we need to meet them where they are!" An article in the Wall Street Journal alerts readers to the necessity of parents understanding texting shorthand. "Parents need to know the lingo in order to keep up with—and sometimes

⁵ People born during the post-war demographic birth boom of 1946 and 1964 and who at their youngest were 47 during this study's research period.

police—their children," journalist Stephanie Raposo notes, later citing somewhat contradictory advice from parenting expert Susan Avery who said, "The best thing is to embrace [texting] and use it as a bonding experience with your child."

If there appears to be a fundamental misunderstanding by older adults of how young people use their cell phones (much as we saw in Miyaki's study), a Washington *Post* article entitled "Texting generation doesn't share boomers' taste for talk", elaborates on this: "A generation of e-mailing, followed by an explosion in texting, has pushed the telephone conversation into serious decline, creating new tensions between Baby Boomers and millennials," journalist Ian Shapira notes. In a similar vein, an article in the Sydney Morning Herald entitled, "Texting obsession presses Baby Boomer's buttons" notes the rapid increase and frequency of teen texting and a corresponding lack of understanding by older adults. The author, Melbourne-based journalist David Campbell notes that his niece, "carries a mobile phone the way I wear a watch," adding in a somewhat doom-laden fashion: "We're engaged in a vast social experiment and the outcome is little more than guesswork." A New Yorker cartoon that shows two ageing men sitting at a bar illustrates this fear of the future vis à vis texting. "I used to call people, then I got into e-mailing, then texting, and now I just ignore everyone," reads the text beneath the illustration (included on page 5 of this thesis).

Elaborating on my secondary research question of *how* adults are texting, while several articles note the slow speed at which adults text compared to young people, or the physical difficulties of using the often small keyboards on modern cell phones, much buzz was generated when the Japanese Sumo Association bought sixty iPads for the

wrestling stables in order to facilitate the sharing of information with wrestlers who have outsized hands. 62-year-old former wrestler and JSA chief Hanaregoma admitted that while he was able to read incoming text messages on his cell phone, he didn't know how to write replies, but found sending emails on the iPad to be easy. That Hanaregoma admitted failure in his ability to reply to a text message was of note, since sending emails on an iPad does not essentially address this failure, and calls into question the claim made by Castells et al. (2007), that technologies diffuse only to the extent that they gel with pre-existing social structures and cultural values. If the Sumo wrestlers are currently having their information relayed to them by fax and snail mail, how are they going to modify their structured communication practices to start engaging themselves in the communication process? Similarly, if the Boomers cited in this literature review are fearful of texting because it is on the rise concurrently with a decline in conversations (which they value greater), then why is texting diffusing through this generation? Why would they do something seemingly at odds with their 'pre-existing social structures and cultural values'? Either Castells is wrong (and that would be a bold statement) or some other mechanism is at play vis à vis adults and texting.

METHODS

Both the individual interview and the small-group focused interview were used in this research as a method of understanding how and why adults text and how the use of text messaging affects their social world. Over a six-month time period from April through September 2011 eight interviews were conducted with ten adults:

TABLE 4: Breakdown Of Interview Subjects

Age	Gender	Nationality	Interview Type	Phone Type	Employment
					Status
65	Female	European	Individual and Group	iPhone	Retired
62	Female	European	Group	ABC-keyboard	Semi-retired
63	Male	American	Individual-key	iPhone	Semi-retired
			informant		
48	Male	American	Individual-key	Smartphone	Employed
			informant		
66	Male	American	Individual-key	Smartphone	Retired
			informant and Group		
62	Female	American	Group	Smartphone	Retired
63	Male	European	Group	BlackBerry	Employed
63	Female	European	Group	BlackBerry	Semi-retired
45	Female	American	Group	iPhone	Employed
48	Female	American	Group	Smartphone	Employed

Interviews were transcribed using a detailed transcription method and participants' comments and statements were systematically analyzed.

It should be pointed out that the ten subjects interviewed were not intended to represent the entire range of adult texters. Subjects were diverse in age, but no adult older than 66 was interviewed. Four of the participants were from Europe and six were from North America, but no generalizations were made based on nationality. In terms of income, subjects covered the spectrum from semi-retired and barely making ends meet to fully retired and living on a substantial fixed retirement income, but again no

generalizations were made based on the self-reported income or employment status of respondents. The subjects were selected by convenience sampling with the intent of opening the door into the world of adult text messaging; limitations due to the size of study or methodology of sampling are mitigated by the fact that generalizations were not made about the population of adult text messengers as a whole based on the results of the eight interviews undertaken here. The strength of this method lies in its suitability for conducting an exploratory study of text messaging in a previously unstudied age range.

Initially the research began with key informant interviews of retired industry insiders—one of whom held an executive position at the phone company AT&T from 1967-2000—in order to gain a strong foothold on the phenomenon of text messaging in and of itself. Their responses led to a modification of the types of questions asked for subsequent interviews, with less focus on the introduction of the technology and more emphasis on the application and utility of it. Two subsequent individual interviews were conducted, one with a texter in his late forties, and one with a texter in her late sixties. The diversity in age (relative to the age-range under scrutiny) at this stage of the study helped me ascertain whether there were any significant differences between the experiences of older adult texters and those born later who nevertheless grew up in a predigital cellular communications age.

Subsequent to the individual interviews four small-group focused interviews were conducted. With each group (two persons plus myself as the moderator) after the relevant consent forms were signed or consent was given orally, the topic at hand was introduced and participants were instructed to converse between themselves on the topic. At the

outset participants were made aware that my participation would merely be to steer the conversation should it stray from the topic at hand, or to ask follow-up questions as necessary. Three of the four small-group focused interviews were conducted by telephone, with the participants in the same room, but not myself. The fourth small-group focused interview was conducted with myself in the same room as the participants. The differences between the two styles of group interview were subtle and do not merit much further deliberation here, suffice to say that with me present in the room it felt much more like a two-person interview, and with me not present in the room participants seemed at times to be in a genuine conversation with each other, albeit one that was focused on a topic of my choosing.

While the majority of existing social research on text messaging focuses on the use of it by young people or as a therapeutic aid, this research focuses solely on text messaging by adults, but where the adults interviewed in this study used texting to communicate with their offspring or youthful acquaintances, it should be noted that I only studied the adult side of the relationship. There already exists a substantial body of work that examines intergenerational texting from a youthful perspective, but a more comprehensive study could include interviews with both.

I selected the age range 45 and above since it includes both the 'Baby Boomers' who were born during the demographic birth boom between 1946 and 1964 (who at their youngest were 47 during the period of research—April through September 2011) and also those who grew up in a pre-digital cellular communications age (widespread uptake of the cell phone did not occur until after the cell phone companies made the move to the

second generation (2G) of mobile communications and digital technology in the late 1980s). In addition, 45-54 years of age represents one of the categories selected by the Nielson Company in its analysis of the cell phone bills of 60,000 American cell phone subscribers, referred to in this thesis.

In preparation for conducting the small-group focused interviews I attended the Fall 2010 Strategic Planning Focus Group session on Monday 11th October as a participant and took notes relevant to its operation. While my years as a print journalist provided me ample experience in individual interviewing, as well as in transcribing responses and discerning relevant themes, I gained experience in group interviewing during the Spring semester 2011 in my position as a Graduate Researcher in the UH Mānoa Assessment Office. During the semester I led sixteen focus groups of between five and ten participants, asking questions from a pre-selected list, ensuring every participant had the opportunity to speak, encouraging the reticent to weigh in, and generally moderating the discussion. Subsequent to the focus groups I was responsible for coding responses thematically, and generating conclusions.

I obtained an exemption from the CHS to carry out this research prior to conducting both the individual and small-group focused interviews. During the Fall 2010 semester I completed the requisite four hours of human studies training that enabled me to file a claim for exemption from the CHS. A copy of CHS approval of the study as exempt is attached as an addendum to this thesis.

Literature specific to group interviews by one of the pioneers of group interviewing—David Morgan—highlights the utility of using such a method for gaining,

"a better understanding of knowledge, attitudes, and practices" (1996: 133), three areas with regards to texting that this study examines. Further, Morgan suggests that group interviews are of greatest utility when they reproduce results from other qualitative methods such as the individual interview. A comparison of data obtained from the two respondents who participated in both the individual and small-group focused interview indicates that their position did not shift significantly from one method to another. However, the small-group focused interview did tend to lend itself to uncovering behaviors that an individual might not have offered on their own (for example one respondent has an ongoing joke with his partner where he takes pictures of his food and texts it to her to maintain communications when he's away on business; he was embarrassed when his partner brought this up and so it is unlikely he would have offered this information on his own).

A concern I had both with the individual interviews and the small-group focused interviews is that the discrepancy between my age (36) and the age of the participants might affect their perception that I was young and therefore hip to texting, while they were older and might not want to reveal some of the limitations they had with the technology. A review of JoEllen Shively (1992), who ran two focus groups of two different ethnic groups (Anglos and American Indians) in order to gain a better understanding of how they viewed a cultural object raised the issue of trying to align the race of the discussion leader with the race of the participants. One assumes that matching the characteristics of the discussion leader with those of the participants would produce less biased results. In every interview, both individual and small-group, I mentioned at the outset that I was a late adopter of the technology and that I didn't yet have a

smartphone, but a further study into the use of text messaging by older adults could use an older adult interviewer to mitigate any possible bias in results.

RESULTS

The primary reason texting has become such a popular mode among the adults interviewed for this study is temporal efficiency: texting is a quick and easy form of telemediated communication. However, where we might assume only a short delay in texting response time, study participants appear to favor asynchronous texting; immediate or near-immediate responses were most commonly neither planned nor anticipated by the adults interviewed for this study. When we delve deeper into the data in order to capture the rich social norms of adult texting behavior an interesting pattern emerges; while most of the participants in this study place a high value on face-to-face copresent communications, they also claim to dislike extended telemediated voice communications (i.e. lengthy cellphone calls) and therefore rely on texting for its latent function (Robert Merton 1957) of eliminating the 'trap' of a protracted cell phone call. Perhaps this is related to temporal efficiency or perhaps this is indicative of a more fundamental shift in phone culture among adults. What is certain is that the negative attributes of texting difficulties hitting the right keys, dislike of the new argot of abbreviated textspeak⁶, or occasional mistrust of texted information—are far outweighed by what study participants see as the benefits, particularly the speed and ease of use, the indispensability of texting for communicating with children and grandchildren, the low cost of using texting for international communications, and the utility of texting for communicating with the hard

⁶ The term *textspeak* made its inaugural entrance into the concise Oxford English Dictionary in 2011 (12th Ed.) with a definition as—Textspeak (noun): Language regarded as characteristic of text messages, consisting of abbreviations, acronyms, initials, emoticons, etc.

of hearing. All the adults interviewed for this study found texting to be a surprisingly useful—even enjoyable—social activity, and one they would be hard pressed to live without.

iPHONE, MY PHONE, DUMB PHONE, SMARTPHONE

If temporal efficiency use answers why adults text, study participants noted that the rate at which they texted and the corresponding ease of it was related to phone-type; study participants found that smartphones (such as the iPhone or BlackBerry) facilitated faster text-writing rates, and further that smartphone text string interfaces made text communications easier to follow than on older phones. As Rudi Volti notes, "A technology is of no use unless it is put to use" (1995: 68), and for study participants this was certainly true since they all owned ABC-keypad cell phones (you press 'A' three times to text-write the letter 'C') for several years with texting capability that they never or rarely used. "I remember thinking what a hassle," one subject said of texting on her old-style keypad; "It was very cumbersome," noted another. Perhaps cognizant of the inadequacies of the old ABC-style keypads, or perhaps because of the lure of the multiple functionalities embedded in the shiny new smartphones, all but one of the adults interviewed in this study upgraded in recent years to a smartphone and with that change saw an increase in their text-writing speed and use of the medium. "I wouldn't send hardly anything with those [old] systems," said one tech-savvy participant. "It's only since the iPhone that I began to actually text."

Two study participants nevertheless admitted to having a hard time with the keyboard on their smartphones, one attributing it to her "fat fingers" which she thought might be the reason she didn't text much, and the other finding herself slow at text-

writing in comparison to her fast rate of touch-typing on a typewriter. Despite these difficulties both respondents still found texting to be a really useful technology, citing a number of positive attributes—its utility for "really important" things such as to get help for a flat tire, or to communicate with a friend who lived out of the country and who was partially deaf—that seemed to outweigh their perceived slow speed of text-writing. "I really love it actually," concluded one of the slow text-writers. "I wish more people texted me." She even customized her cell phone with a received text alert that harks back strikingly to a pre-digital age: "a little bicycle bell—ding ding—that's my chosen alert!" she said, indicative of the agency people can exercise when they appropriate a new technology, molding and transforming their modern digital devices to suit their own personal—and in this case pre-digital—cultural schemas. Where a majority of adult texters found that their new smartphones engendered a more rapid text-type rate than ever before, even those that were ambivalent about its speed and ease of use still found it to be an indispensable and—once they had customized it—enjoyable communication tool.

TEXT STRINGS: CONVERSATIONAL OR MNEMONICAL?

A further development that accompanied smartphones and which many study participants found increased texting's ease and utility are the visual interfaces known as *text strings*, whereby texts to and from correspondents are organized in a stream on a single interface; study participants found that not only did text string interfaces help them remember what previous communiqués had been about, some also felt it contributed to a feeling that texting is conversational in nature: "I like the conversations that you get on an iPhone so that if you get a text and you reply and then the reply comes back you have the whole thing in a string and so it actually is a conversation," described one participant

to her friend—the remaining participant still with an ABC-keypad phone. "Yes that's much more of a conversation," her friend replied. One study participant, describing how he and his partner would organize things over text said, "You sort of ping pong really." A fourth participant described is as, "a whole trail, a conversation trail." Where study participants did not find it made texting conversational they nevertheless found it useful as a mnemonic: "It just makes it easier for me to remember what I said three messages back," said one early adopter of the technology. "Sometimes I don't get replies for six, seven hours and then they reply 'yeah, sure' and it's like, er, what was that about again?" he confessed. For this study participant the text string software increased texting's ease of use and utility as a telemediated communication tool; the more useful it became, the more he came to rely on it to stay connected to family and business colleagues. What is interesting is that despite lauding texting for its speed and efficiency he nevertheless confessed to using it asynchronously, a pattern of communication more often associated with letter and postcard writing, e-mail, or with the convention of playing 'voice tag' whereby communicants leave messages for each other on answering machines rather than speaking to each other contemporaneously—all noted by study participants as primary methods of communication prior to the advent of texting. We shall return to an analysis of synchronicity as it marks an important divergence from young people's common use of texting and may indicate a mode adults are employing to wrest control over mobile interactions, since asynchronous use of texting essentially untethers the self from the texting device. The unique manner in which study participants claim to use texting is also indicative of how they have made texting 'resonate' with their 'cultural values' by adopting an asynchronous pattern of use that complements prior asynchronous

communications, and also signifies how they have molded texting to fit "into the stream of social and cultural evolution" (Ito, ibid), by using texting alongside brief mobile phone calls or to set up land-line phone calls, suggesting strongly the agentic nature of adults' adoption of the new technology of texting.

THAT'S NOT WHAT I MEANT: AUTO-FILL DESPAIR

If asynchronous use of texting lends adults a measure of control over their use of mobile telephony, the same cannot be said for other facets of the new technology; along with numerous additional functionalities of the smartphone (emailing, syncable calendar, for example) came advances in texting software that meant that unless you disabled it, auto-correct and auto-fill came as standard, but while most study participants had positive things to say about auto-correct, anthropomorphizing it into some kind of intelligent lifeform ("It even can correct my name I mean it learned, it's smart!") they had mostly negative things to say about auto-fill or predictive texting. "It alters so many words; it's so irritating you have to keep overriding it," said one European adult texter, adding "it's so silly because the language is often American." Subjects likewise humanized (or demonized) auto-fill: "I find it very, very intrusive," remarked one. "How dare you presume that you know which way my brain is going and what I actually want to say!" Two subjects had BlackBerry smartphones that they noted with something like pride they had taught to auto-fill specific words of their choosing. "I put 'spw' in it comes up as 'sparkling wine' so you can put in whatever you want," the participant said. The ability of these BlackBerry owners to 'teach' their phones shortcuts, in essence customizing their technologies to their own personal needs, shows again the agentic nature of human appropriation of technology and stands in contrast to the perception of other study

participants that when the phone acts of its own accord it is somehow a sentient being, something other than machine, that intrudes in their personal space.

WTF? ADULTS' DISLIKE OF ABBREVIATED TEXTSPEAK

While the adults interviewed for this research study lauded texting as a telecommunication mode primarily because of the speed and ease of its use, most participants nevertheless took the extra time to always use proper spelling, grammar, and punctuation, and most thought negatively about contacts who texted them without adhering to this convention. "I use the abbreviations to the extent that I know them," said one while admitting that, "someone that's just getting into it would think this was gibberish." Others blamed their formal education or age for making them want to stick to 'correct' writing forms. "I have to use a capital letter it was so drummed into us at school," said one. "It's just not in my nature," said another, adding, "I think that's all part of my age probably!" Although three participants admitted to using abbreviations in their texts—also known as textspeak—there was a general sense that young people who use textspeak are communicating in their own language. Further, there was a feeling that frequent use of abbreviations in text-writing has contributed to a general worsening of young people's written communication skills: "You guys can't even write a complete coherent sentence any more you're so used to abbreviating," said one participant of the young people he has hired for his business. "I can't understand quite a lot of what [teenagers] write because they've got a sort of argot of their own—a text argot I guess," said another. "There's a whole new language out that, sometimes I get a text message I really don't know if that was a typo or if that's the way it's supposed to be!" a further participant commented on communications from her grandchildren. Three participants

noted that while it may be quicker to write texts using textspeak it doesn't make it any quicker to read them. "It takes me ages to work out—you've got to recalibrate your thinking to that new kind of linguistic," said one. "I hate it too," replied her friend. "It takes just as long to read them." But if we are led to believe textspeak is simply a young person's modification of the medium—a creative method of injecting feelings into a text given its limited length—that is not to say that young people are exclusive owners of the practice, nor that adults dislike the brevity inherent in the medium: "You have to be much more concise [and] I quite enjoy that aspect of it," one grandmother said. "It can be quite amusing . . . it's a very unique way of writing." If textspeak is seen as a new language and one that interview subjects felt threatened young people's ability to use standard English—particularly for young people who use it frequently—study participants nevertheless found that it contributed to texting's brevity; temporal efficiency is still supported as the main reason the adults interviewed are taking up texting.

While it is clear that some of the older adults interviewed enjoyed the new linguistic apposite to brief text communications, two participants noted that adults who use textspeak in their texts to other adults are contravening the informal norms of telemediated adult communication behavior: "I try to use some of the slang that the kids use with me, but I don't use it with adults. I mean, I just think it's foolish to try to act cool," said one. "I would not think very highly of it. I would think they were trying to be too young," said another. "I like to make sure things are spelled right and I like to make sure that they're punctuated right . . . I want [work] people to think of [me as] professional," said another. Two participants felt the use of textspeak, including the use of emoticons such as smiley faces, was useful, although they were very specific about

when the use of such conventions was appropriate. "It makes it possible to communicate more using less characters in a texting situation," said one, adding as a caveat, "but I think words are always better." The other respondent, who has regular contact with his large extended family of children and grandchildren via both telephone calls and texting saw the use of emoticons and textspeak as injecting a more human element to an otherwise static communication form:

It's good feedback too. For example, if you send them something and it's a little humorous then they write back LOL or whatever, it means that it tickled their funny bone or at least it was more than just digestion of words: they reacted to it; it's a quick way of reacting.

Note, however, that the chief virtue he sees in the use of textspeak and emoticons is not just that it makes it feel more conversational, but that it's a "quick" way of reacting: temporal efficiency is still paramount. What is uncertain is whether textspeak is enduring a phase of cultural lag (William Ogburn 1922), whereby textspeak use is currently seen by adults as inappropriate—or as inappropriate for certain situations such as business use—but will eventually become the norm of adult texted communications.

PHONE-STYLE DETERMINISM?

If the theory of technological determinism—a strong form of which would postulate that technology determines change in social organization and cultural values—is too reductionist and fails to take into account the agentic nature of human appropriation of technology evidenced by study participants, we are still faced with the fact that eight out of ten older adults interviewed for this study found that getting a smartphone positively impacted the amount of texting they did, leading to increased communications both inter- and intragenerationally, and further that concurrent with uptake of texting

came an increased dislike and devaluing of telephone conversations, affecting both the amount of telephone calls made and the length of call. "Since I got my BlackBerry I email more and text more," said one grandfather interviewed for this study, concluding, "I do much less telephoning now than I used to." And yet while most study participants claimed to place a higher value on face to face communications—acquiescing that such communications weren't always possible—they also appeared to value texting for its latent function of avoiding telephone conversations, and it is this decline in the desire to engage in telemediated voice communications that is one of the paramount shifts in communication patterns that the recent prevalent uptake of texting has effected among adults, evidenced both among the adults interviewed for this study and the adults surveyed by CTIA (see Table 3 on page 10 of this thesis). It's hard not to feel technologically deterministic when faced with these facts: subsequent to adopting a new mode of communicating (that sits on the same device they use to make mobile telephone calls), adults are organizing their contact with each other in a way that actively avoids telemediated voice communications. "I realize that texting is useful where I don't want to get into a phone conversation with you for ten minutes," said one semi-retired adult texter. "I don't particularly like to sit for hours on a telephone call or I don't like to go through a lot of the niceties like, 'how are you doing?', 'how's the weather there?'...I like to be able to receive information in concise efficient ways and that's where texting is really good," said another. "You wouldn't want to ring them up and engage in conversation with them about something else," intoned a third. One participant liked texting because it saved her from worrying about her ward without necessitating a voice call: "I don't need to talk to her on the phone, she just needed to text me to tell me to give me a status report," she said. One grandmother admitted that while her girlfriends and her texted occasionally for "little consultations about this, that, or the other," she also found texting to be useful for enabling communication without the risk of running into a protracted conversation. "It does save a lot of conversations," she said. "One of the things I really appreciate is that you can have a quick and direct conversation with someone [using text] without actually having to talk to them." What is interesting here is the subject's bifurcation of conversation; she sees text chat and "little consultations" over text as analogous to a "direct conversation" whereas telemediated voice communications are something to be avoided, something to be 'saved' from. Perhaps this shift in preferred modes of telemediated communication amongst older adults is a result of many of their newly retired statuses: if much of their working lives was dependent on telemediated voice communications in which the telephone call was an essentially commodified practice, retirement presents an opportunity to break from this. Or perhaps we can return to temporal efficiency for a cause of this shift: time is precious (as Melenhorst et al. described it in particular reference to older adults, see p. 20 of this thesis); voice calls are an inefficient use of time. A third potential reason for this shift may be that of control (much as we saw was the case for the young people in the literature review); relative to an unexpected phone call, an unexpected text is preferable since it gives the receiver control over the length of time it takes to engage in the communication, gives them the option to 'ignore' the missive or reply either by text or by phone call, and gives them the luxury of pondering over the response. A fourth possibility, and one that warrants further investigation since it was not covered implicitly in this study, is that adults do not like the mobility inherent in cellphone use: voice calls may be non-problematic when they are

taken from the comfort of the home on a land line, but *mobile* voice calls may be problematic for adults for a variety of reasons.

SOCIAL CIRCLE UPKEEP

If brevity of communication is seen as a paramount benefit of texting for most study participants, this is not to say that brief texted communications aren't socially valuable: all of the adults interviewed found texting uptake supported and even improved social relations both among immediate social circles and more distant ones. "It's a link, it's a tether," intoned one woman of how her texting communications made her feel when she was away from her husband (even stating that texting was a preferred method since phone calls from her have a unique ring when she calls his phone and, "I know sometimes [he] ignores me when I call him."). Another grandmother who confessed that the whole notion of communicating in brief was anothema to her nevertheless conceded to enjoying, "these different, alternative ways of communication," perhaps attributable to her newly retired status or the fact that she lives in a remote, isolated place. "I find texting really exciting when there's a little blip saying 'you have a new message'," she said. "There's still this feeling that there's contact from the outside world or you are in touch with somebody somewhere." While she sees her own texting behavior as different from others due to her lengthy communication style she nevertheless values it greatly as a means of keeping social contact with the outside world; texting has positively impacted her perceived sense of connection, of community, with others in geographically remote places, making her and her contacts, as Goffman might say, "accessible, available, and subject to one another" (1963: 22) through a process of telemediated copresence. Even the older adult who admitted to infrequent use of texting admitted that it was essential for

helping her stay connected to one friend in particular with whom, prior to texting, she had only had annual non-telemediated communications via Christmas card:

That has allowed us to keep in contact and keep in contact in sort of a week to week month to month basis as opposed to once a year . . . Text is a nice way to continue to have a relationship with them that in some ways is still meaningful—more meaningful than the Christmas card—the Christmas card you only get to hear some of the big highlights . . . a text conversation you might be able to pick up on some of the smaller highlights that are current that are equally important.

Of interest is that while brevity of communications is seen as a prime benefit of texting for most adults interviewed in this study, in this instance we see the subject favoring text for its enabling her to 'converse' with a friend about current happenings; the annual Christmas card is eschewed in favor of a 'text conversation' that keeps her and her friends up to date throughout the year in a 'relationship'. In this example we can see that the new mode of texting is replacing existing communication modes, superseding the annual Christmas Card in favor of a more frequent 'conversation' via text, and positively affecting the text-writer's social world since it keeps her up to date throughout the year, keeping her *electronically proximal* (Michael Dertouzos 1998).

While texting is described by a few study participants as being impersonal or not an 'emotional-based' medium, two pairs of older adults admitting to sending brief affectionate statements to each other, showing poignantly the positive effect of texting uptake on their social and emotional worlds. "You and I use it for nice little messages to each other which is quite sweet," said one respondent in a conversation with her partner about the amorous nature of their texts. But as the conversation continued it became apparent that as their relationship developed and they were physically copresent more

often, the frequency of their amorous text missives decreased. But that is not to say their frequency of their *communications* decreased; rather it evolved from textual to nontextual as the structure of their relationship evolved. When her partner was away or at a business function he found a way to stay in contact using picture messages (known as MMS-multimedia messages) as a sort of in-joke between the two of them. "Of course you use yours for sending me pictures of your meals," she said to her partner. "For some reason [he's] got this fixation about sending pictures of meals. So it's a bit of a joke!" A joke that keeps them connected in their own private world without the need to add any text; a non-textual telemediated communication that mitigates their lack of physical copresence.

If low cost was seen in the literature review as a major reason for texting uptake by young people or in impoverished nations, while many study participants stated they were either fully or partially retired and therefore living on a fixed or reduced income, low cost was not described as a reason for taking up texting. One early adopter of the technology noted that when he and his wife sent their first texts as a novelty the per-text cost had even been prohibitive, but like most study participants found that when he upgraded to a smartphone, unlimited texting was bundled in with the cost of phone connectivity (which at the relatively high cost of at least \$80 per month was a source of concern for at least three participants). However, two retired adults interviewed did laud texting for its low cost in keeping them connected when they were abroad, and for strengthening ties with friends who had retired abroad. One grandmother who claimed she was "sold" on texting by its ease and cheapness of international use noted how texting had reduced her worry about her beloved pets when she had gone on holiday:

"When we were out in the middle of the bush in Africa texting was a vehicle for us to get feedback every day on our dogs," she said, adding, "You can communicate all over the world with it." Another grandmother noted how texting had brought her closer to a retired friend in France with whom she had limited contact prior to texting: "We wouldn't communicate at all when she was away. She doesn't use her mobile phone much—she's just never got into it really—but now she's got going on texting, she and I text a lot . . . about really silly things that we wouldn't bother to clock up money on a phone call about." What is particularly poignant about the nature of this subject's relationship with her friend is that texting has brought them closer at a time when her friend at 71 years old is beginning to suffer from age-related deafness: "She's getting a bit deaf and she doesn't hear her phone," the respondent said. "She hasn't got to the point where she wears hearing aids but unless you're looking at her she doesn't hear you. But she can see the screen you see so she's [texting] more and more and I suspect it might be for that reason." What is interesting is that here texting is seen not only as a vehicle for regular chats about the mundane content of daily life (they had texted each other three times the previous day for a "long conversation" about operating a new gas-powered weed whacker), but that texting has also strengthened their relationship against adversity—not only the physical isolation caused as her friend retired out of the country, but also her encroaching deafness in a way that avoided the loss of face of explicitly addressing it. The implications of the inclusive nature of texting for our rapidly ageing society are not to be underestimated. The Administration on Aging estimates that by 2030 there will be more than twice the number of older persons (65+) than in 2000, and so the practical applications of texting for older adults are not to be underestimated.

IMMEDIATE VS. DELAYED RESPONSE

While the perceived style of younger people's texts may be clipped, and the perceived style of their use of texting is rapid back-and-forth conversation, the adult texters interviewed for this study admitted to texting in an altogether different temporal frame: asynchronously. There are two dimensions of copresence that Zhao expounds upon in his Toward a Taxonomy of Copresence (2003: 445) and which I describe in detail in the literature review (see page 16); but where Zhao posits that "real-time or near realtime interaction" (p. 450) poses a synchronous structure (where texts bounce back and forth in real time as if in a virtual conversation, for example) for study participants there was no such sense of synchronicity implied in responding to a text nor in anticipating its response for most texted communications. Many study participants felt their own texts bounced back and forth at a much slower pace, in many instances hours passed inbetween, but this was not seen as disadvantageous, and in a couple of cases participants felt that this was one of texting's virtues since it meant that the text did not interrupt dayto-day activities. One study participant noted that he prefers for contacting his daughter, cognizant of the social embarrassment a phone call might create if he interrupts her when she's with her contemporaries: "Because it was a text thing it was something she could reply to and she didn't have to sit there and go, 'it's my Dad'." Again we have the notion of control; when this parent contacts his daughter by text he is in essence giving control of the communication to her—communicating with her on her own terms—perhaps as a signifier of his own emotional proximity and parental understanding, in which case the medium has truly become the message (Marshall McLuhan 1964). For his own personal use, however, he likes what he perceives as the asynchronicity of texting since it allows

him to deal with things in his own time frame. "I like that it just it just comes immediately. I can deal with it. Or not," he said, and so here we see the symmetric etiquette of texting, where texting affords both the sender and the receiver a modicum of control over telemediated communications in a manner that was not possible prior to text⁷. Another male respondent likewise found texting to be useful for giving the recipient the choice to ignore messages. "Sending a text the person can either look at it, ignore it, or reply," he said. But he was also cognizant of not wanting to interrupt people or call at a time contrary to social norms: "You might not want to ring them up because it could be late," he said. "Telephoning the person you're disrupting what they're doing." The adults interviewed for this study were cognizant of the state of being of the recipient, favoring texting communications that both do not interrupt whatever a communicant may be doing at a remote location, but also allow for a polite ignoring of communications.

When study participants confirmed they were thinking of recipients when they chose to use text as a mode of communicating, that's not to say recipients were always ready to be communicated with; one retired texter attributed the lengthy delay in response to texts with some of her friends because of a differential use of cell phones perhaps unique to older adults who grew up in a pre-cellular age—only switching their cell phones on to make calls: "If they don't [respond quickly] you know it's because they forgot to switch their phone on if it's one of my friends!" she said. A couple of study participants even disliked texting for its implied fast response. "I think that's maybe what inhibited me [to using] texting; it's like always having to be attentive, feeling like I was now attached to my phone," said one participant, echoing McLuhan's sentiment that we

⁷ Of course since the advent of caller ID it was possible to know who was calling and *ignore* the call, but in ignoring a call there is always the chance that it will be seen as a snub, and more importantly, there is no sense of *communication* when a call is ignored: the message is not communicated.

are in an, "Age of Anxiety for the reason of the electric explosion that compels commitment and participation" (1964: 5). Others felt torn between wanting an immediate response and not wanting to be tied to checking their phones. "I throw it out there and then you know sometimes I don't check my phone for a couple of hours after that. While some people would just be aghast that I do that . . . [other] people get annoyed at those people for expecting an immediate response." One couple, however, who had tried to use texting to collaborate on buying a rug, felt extremely frustrated when their plan failed because of network latency: "We literally *relied* on it," said the wife. "I said 'take a picture and text it to me and I'll let you know', and that was our plan and we weren't able to execute on that plan." In this instance texting had not lived up to its promise of real-time or near real-time interaction, but this was a rare instance that synchronous texting was even attempted by the adults interviewed; while text has the potential for both synchronous and asynchronous use, a majority of the time texting was seen by study participants as being asynchronous in nature.

For one grandmother interviewed, the asynchronicity of texting held an unexpected intrinsic value: "In a phone conversation or any kind of conversation you're thinking on your feet the whole time so your immediate response may not be very well thought out, may not be very valued," she said. "A text the person has had a little bit of time to think through what they're going to say." She valued texting's asynchronicity for its allowing both her and the respondent greater time to contemplate, but she also liked texting because it kept a permanent record of the 'conversation', conferring on her the ability to take pleasure in it over and over again, much as she would with more traditional forms of written communication. "It's a sort of throwback to getting a letter," she said.

"In a letter you could read it again and you could savor it and you could puzzle out what they meant . . . and the same thing occurs with a text, whereas with a phone call . . . it's lost in the ether." In this instance asynchronous use of texting is seen as complementing earlier modes of communication (the letter), and is held in higher esteem than the conversation (either by phone or face-to-face). If asynchronous texting is seen as an unique appropriation of the technology particular to adults since it more closely 'resonates' with the most valued communication modes of adults, then the technology is not deterministic; asynchronous texting mimics preferred structures of adult communication and supports their cultural value schemas. Their agentic appropriation of texting confirms Ito's approach to technological uptake is wise; texting uptake has not 'transformed' (although clearly it has 'impacted' our adults' lives), rather adults have adopted texting in a way that suits their cultural schemas, in a way that mimics their preferred communication practices such as letter writing that they may feel is in danger of becoming a lost art in today's rapidly evolving world of communications.

DIVIDED BY GENERATIONS; UNITED IN TEXT

If study participants noted they often use text messaging asynchronously—much as a drop box for a message—many also said they preferred using text messaging to voice mail, a communications mode which appears to have declined in value and use since the introduction of texting into study participants' lives. Primarily, when communicating with contemporaries, voice mail is perceived as too slow ("why you making me listen to this whole voice message and all you had to tell me was that? You could've just texted me!"), but when communicating with younger contacts leaving a voice mail was seen as a dead end, since the perception among study participants was that

young people use *voicemail* asynchronously, or fail to use it at all: "I'd be a skeleton sitting in a chair if I was waiting for [the kids] to return a phone call, but they'll get back to me on a text virtually instantaneously," said one grandparent, adding, "They seem to be very tuned in to staying current and responding immediately to text messaging." While many study participants felt that texting gave them the ability to instantly connect with friends and family, one respondent saw its greatest virtue as allowing him to engage in telemediated communication with his daughter without interrupting her: "I'll text her and she'll get to it when she gets out of class you know rather than having the phone ring and then she's got to check her voicemail which she doesn't usually do very well." Texting is thus seen as promoting closer intergenerational connections, increasing a sense of community among adult texters and their offspring since they are essentially meeting young people on their 'own' technological doorsteps.

While texting is seen as an efficient way of communicating both inter- and intragenerationally without disturbing others around the phone user or disrupting the phone user themselves, there is also a more doom-laden sense among older adults that the act of texting puts users in a void where they are oblivious to the outside world. "It does exclude people. You see somebody texting and you wish they weren't doing it somehow although it's nothing to do with you at all . . . it's kind of intimate in a way," said one grandmother of how she feels when she sees people in public texting. Thinking about her own texting behavior she attributed this sense of intimacy to the physical act of textwriting: "You have to really concentrate to write; you don't have to concentrate in the same way when you're on the phone." Another grandmother echoed this sentiment: "It is an easy way for people to communicate and to some degree I think almost in a vacuum . .

. you're not looking at anybody," she said. "It's a non-emotional way of communicating." Perhaps because of this lack of emotion, when she receives a text she doesn't entirely trust its contents. An example she gives is when she was planning on booking some plane tickets to visit grandchildren and had texted her daughter-in-law to confirm her plans. "When I say it's kind of in a vacuum it's because even though I've gotten feedback I'm not convinced that I should make that commitment to spend those dollars without having dialogue . . . I don't want that communication to be in this cyberspace stream thing," she said. Later in the small-group interview in which she was participating with her husband, she expounds further about her mistrust of texting due to what she perceives as its nonemotional nature. "There's no context for it," she said. "It's just a minimal amount of words thrown out there and you never really know what might be behind it. Now obviously you take into account who's sending it to you but I think that it's a very, very easy way for people to camouflage what they're trying to say and what they really feel." Because of the brief nature of texts—even when the communication is three or four texts long—the participant feels there is room for error or misinterpretation of intent, a feeling echoed in the following cartoon published in the New Yorker:



"She's texting me, but I think she's also subtexting me."8

For both the gentleman in the cartoon and for our grandmother study participant there is an occasional sense of distrust of texted telecommunications where the brevity of the missive leaves room for misunderstanding or miscommunication. And yet still our grandmother feels texting is "a really awesome advancement"; situation is paramount for her when deciding whether to rely on modern texting technology.

SAY WHAT? NO MORE POSTCARDS?

For some study participants texting feels new and different, for others it's just another mode of telemediated communication, and the differing attitudes can be discerned by paying attention to the verb respondents use when talking about texting. "It's just to *say* I'll be there on time" said one interviewee about a text he'd sent, as if he had called and told them he'd be there on time. Another texter when referencing how much she liked the interface of text strings likewise mentions that, "you can refer to what they *said*". Another, speaking about killing fallow minutes of time said, "I'll quickly

⁸ Cartoon by Leo Cullum. Published in The New Yorker 7/2/2007.

write a note to my sister in Australia" as if she were manually hand-writing a note rather than text-writing from her smartphone at a bus stop. And yet while the differences between hand-writing and text-writing may be primarily to do with method, many study participants noted that an increase in one had led to a decline or total absence of the other: "I don't send postcards when I'm on holiday any more—I just take a photograph and send it," one BlackBerry user explained. "I hate writing letters anyway, loathe it, it's much quicker in email," noted his partner, who uses her smartphone as a principal emailing device. Other older adults interviewed appeared saddened by this decline in traditional communication forms: "Nobody sits down and pens a three-page letter," lamented one participant. "It's kind of like getting a thank you note for a wonderful party or something. It's so rare that people do that." Study participants were conflicted in their feelings about the consequences of texting uptake: it was indeed quick and easy, but it made prior communication forms (letter writing, voice mail) seem slow and outmoded by comparison. The following diagram illustrates these shifts in preferred modes of communication pre-and post-texting among study participants:

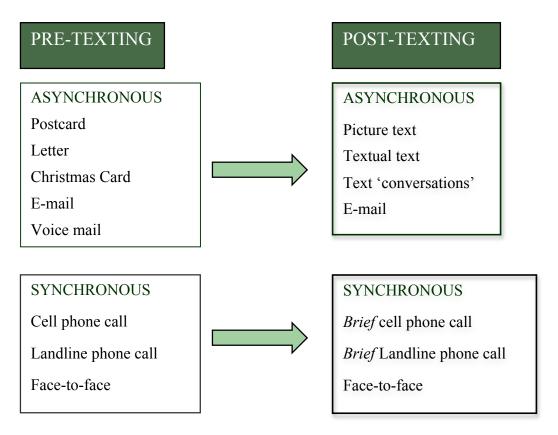


Diagram 1: Preferred modes of Communication among Adult Study Participants Pre-and Post-texting.

And yet while we could posit that letter writing was doomed by the introduction of email, for example, or is symptomatic of increased use of keyboards and the waning popularity of calligraphy, the decline in preference for using voice mail is harder to explain. It would be reductionist to assume voice mail's decline is a consequence of texting uptake alone; rather its place in our lives has evolved, as Ito notes, in a process that "intertwined the social, cultural and technical" (2004: 4) whereby voicemail diminished in perceived utility and value in the presence of other more immediate and brief forms of communication.

If study participants were ambiguous when thinking about the consequences of texting uptake on their own behavior, they were much more emphatic about the perceived strangeness of young people's texting behavior or the negative social consequences that await young people as a result of taking up texting. "I see young people all the time carrying on back and forth, back and forth, back and forth," laughed one participant, noting that the young people appeared to be multitasking while engaging in a text conversation: "They're doing something else—they're watching TV or they're in a circle of people—and they text," she said. Her co-worker was equally fascinated. "I'm more amused by the people who are in a group together and they're texting other people . . . Like this weird little conversation where they could be actually talking to each other but they're talking to other people." One older adult spoke of a young person he had seen texting: "They're rattling away with two thumbs on a tiny keyboard . . . I don't know how she did it. I was on the bus ten minutes, she spent the whole time texting—she had a conversation going with somebody." One subject thought young people's texting was very different from his own due to the synchronous nature of young people's texting: "I think a lot of younger people actually have sort of real-time conversations with people by text don't they?", he said to his partner. "You know, somebody's actively sitting in front of their phone texting and somebody else is at the other end answering and they're replying back and forth. We don't do that." While many study participants saw youth texting behavior as fundamentally at odds with their own and indicative of a new social code among young people where it is the norm to text during a conversation or even as part of a conversation with others, it was often commented how this bifurcation in style

of use made them feel old. "I think it's probably this sort of pompous oldie perversity," noted one grandmother about her disinclination to use textspeak. "Gosh this is ageism I guess," said another of the differential time frame she employs when texting asynchronous rather than the perceived synchronous texting she saw a group of young people engaging in. But not all study participants said observing young people's texting activity made them feel old; one grandmother even went so far as to say it made her feel, "cool and trendy." Whether this is because historically texting arose out of young people's uptake of the medium—making it unique among new technologies—and she was keen to mimic the behavior of young people she had seen is unclear. Indeed she concludes her 'cool and trendy' statement with: "We are the glamorous grandmothers after all!" so perhaps for her adopting the 'youthful' activity of texting is part of her 'glamorous grandmother' image construction, or perhaps doing what she sees as a young person's activity makes her feel young. Certainly this sentiment is echoed by the other older adults as reported by Cody et al.— detailed in the literature review—in which uptake of emailing had the effect of making older adults, "feel 'younger'" (1999: 146). The social benefits of taking up an activity that not only maintains and strengthens social ties but also positively affects self-perceptions of age cannot be underestimated, and may have concrete practical applications for our ageing society.

Some adults interviewed, however, were actively concerned about the social consequences of texting for the young people in their families: "Younger generations I see use text for everything," one grandmother observed. "I see that as their only vehicle these days and what happens is they lose their communication skills, they lose their social skills . . . I believe that some of these younger kids they are missing out on the ability to

do problem resolution or to deal with their feelings." Others felt that young people's frequent use of textspeak and fast-paced synchronous method of texting was a symptom of the age: "The whole genre of video games, texting, everything abbreviated, clipped, fast, fast, fast," said one semi-retired participant. Whether this is a fundamental misinterpretation of how young people use texting as a telemediated communication form remains to be seen; what is sure is that the adults interviewed for this study certainly perceived there to be significant differences—and alarming social consequences—for young texters today. The effects of high rates of texting on young people, as well as the effects of regular use of non-standard English on their formal written communication skills, is not the domain of this study, but a more comprehensive analysis of the social effects of texting uptake could include the perspectives of all age groups.

CULTURAL LAG AFTER UPTAKE OF THE NEW

If many study participants felt young people are heading for trouble because of the fast-paced world they inhabit, or because of their over-use of texting, most adults interviewed voiced a very clear set of cultural norms they used to judge the appropriateness of texting activity. Due to the ease of texting, many study participants were dismissive of the technology for certain applications; when asked whether it was appropriate to send a thank you via text, most thought it inappropriate: "Texting is effortless," agreed one older adult, who frequently texts with his nine grandchildren. "While it does connote a thought—which is considerate—I would rather have something a little more substantial when a thank you is expected . . . I don't think [texting's] personal enough." If a thank you text isn't personal enough, some study participants viewed a text from a business trying to ply their trade as an abuse. "What really, really,

really annoys me is when companies text me," one subject said. Even though the participant found texting useful for conducting his own business, for communicating with coworkers who may be too busy to reply immediately, or who were unable to answer a phone call, he was adamant that texting was not going to be another avenue for companies to bombard him with solicitations. "It's not a marketing tool," he said, an opinion echoed by a number of participants, and perhaps indicative of what William Ogburn (1922) would term a "cultural lag", a disjoint after the introduction of a new technology whereby the behavioral norms surrounding use of the technology take some time to emerge, be commonly understood, and be adhered to by all parties. Here, the rapid uptake of texting among adults is seen by some companies as an opportunity for reaching a new market; socially problematic for the adults who use texting primarily as a personal communications medium.

While texting can be used by companies trying to make a quick buck by exploiting the capabilities of texting as both a mass and personal communications medium, one participant noted that the act of texting itself was not always appropriate: "I mean it's protocol right," she said, telling an anecdote whereby she had caught her husband trying to text surreptitiously during a formal dinner. "I yelled at him, I told him, 'put your phone away! There's people here in front of you at the table.' I thought it was rude. You're bored? I don't care if you're bored, you just sit quietly."

Other study participants felt that the limited sense perception inherent in texting opened the window for personal contacts to behave less than honorably. "If one is attempting to conceal it's quite easy to do so," lamented one grandmother, finding there was, "an inherently sneaky, potentially dishonest, use of texting" due to the brevity of the

missive and the fact it can be done anywhere. And yet if some study participants have issues of trust with texting, it is interesting to note that they do not appear to feel the same about emailing, even when they receive both texts and emails on the same device. "I'd rather send most people an email where you can actually spell out in proper English what you mean, what you have agreed to," said one BlackBerry user who uses his smartphone to email and text for both personal and business use. But where emails are a more permanent record than BlackBerry messages (which expire unlike other text messages), he nevertheless likes text messaging for its speed. "Sometimes emails will get hung up because they've got to go through a server but texts are a bit more direct," he said.

For some adult smartphone users because the messages all appear on the same device (although not on the same interface) there is even confusion about whether a communication is a text or an email. This is true for both sending and receiving texts/emails. With embarrassed laughter one texter confesses, "I do sometimes forget whether I'm emailing or texting *in* the middle of what I'm doing!" Another study participant thought she was receiving photos from her partner via texting, but her partner corrects her, "Well actually that's emailing," he says. Other adult texters do not seem to care which it is: "It's all part of that technology," said one respondent, a former executive of AT&T, who admits his company didn't even anticipate how texting would take off. "It just all blends together and it's all in one place and I sort of like that." If some of the adults interviewed for this study claim not to know—or even care—whether they are using their cell phones for texting or emailing, we have to ask whether separating them when analyzing adult cell phone use makes good theoretical sense. Certainly study participants frame texting communications within the mode of cell phone

communications: in their anthropomorphization of cell phones when speaking about predictive texting (rather than anthropomorphizing *texting*); in their confusion or even lack of care whether they are using one application or another (even when the interfaces are so different); in their use of the word 'said' to describe content mediated through the non-verbal vehicle of texting. This is of particular interest since increased complexity customarily points to increased differentiation, but in the case of cell phones and texting, with the increased complexity of the smartphone came a decreasing differentiation of functionality for study participants.

LIMITATIONS OF STUDY

Where this research sought to explore texting use by a previously unexamined demographic—adults aged 45 and above—it should be noted both that the study population was small and that participants were gathered using convenience sampling; the strength of this method lies in its appropriateness for an exploratory study of a previously unstudied age range. While no generalizations were made about the population of adult text messengers as a whole based on the results of the eight interviews undertaken here, a number of reasonable conclusions were reached that warrant further examination. Future research on this topic could incorporate the findings described here and assess whether they are experienced by the population at large; a survey would be the ideal tool for conducting further research on this topic. Further research could also illuminate four points that arose during this study, namely: do adults and *older* adults see things differently?; what specifically are the preferred or habitual communications methods of adults pre- and post-texting; do adults dislike *mobile* voice calls or *all* voice calls?; and related to this point, did adults' dislike of voice calls occur

simultaneously with texting uptake or did the shift in preference occur prior to texting uptake and use of texting was just seen as a convenient way of avoiding phone conversations?

All the adults in this study described in detail how they actually text, and most expressed a dislike of textspeak and other non-standard English text conventions, but a more comprehensive study could assess texts themselves as a primary source for content analysis, looking at the frequency of use of textspeak or non-standard English should it arise, and noting the circumstances when use of it arises. As increased speed of textwriting were seen in this study as relating to increased frequency of use of the medium, it would also be of interest to examine the speed of adults' text-writing, comparing speeds among adults and older adults, and perhaps among other segments of the texting population.

If differential uptake and use of modern technologies are assumed to increase the intergenerational divide, a number of interesting findings were described in this study that noted the increased sense of *community* adults felt through use of texting to communicate with their children or grandchildren; a more comprehensive future study could both examine in detail this notion of a digital divide and also include interviews with both adult texters and their youthful contacts.

Conclusion

Where new technologies emerge and diffuse throughout society there are often unexpected outcomes, and this applies in particular to people for whom the technology was never intended or designed. If the main objective of this investigation was to uncover the manifest details of adult texting—why and how adults text—as well as the softer underbelly—how the use of texting affects adults' social worlds—the often unexpected and richly detailed results described herein should add to our understanding of texting by this previously unexplored demographic, and as such contribute to the sociological literature on the subject. Describing and analyzing the positive social functions of texting—increased frequency of inter- and intragenerational communications, increased sense of proximity and feelings of community with people both near and far, increased sense of control over mobile communications, a sense of 'cool' that use of the technology confers—could have concrete practical applications and even policy implications as our society rapidly ages.

There is no doubt that texting has diffused throughout the lives of the adults interviewed for this study, taking them by surprise not only because of texting's utility but also because of the frequency with which they now find themselves engaging in it. Texting was found to be a quick and easy telecommunications mode but where study participants saw younger people texting synchronously (and mostly took up texting after seeing young people doing it), they nevertheless preferred an asynchronous use of the medium, demonstrating the agency with which they have appropriated texting technology, shaping it to complement valued pre-texting communications modes such as letter writing. Asynchronous use of texting was also seen as effecting greater control over

mobile communications since it essentially untethers the self from the texting device. Because of the agentic nature of their appropriation of texting technology it would be a far stretch to posit that the technology was *deterministic* for the adults in this study. Nevertheless, a number of changes in communication patterns and preferences did transpire concurrently with the uptake of texting by study participants: the amount of physical writing they engaged in (postcards, letters) was reduced or eliminated; the value they placed on voicemail decreased due to its perceived temporal inefficiency; and, most importantly, study participants realized they were no longer willing to engage in or get 'trapped' by lengthy telephone conversations and texting was seen as a convenient way of avoiding this trap. It is this latent function of texting that surprises the most; with uptake of a quick and easy telecommunications mode came a shift in adults' preferences away from extended phone calls that had been part of their pre-texting communications culture.

All the adults in this study used texting to communicate with young relatives and found it to be an efficient mode of getting a timely response out of them—sometimes the only mode—since the perception among study participants was that young people's use of voicemail has decreased to the point that they are now using it sporadically or not at all. Texting kept study participants connected to their young relatives using a telecommunications mode young people were responsive to and actively liked, shrinking the generational distance. But where study participants had no fears for their own communications style or ability due to use of texting, a number of fears were expressed about the consequences of texting on young people.

In summary, adult study participants have adopted texting primarily for the temporal efficiency inherent in the mode, but where young people are seen to text synchronously, adults prefer an asynchronous use of the medium, which both complements treasured pre-digital modes of communicating such as letter writing, and effects a greater sense of control over mobile communications since it essentially untethers the self from the texting device. Use of texting was also seen as valuable for its latent function of eliminating the 'trap' of a protracted voice call. While texting uptake was not seen as deterministic (except perhaps in a broader sense in that lengthy phone calls, postcards, letter-writing and voicemail are valued less by study participants than they were in a pre-texting age) we do see that what at first appeared to be an anomalous technology for adults was taken up gratefully once adults had upgraded to smartphones and realized texting's positive social functions. Texting has woven itself into the fabric of our study participants' lives; they have appropriated it and added their own asynchronous twist to the mode, indicative of the agentic nature of technology uptake.

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Addendum 1: Sample of Interview Questions

- Has your use of texting increased over the years/recently?
- If so, what do you think caused you to start texting more?
- Do you find that you tend to mimic the style of a received text in your reply?
- Do you use the same language to text young people as you do to text someone your own age?
- Do you find texting physically easy to do?
- Do you think the medium of texting impacts what you say in your message?
- Has texting helped you stay close to someone or made you closer to someone?
 Would you have communications with them if you weren't texting?
- Do you ever text just to remind a close friend that you are thinking of them?
- Have you ever sent an intensely personal text, such as a 'love letter'-type text?
- Thinking about texting in general, what would you say is/are the most useful aspects of the communications technology?
- What do you value higher: phone calls, voice mail, or a text?
- Is it appropriate to send a 'thank-you' text? When is it appropriate/not appropriate to do this?
- Does other people's use of texting ever annoy you? What is it that annoys you about their texting behavior?
- Have your text communications with a person changed how you think about them?
- Do you think texting feels conversational ever?
- Do you think texting is here to stay?

Addendum 2: Consent Form for Interview

Agreement to Participate in Text Messaging Interview

Holly Sevier, Primary Investigator (808) 457-8150; hsevier@hawaii.edu

This research project is being conducted as a component of a dissertation for a master's degree. The purpose of the project is to learn why adults aged 45 and above are adopting text messaging as a communication method; how adults are texting; and how the use of texting affects an adult's social world. You are being asked to participate because you are more than 45 years of age and you use text messaging.

Participation in the project will consist of filling out a form on background information about yourself, filling out a form detailing your cell phone usage, and an interview with the investigator. Interview questions will focus on *why* you are texting, *how* you are texting (how often, using what kinds of language, for example); and the *effects*, if any, that the use of text messaging has on your social relationships. Data from the interview will be summarized into categories. No personal identifying information will be included with the research results. Completion of the cell phone usage and background data form should take no more than 10 minutes. Each interview will last no longer than 45 minutes. Approximately 5 people will participate in the study. Interviews will be audio recorded for the purpose of transcription.

The investigator believes there is little or no risk to participating in this research project. However, there may be a small risk that you will experience psychological pain when closely examining whether your use of text messaging is affecting your social relationships. Participating in this research may be of no direct benefit to you. It is believed, however, that results from this project will help us better understand the uses and effects of an emerging technology and will fill the gaps in existing literature that focus solely on young people's use of texting.

Research data will be confidential to the extent allowed by law. Agencies with research oversight, such as the UH Committee on Human Studies, have the authority to review research data. All research records will be stored in a locked file in the primary investigators' office for the duration of the research project. Audio tapes will be destroyed immediately following transcription. All other research records will be destroyed upon completion of the project. Participation in this research project is completely voluntary. You are free to withdraw from participation at any time during the duration of the project with no penalty, or loss of benefit to which you would otherwise be entitled.

If you have any questions regarding this research project, please contact the researcher, Holly Sevier, at 457-8150

If you have any questions regarding your rights as a research participant, please contact the UH Committee on Human Studies at (808)956-5007, or uhirb@hawaii.edu

Addendum 3: CHS Approval of Study as Exempt

UNIVERSITY OF HAWAI'I

Committee on Human Studies

January 18, 2011

TO:

Holly Sevier

Principal Investigator

Department of Sociology

FROM:

Nancy R. King

Director

Re: CHS #18836- "New Tools, Old Voices: Text Messaging By Adult Cell Phone

Users"

This letter is your record of CHS approval of this study as exempt.

On January 14, 2011, the University of Hawai'i (UH) Committee on Human Studies (CHS) approved this study as exempt from federal regulations pertaining to the protection of human research participants. The authority for the exemption applicable to your study is documented in the Code of Federal Regulations at 45 CRF 46 (2).

Exempt studies are subject to the ethical principles articulated in The Belmont Report, found at http://www.hawaii.edu/irb/html/manual/appendiccs/A/belmont.html

Exempt studies do not require regular continuing review by the Committee on Human Studies. However, if you propose to modify your study, you must receive approval from CHS prior to implementing any changes. You can submit your proposed changes via email at https://doi.org/10.1007/journal.com/ (The subject line should read: Exempt Study Modification.) CHS may review the exempt status at that time and request an application for approval as non-exempt research.

In order to protect the confidentiality of research participants, we encourage you to destroy private information which can be linked to the identities of individuals as soon as it is reasonable to do so. Signed consent forms, as applicable to your study, should be maintained for at least the duration of your project.

This approval does not expire. However, <u>please notify CHS when your study is complete</u>. Upon notification, we will close our files pertaining to your study.

If you have any questions relating to the protection of human research participants, please contact CHS at 956-5007 or uhirb@hawaii.edu. We wish you success in carrying out your research project.