

The Social Shaping of Text Messaging in North American Youth Culture

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Abstract

The Social Shaping of Text Messaging in North American Youth Culture

Kate Pitfield

At a time when technological communication devices are rapidly inundating North America it is important to consider not just the impact these technologies have on society, but the influence that society has on defining the uses and role played by these technologies.

This thesis is a case study of one such communication technology, called Short Messaging Service (SMS). Introduced in Finland, in 1991, this technology was built into mobile phones and was intended for engineers to communicate with each other. However, the technologically savvy youth of, first, Asia and Europe, and now North America, have been quick to adopt this technology as a primary means of exchanging information and maintaining social ties. This thesis investigates the relationship between the development of SMS technology in North American youth culture and the role played by the social distinctions of this cultural terrain. Relying on the social shaping of technology perspective, it argues that the diffusion of SMS into North American youth culture has been guided in response to three distinct yet related spheres suggested by Hughie Mackay and Gareth Gillespie. They are: conception, invention, development and design; marketing; and, appropriation by users. Drawing from this framework, this analysis first considers the initial diffusion of SMS in Asia and Europe and suggests reasons for its less popular development in the US. Secondly, it highlights specific marketing techniques used in the US to encourage the use of SMS amongst youth consumers. Finally, it explores the youth appropriation of SMS and development of a text-based language. Throughout, this thesis considers the role of the powerful elite and youth consumer/user in defining novel technologies like SMS.

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Chapter One

Introduction

For some communication is the essential glue of community. ... Without ongoing communication amongst its participants a community dissolves. (Green 198)

Our dependence on communication is evident when considering the vast array of communication technologies that are currently available in North America. From the telephone and the fax machine, to the Internet and the mobile phone, an abundance of communication tools have come to find a comfortable place within our daily lifestyles. The presence of these technologies and the influence of their diffusion throughout our society should not be ignored. If we accept that communication technologies are a definitive part of contemporary society, then it is important to consider their relationship to society.

In the past, many social scientists have tended to take a technologically determinist stance in explaining the growth of a technology and its connection to social change. Technological determinism assumes that technological change is an independent force and that such alterations cause social changes (Mackenzie and Wajcman 4). In other words, as Lelia Green argues, technological determinists believe that a technology is neutral; it is unaffected by the social, political, and economic terrain in which it is a part. The use of a technology is dictated solely by its technological components and the role of society is simply to adapt to its emergence (Green 2). This perspective suggests that we are powerless against technological progress.

Take for example Short Messaging Service (SMS); a text based messaging technology that was first introduced in Finland in 1991 (Rheingold 15). Often referred to as “text messaging” or “texting”, this technology operates through a control channel on a cellular network. In order to send a message all one needs is a mobile phone and the intended recipient’s mobile phone number. Simply dial the number, type the message using the keypad on the cellular phone, and press the send button. Once sent, the text message is displayed on the recipient’s mobile phone screen instantaneously, arriving faster than a telephone call, and usually for a lower cost (Hafner G9).

In 2002, an average of twenty-four billion text messages were sent worldwide compared to an average of only seven billion messages that were sent in 2000 (Taylor C10). From a technologically determinist perspective one might argue that the growth of SMS has altered social relations—that for example, within any society in which this new technology has emerged, geographical boundaries and temporal problems have been challenged and the sense of community has changed. From this standpoint the technology itself is seen as neutral, untouched by societal needs, practices, or beliefs. However, when we consider that despite its *global* introduction in 1991, the development of SMS in North America in no way compares to that of Asia and Europe, a technologically determinist approach proves insufficient.

This difference in growth cannot possibly be explained in terms of the effects of the technology alone. For example, its slow diffusion throughout the United States compared to the rapid adoption of text messaging in Asia and Europe does not support this theory. The reasons that account for these dissimilarities involve not only issues of technological

compatibility but also social and cultural distinctions. In contrast to technological determinism, Donald Mackenzie and Judy Wajcman argue for the social shaping of technology approach (1985). They maintain that while the technological components of a technology are important to consider they do not solely define the shape of the technology. It is necessary to also take into account the effects of society on technology, because technologies do not come in the form of discrete isolated devices, but are developed as parts of a system involving social and cultural contingences (Green 5). A technology is neutral only in the case that it is never used and no one considers what it should be used for. As Mackenzie and Wajcman suggest, "once knowledge comes into play, technology is implicated in social processes, and there is nothing neutral about society" (Green 5). Thus, as a 'corrective' of technological determinism (Mackay and Gillespie 694), the social shaping of technology approach considers not only the technological parts of the technology but also questions how and to what extent the kind of culture we live in affects the kinds of technology we produce (Mackay and Gillespie 2).

Therefore, taking SMS technology into consideration, although it may well affect the societies into which it is introduced, it is also important to take into account the social shaping of the technology. One must recognize that upon its inception, text messaging has become a part of an already existing social and cultural terrain. It was not simply adopted into society as its technological components dictated; rather it has been shaped and continues to be defined by the social context from which it has emerged.

The social shaping of technology approach is not without its shortcomings however. This perspective roots its focus solely at its conception, development, and design phase and does

not consider other important stages that play an equally integral role in defining a technology. As Mackay and Gillespie write, “[t]o suggest that once a technology is produced, or even sold, it reaches the end of its social shaping,... is to ignore both its marketing and how the technology comes to be used or implemented” (694). Integrating ideas developed in cultural studies with the social shaping of technology approach, Mackay and Gillespie argue that much of the social shaping of technology approach prioritizes the role of structure over that of subject. They explain that in such cases, “the subject is relegated to a passive, determined, role, as opposed to one which actively constructs the social world” (Mackay and Gillespie 691). Conversely, the remainder of the social shaping of technology approach has tended toward elevating the role of the subject by focusing on the active role in determining the conditions of her experience. This explanation relies upon understanding the subject’s construction of meaning in her experience and interaction; as such the approach fails to take account of broader social processes (Mackay and Gillespie 691).

In an effort to consider both structure and agency, Mackay and Gillespie assert that technology should be analyzed as a product of three conceptually distinct yet interconnected spheres: conception, invention, development and design; marketing; and, appropriation by users (Mackay and Gillespie 691). Ideology is the overriding connector between each of these three spheres. As Mackay and Gillespie argue, “to explain the development of a technology requires a coherent model of the society in which the technology is embedded; without ideology, we would argue, you do not have such a model” (691).

This thesis will explore the diffusion of text messaging in North America. In particular, it will focus on the youth demographic. “North American society” and the “youth” indicate

extremely broad spectrums and inevitably enormous bodies of research. In an effort to further narrow the focus of this thesis, when referring to North America, what is implied, for the most part, is the urban cultures of the United States and Canada. In addition, in order to define what is meant by the “youth demographic”, I turn to the work of Mizuko Ito and Okabe Daisuke on mobile phones and Japanese youth culture. They apply the category of youth to those institutionalized as such –high school and college students who are financially dependent on adults (4). Adding to this definition, “youth” then specifically refers to those between the ages of thirteen to twenty-five.

Three reasons, distinct yet related, justify this focus on North American youth. Firstly, not only is digital technology, like text messaging, popular within youth culture, but it is also easily accessible to youth. Current academic and popular news articles that explore contemporary communication technologies argue that youth have grown up using computers and the Internet; they are technologically literate and as a result avid users and consumers of wireless technology. In fact, according to “Born to be Wired”, a study commissioned by Yahoo!, amongst youth between the ages of thirteen and eighteen 82% have computers, 62% have videogame consoles, and 49% have cell phones (Hein 24). As Virpi Oksman and Jussi Turtiainen argue, so-called new media of today are not really new media for youth. They write,

[n]ew media constitute a significant factor in young people’s experience of their generation. The multimedia generation differs from the previous generation in their more extensive use of mobile communication and new media. The function of mobile communication for young people is different from adults’: aspects such as the nuanced diverse text messaging conventions and the playing of mobile games form an essential part of the mobile culture of teenagers. (Oksman and Turtiainen 321)

It follows that these digital communication devices are integral features of the communication channels set out by young people in contemporary society. This relates to the second reason for this demographic-specific focus. Like passing notes in a classroom or chatting all night on the phone, SMS technology has come to play an integral role in the social networking of youth culture. According to scholars Eija Kasesniemi and Prijo Rautiainen, text messaging allows young people to "... hate, love, gossip, mediate, and express longing, even when the teen lacks the courage to call or in situations where other communication channels are inappropriate" (171). SMS is not entirely unprecedented in that past modes of communication often utilized by youth, like writing messages on bathroom walls, notes in the back of class, or even coded languages, like speaking pig Latin, similarly afford young people a method of interaction amongst social groups. However, text messaging holds many unique qualities. For example, SMS technology is housed in a mobile phone and is thus a portable device, allowing one to carry it wherever one goes, dissimilar to the static quality of notes on a bathroom wall. Furthermore, it is a globally connected device; one can send a message to a fellow "texter" anywhere in the world, arriving in an instant. These qualities are highlighted when considering the common practice of young boys and girls to form romantic attachments via text messaging. This technology allows communication to take place privately without the risk of being overheard and without having to enlist the help of friends to deliver notes (Ito and Daisuke 10). One is able to directly interact with the other person without having to deal with any embarrassment a face-to-face interaction might involve.

Furthermore, SMS is also unique in that it allows young people to store their friends' phone numbers and saved text messages in their mobile phones. According to Oksman and

Turtiainen, features such as the address book function, enable young people to take their entire social community with them (332). The flexibility and social contact allowed by SMS technology has meant that it has become a part of many young peoples' identities. In addition, outside of the practical uses of text messaging, there is also a "hip" factor to consider. For the youth demographic making calls on one's cell phone or "texting" a message is an indispensable symbol of cool (Halpern 2).

This relates to the third reason for focusing on youth. In her investigation of the emergence of the teenage consumer in postwar America, Angela R. Record focused on the merging of "consumer-based activity with dominant ideological notions regarding teenage women and domesticity" (181). Record asserts that during the postwar period marketers profited from domesticating teenage women into their roles as wives and mothers. Furthermore, they solidified their revenue by creating a feminine beauty ideal. Teenage women were thus led to believe in feminine perfection; this inevitably lowered their self-esteem and increased their spending on products promising improvements (Record 191).

Drawing from this, the youth demographic as a whole represents a group of people at an important stage in their social development. Young people are still at an age when they are negotiating their self-esteem, whether because of peer pressure or marketing strategies designed to manipulate them into believing in an ideal, youth are in need of reassurance and as such are easily influenced by the newest and "coolest" products advertised and targeted to them (Record 191). Therefore, as marketing analyst Peter Zollo suggests, given the importance of communication technologies in current North American youth society and the relationship that they have formed with such technologies, this demographic, now more

than ever, is a segment too powerful and a marketing opportunity too profitable to be ignored (Zollo 9).

As Record asserts, the youth demographic has been a primary target for advertisers for decades. Whether on television, in films, magazines, or on the Internet, the various mass media used by marketers to send their messages of consumption are easily accessed by young people. The drive toward aiming marketing strategies at the youth demographic is further solidified when considering that the disposable income of this group continues to grow exorbitantly. According to a study conducted in the US by Teenage Research Unlimited, in 2003, 43% of males and 44% of females between the ages of fourteen and eighteen spent more money on consumer goods in the six months comprising the study than they did during the six months prior to that (Hein 24). According to RBC Capital Markets, the youth market is now more than ever willing to pay for services and features it finds important (Marek *SMS*). Furthermore, Record argues that this demographic has a significant influence over the adult market. As a result, advertisers targeting youth inevitably also reach the adult consumer (Record 193).

With respect to SMS technology specifically, it has been argued that if advertisers continue to market toward youths, text messaging could generate as much as five hundred million dollars in revenue for US carriers (Marek *SMS*) This approach is demonstrated by the youth marketing strategy of Cingular Wireless which relies on both advertising to millions of kids and young adults between the ages of fifteen and twenty-four (Sewell). For example, Cingular has launched a television ad campaign for SMS technology that features close-ups of mobile phone screens as two girls, with multi-coloured fingernail polished hands, trade

gossip via text messaging (Sullivan 1). The message Cingular is trying to send with this advertisement is that “teenagers live in a zany world the rest of us cannot hope to understand, and text messaging helps them keep it that way” (Sullivan 1). As marketing director Greg Roberts asserts, “the youth audience is smart, and they know what they want. If we don’t give it to them, they’ll try and find it someplace else” (Sewell).

In addition, mobile phones offer parents a certain element of security. In other words, they can now more than ever easily reach their children by calling them on their cellular phones. This quality is valuable enough to justify, if not, buying their children mobile phones and paying for their monthly costs, than at least supporting their children’s use of mobile telephony. For example, in their ethnographic work on youth SMS users in Finland, Oksman and Turtiainen explain that text messaging offers young people a certain element of freedom as not only are youth able to maintain social ties through private text conversations, but parents are more lenient about allowing their children more independence outside of the house (325). This is because of the surveillance and monitoring aspects of the technology. Equipping one’s child with a mobile phone reassures the parent that she is, for the most part, always accessible. I mention this not only to indicate the role played by parents in the consumption of SMS technology by young people, but more broadly, to acknowledge that while this thesis explores in large part the relationship between youth and SMS technology, the place of adults, and more particularly parents, should not be forgotten, as not only are parents aware of the practice of text messaging and the popularity of it amongst their children, but they, in many ways, encourage it by paying or at least supporting its services.

Drawing from these three reasons –the technological savvy of youth culture, the role played by SMS technology in social networking amongst young people, and the ideal market of the youth demographic– this study will explore the social shaping of SMS technology with the youth user in mind.

In order to consider the social and cultural distinctions that have catered to the growth of text messaging in North American youth culture, this thesis will rely on the social shaping of technology approach. In particular, this paper will draw from the three spheres suggested by Mackay and Gillespie's. This provides an ideal framework through which to highlight the integral role played by society in defining a technology. Their approach considers the importance of agency and structure in a technology's social shaping but, above all else, does not prioritize it. In other words, MacKay and Gillespie do not discount the part played by the technological components in defining a technology. For example, in consideration of the development of a technology at its appropriation phase, Mackay and Gillespie suggest the possibility for a technology's social appropriation to be shaped or constrained by its physical nature. They argue that such a suggestion does not indicate a technologically determinist stance, but merely indicates an acceptance of not only the role played by the user, in her interaction with the technology, but also of the importance of the technology's parts. In essence, Mackay and Gillespie accommodate some notional middle ground by acknowledging agency and structure, as well as an element of technological determinism (MacKay and Gillespie).

The initial development and design of text messaging did not occur in North America, but was a product of Asian and European cultural contingences. Despite the absence of US

influences, this stage is important to consider as it marks the birth of the technology. An exploration of this first sphere not only offers reasons for the initial development of SMS but also provides explanations for the slow development of text messaging in North America. The emergence of text messaging in the US is still considered by some as fairly novel. It is the second sphere that has ultimately led to its greater diffusion within society. As is characteristic of capitalist societies, the power of marketing has convinced North American society of the usefulness of SMS technology and as a result has inadvertently contributed to the shaping of the technology. With this, the number of “texters” has grown. Typically youth, these users have appropriated the technology according to their own needs and desires, likewise playing an important role in defining text messaging. In this way, the development of SMS technology in North American youth culture is distinctly marked by the three spheres suggested by Mackay and Gillespie. These stages will be explored and analysed in discrete chapters of this thesis.

Chapter one will explore the first of these spheres: conception, invention, development and design. This chapter will look at the development of SMS technology and its original purpose. Furthermore, it will explore the diffusion of text messaging throughout North America as it compares to its inception in Asia and Europe. I will argue that these three cultures have adapted to the technology differently for reasons not only relating to issues of technological compatibility, but also based on social and cultural distinctions. For example, Howard Rheingold argues that the inception of SMS into the social circles of Asian and European youth cultures has proven seamless. In Asia, issues of limited access to private space have played a large role in defining the popularity of SMS amongst youth, while in Europe economic issues have contributed to the growth of text messaging (Rheingold 4).

In contrast, the diffusion of SMS within the United States has proven less successful. For example, according to analyst Knox Bricken, in 2001, while only 36% of youth in the US used cell phones and SMS technology, 77% of youth in Britain and 80% to 90% of youth in Scandinavian nations used these communication technologies (Levy). Not only was SMS technologically initially incompatible, social and cultural factors likewise contributed to the slow emergence of SMS in North America. Upon its inception, text messaging did not fit into the social and cultural terrain of the US. Rheingold argues that the social and economic restrictions that made text messaging useful in Asia and Europe were not relevant in North America (23). Drawing from the uneven diffusion of text messaging in Asia and Europe as compared to the US, this chapter considers the effects that different cultural terrains have had on the initial design and development of SMS technology.

Text messaging eventually became popular in the US. As in Asia and Europe it found success amongst a large portion of North American youth. Relying on the social shaping of technology approach, chapter two will explore marketing. It is this, the second sphere suggested by Mackay and Gillespie, that has particularly played an integral role in defining SMS technology in North America. Text messaging did not become popular in the US because it fulfilled a need, but only once it was sold as a “need” through marketing techniques.

Although advertisements for mobile technologies like text messaging are not limited to any one medium, chapter two will explore a unique marketing technique that has proven very popular amongst advertisers selling SMS technology to the youth demographic in North

America. Through reality television, its conventions of realism, and its interactive qualities in particular, advertisers have found a successful means of promoting text messaging. With the advent of reality TV, marketing companies have manipulated the traditional practice of selling products through celebrity promotion. Throughout the majority of reality TV shows, “real” people—“nobodies”— just like the youth watching, are depicted as worthy of recognition. As Steven Reiss argues, “reality TV allows Americans to fantasize about gaining status through automatic fame. Ordinary people can watch the shows, see people like themselves and imagine that they could become celebrities by being on reality television” (Reiss) SMS marketers have incorporated their products into this “realistic” construction of celebrity and are in turn convincing young viewers that the possibility of participating in the conversion of “real” people into “stars” is more “real” than ever. All they need in order to take part is SMS technology, the product they see advertised before them on the screen.

This marketing approach will be analyzed with particular reference to the reality TV show American Idol. This program has been credited by many for launching text messaging into the hands of North American youth (Wickham 29). The show was the first to offer viewers a “vote” that gave them input on the outcome of the program. Viewers take part in deciding who should be the next “Idol”, an excitable feature for youth who have been conditioned by the media to believe in the importance of celebrity. Young viewers tune in every week to vote for their favourite “Idol” using SMS technology (Wasserman R4). In turn, they not only witness but also take part in the transformation of a “real” person —one of their own— into a “star”.

Chapter four explores the third sphere, what Mackay and Gillespie refer to as the “appropriation of the user” (691). The use of SMS by youth in North America and the manner in which they have manipulated the technology lends support to the argument that the shaping of text messaging must include an exploration of its appropriation by consumers.

Young people develop their identities through factors such as language, clothing, accessories, etc. Text messaging is one such factor. It is used as a personal style concept among youth whilst also affording them a certain amount of control (Skog 270). For example, as Berit Skog asserts, not only can users position themselves in relation to a number of “time-typical” trends: being easily accessible, flexible, communicative, informed and up to date, they can also have an overview of different types of arenas such as, school, home, and leisure time (Skog 270).

All of these practices, however, rely on one overriding feature, the most telling example of the appropriation and manipulation of SMS by youth: text. Youth have, in many ways defined SMS technology. Drawing from the influences of hacker culture, youth users have established their own group of “texters”. In order to maintain a level of secrecy amongst hackers, a coded language has been developed. This has also contributed to a sense of membership. Similarly, SMS users have established their own high-speed vocabulary, a mix of available icons, snappy acronyms and phonetic shorthand that likewise affirms membership. In fact, the text vernacular has become so embedded in youth culture that a new form of English-to-text language has originated in many ways redefining methods of communication (“HOT SYNC,” 1). Youth have altered and abbreviated words so much that

they are practically incomprehensible to the “non SMS user”, no doubt perceived by most youth to be the adult—the authoritarian figure. Through the manipulation of SMS technology, young people have found a new way to “pass notes” in class, a new way to share secrets amongst friends, and a new way to socialize.

Embedded within every technology is an ideological bias, a “predisposition to construct the world as one thing over another” (Postman 13). This thesis will conclude by first questioning the preferred beliefs associated with the development of SMS technology. These, more often than not, correspond to the perspectives of those powerful members of society who introduce the technology at large. As Green suggests, a new technology emerges into society as a result of specific decisions made by influential power brokers representing a limited range of social elites. She sums these up as “ABC”: “armed forces, bureaucracy, and corporate power” (Green 9). This corresponds to Postman’s concept of “winners” which refers to those who cultivate competence in the use of the technology and as a result accumulate power.

We must therefore take into account, no matter how underlying, the ever-present self-interest of the socially elite. However, although the development of text messaging in the United States first found its success through marketing strategies, thus securing the “winnings” of the corporate elite, evidence suggests the possibility that SMS users can also attain a certain degree of empowerment. Drawing from this, this chapter will further explore the possibility of a counter viewpoint. Given the unique qualities of SMS technology (for example its interactive features and SMS text) is it possible for SMS users to likewise attain a

“voice” within society? This question will be explored using specific examples where SMS technology has been used as a way to mobilize social groups.

For example, in January 2000, the people of Manila overthrew Philippine President Joseph Estrada. “Armed” with mobile phones, organizers arranged a protest by text messaging citizens of Manila asking them to gather at the EDSA, a shrine that commemorated the uprising of 1986, which overthrew Ferdinand E. Marcos. In 2000, protestors rallied there against a controversial Senate vote that could have cleared Estrada. One hundred thousand people responded to the wireless message, jamming the street around EDSA and successfully ousting the President (Bociurkiw 28).

Can SMS in North America provide a venue for meaningful civic participation? Outside of capitalist initiatives and mere marketing ploys designed for consumer entertainment, does this communication technology offer the potential for citizens to gain a “voice”? The last chapter of this thesis will explore these questions and, in so doing, hopes to provide some insight into the future of wireless communication technology.

The methodology of this thesis relies on an exploration of the three distinct spheres of the social shaping of technology suggested by Mackay and Gillespie: the conception, invention, development and design; the marketing; and, the user’s appropriation of SMS technology. Each of these spheres will be explored respectively as they relate particularly to the diffusion of text messaging in North American youth culture. In order to highlight the social distinctions of this demographic I will look at various cultural studies texts. In particular, I will rely on works by such scholars as Howard Rheingold and Brenda Danet in an effort to

uncover the current relationship between digital technologies and youth culture. In addition, works by Jackie Stacey, Thomas Frank, and Ted Magder, will provide perspectives on marketing towards young people, specifically through the use of reality TV, celebrity endorsement and product placement.

SMS technology first became popular in Asian and European countries. For this reason, much of the work that has been done on the subject investigates the relationship between SMS technology and youth specific to these cultures. For example, Mizuko and Daisuke (2001) explore the influence of the mobile phone and text messaging on Japanese youth. Their work highlights the cultural distinctions of Asian lifestyles. For instance, they argue that youth are often without private space within the home making it significantly harder to conduct conversations with friends without being overheard; this in turn jeopardizes social ties. The emergence of the mobile phone has aided this concern. Similarly, Eija-Luna Kasesniemi and Pirjo Rautiainen as well as Berit Skog also look at the use of mobile phones and text messaging by youth. Where the former explore the impact of this technology on youth in Finland, the latter scholar investigates Norwegian teen culture and the emergence of mobile phones and SMS technology. Her particular concern is with gender and class distinctions as they relate to the diffusion of these technologies. Similar to all of these works is the tendency to explore issues of youth identity in connection to the appropriation of mobile technology and text messaging. The difference, however, is the social and cultural terrain into which the technology has become a part. This is an integral distinction and as indicated by these scholars, the use of mobile technology and text messaging is greatly defined by the society in which it is a part. In an effort to explore the emergence of SMS technology in North America, this thesis will consider much of the findings of these works

and question their relevance to the appropriation of text messaging by North American youth culture.

In addition, to further support the arguments being presented, this thesis will also look at industry literature such as statistical evidence of the growth of SMS in North America.

Furthermore, text messaging is a newly developing phenomenon. For this reason throughout this work I will draw on the plethora of valuable popular news articles and academic articles on the subject. These articles further reflect society's engagement with this burgeoning technological innovation.

By exploring the social shaping of SMS in North American youth culture, based on its development and design, as well as the way it is being marketed and appropriated by its users, this thesis hopes to contribute to a better understanding of the social significance of emerging new technologies and to provide insight into the important role played by young people. It is especially pertinent at a time when other wireless technologies are rapidly finding their place in North American society, no doubt finding their initial popularity through youth culture as well. While we continue to argue the social significance of this novel communication technology, newer and more innovative technologies are emerging. It is important that we consider the development of these new technologies. Not only should we question the social and cultural terrains in which these technologies impact, and in turn in which they are shaped by, but we must also consider the role played by the user in the development of these new "gadgets"; as their role introduces important questions considering arguments over the potential power and control that such appropriations may provide the society in which it emerges.

Chapter Two

The Conception, Invention, Development, and Design of SMS Technology

Technologies are not created by lone inventors or geniuses working in a social vacuum, but by a combination of social forces and processes. (Mackay and Gillespie 688)

SMS technology did not emerge “ready-made” from a sudden flash of inspiration. Rather, “[i]nvention is a matter of creative and imaginative process that lies above all in seeing ways in which existing devices can be improved” (Mackenzie and Wajcman 10). The decision to further develop a technology is contingent on its value. There is no need to improve on a technology that proves to be futile. The measure of the value of an emerging device is determined by social and cultural factors. In other words, improvements are determined by how useful the technology is to the society into which it emerges.

Drawing from this, Mackay and Gillespie argue that such an exploration is not possible without considering ideology (691). They assert that all technologies are encoded with preferred forms of use regardless of whether or not such beliefs are intentionally embedded. Designers ultimately condense a complex of ideologies into a single product (Mackay and Gillespie 693). Take for example, Robert Moses’ road system. Moses was the planner of a number of public works projects particularly in New York, from the 1920s to the 1960s. His designs included parks and beaches in Long Island, New York. Moses is not known solely as a planner, but he is also recognized for using physical design as a means of social screening (Mackay and Gillespie 689). For example, through the development of extraordinarily low overpasses throughout the US, Moses’ design prevented those traveling in tall vehicles from experiencing the delights of his New York beaches and parkways. The intention was to

prevent people from outside the city traveling by public transit from gaining access thus encouraging race and class restrictions. As such, the physical design of his overpasses carried an undeniable ideological bias (Mackay and Gillespie 689). Similarly, domestic appliances, like the dishwasher, the vacuum cleaner, or the washing machine, would never have come to be created without the existence of certain prejudices involving gender roles (Mackay and Gillespie 693). Traditional assumptions of the man as the “breadwinner” and the woman as the “homemaker” relegated men to the public sphere and women to the private sphere where they were expected to maintain certain established ideals of the “perfect” home, a role no doubt involving a part played by these appliances (Spigel 73).

Those who are involved in this first stage of the development of a technology are “... member[s] of a social group and thus come under specific social and economic conditions, shared values and beliefs, and in the widest sense of the term represent in [their] work ideological positions” (qtd. in Mackay and Gillespie 693). Designers draw on certain social distinctions relevant to the culture of which both they and the technology are a part. It follows then, that the development of SMS technology reflects certain values and beliefs of the cultural ground out of which the technology has emerged, a terrain that no doubt includes the designers, but that likewise involves the social conditions and preferred ideologies of the society in which it is a part.

In this chapter I will explore the first sphere suggested by Mackay and Gillespie: conception, invention, development and design as it relates to the development of SMS technology. Upon its initial diffusion, text messaging proved much more valuable to Asian and European culture. As such this first sphere has in large part been defined by the social and cultural

distinctions of those societies and not by North American practices. Thus, as the emergence of text messaging is defined by the society in which it is a part, in order to explain the initial development of text messaging, a coherent model of the social and cultural terrain specific to Asia and Europe is required. However, as this is an exploration of the development of SMS technology in North America, the significant development of the technology in Asia and Europe will be considered in relation to the social and cultural factors that prohibited the initial growth of text messaging in the US. In particular, this chapter will explore the increasing popularity of SMS technology, the defining features of the product, the characteristics of its typical users and the social circumstances determining its uses, and from this it will reveal the role played by social and cultural distinctions in shaping SMS technology.

The Growth of SMS Technology

SMS technology was originally implemented on cellular phones as a way to absorb extra network capacity. Furthermore, it was used by phone-company engineers to send messages back and forth quickly and cheaply (Ferrohar). As such, upon its initial introduction into society it was not heavily promoted to the public. Given the low cost of maintaining the feature it remained on mobile phones both for the use by engineers and in the off chance that a user might also find it worthwhile (Hafner G9). At this stage of its development it was not yet considered worthy of any further improvements, as it was rarely used.

However, as Mackenzie and Wajcman argue, “[a] new technology merely opens a door, it does not compel one to enter” (Mackenzie and Wajcman 6). SMS technology itself did not force societies to adapt to it. Rather, certain social and cultural circumstances specific to

individual societies determined text messaging as a useful technology; in turn as it grew in popularity improvements were made on its development and design.

In 2002, globally an average of thirty messages were sent or received each month by a mobile subscriber, the equivalent to one message per day. In particular, in both Asia and Europe there exist a considerably large number of SMS users. For example, In Japan there are approximately twenty-two million users of text messaging while in Europe there are two hundred and forty million (Race C9). According to Nick Thompson, a senior executive at the Philippine Long Distance Telephone Company, in 2001, an estimated one hundred million text messages clogged the wireless networks each day in the Philippines (Bociurkiw 28).

Similar growth has occurred in Europe. In December 2000, Germans sent approximately two billion SMS messages (Urbaczewski), while in Britain, by March 2001, eight hundred and sixty-four million messages were sent, up from three hundred and seventy-two million in the same month one year earlier (Ellison A14). Furthermore, in 2000, seventy-five million text messages were sent per month in Finland (Hafner G9). Other statistics demonstrate this popularity by suggesting that nearly one billion messages were sent in 2000 by the five million inhabitants of Finland.

In comparison, the use of mobile phones and SMS technology is significantly lower in the United States. For example, in Britain in 2001, 68% of the population carried a mobile phone, compared with 38% in the United States (Ellison A14). Furthermore, while in Britain, wireless phone users exchanged an average of thirty three million text messages daily

during 2001, up 98% from the seventeen million messages traded each day during 2000, only four million text messages were sent daily in the United States during 2000, a substantial difference when one considers that the population of the US is four times that of Britain (Loftus B13D). Even still, although the growth of SMS technology in North America has proven considerably slow it nonetheless continues to grow. For example, in the United States in 2000, there were one hundred and nine million users and by 2002 that number had increased to one hundred and forty-eight million (Aoki and Downes 349).

The increase of SMS users, particularly in Asia and Europe, indicated a need to improve on the technology originally introduced as a “just in case” technological gadget. Furthermore, in consideration of the conception, invention, and development of text messaging, it is important to consider the varying number of users in Asia and Europe compared to North America. The fact that citizens of Asia and Europe have found a greater use for text messaging than people in North America suggests reasons of social and cultural distinction. It is necessary to consider these differences as they account for the improvement of SMS technology and its eventual inception into the US.

Defining Features of SMS Technology

According to Green, certain factors can contribute to the further development of an emerging technology. While some of these factors refer to product characteristics, others relate to user characteristics (Green 33). For example, Green refers to relative advantage. This factor suggests that an innovation should have either a price advantage or a performance advantage in order to ensure product diffusion (qtd. in Green 33). A similar factor is, what Green refers to as trialability. This refers to the accessibility of trying the

technology. Like relative advantage this includes low-cost but also considers the low-risk of trial, in other words, how easy is it to try the product. Naturally the easier it is to use, the greater the likelihood of its further diffusion and successful adoption (Green 33).

In considering these two factors in relation to the development of SMS technology, Rheingold explains that text messaging is “packet-switched” rather than “circuit-switched” (15). This technical distinction assures a greater degree of performance and a low cost. The difference is that SMS technology does not rely on an analog network as the telegraph-telephone era but rather a digital network like the Internet. Thus, while telephone connections require a series of physical switches to link a continuous wired circuit between both parties, text messages are sent in electronic bursts of data called “packets”. Packets are tiny and are reassembled at the destination; this way they can fit in between other messages instead of preempting them the way analog circuits do (Rheingold 15). This performance advantage makes it less expensive to support SMS traffic than to support circuit-switched voice traffic.

The economic benefit and the higher quality of performance of SMS technology not only relate to factors of relative advantage and trialability but have also contributed to the further development of text messaging in Asia and Europe (Green 34). For example, in a country such as the Philippines, where in 2001, almost 40% of the population lived on a dollar a day income, SMS is inexpensive when compared to the cost of a phone call (Bociurkiw 28). Text messages are one-tenth the cost of a voice call (Rheingold 158). Furthermore, in some parts of Asia, such as Singapore and the Philippines, a large number of free messages are included in monthly pricing plans and as a result the number of messages sent per-subscriber per

month is as high as two hundred. In fact, in many remote developing countries, the mobile phone and by extension, text messaging is being introduced in villages that have never even seen landline telephones (Rheingold 122). Similarly, in Britain, the conventional telephone system and cellular phone systems are extremely expensive, whereas the cost of text messaging is very low: twelve pence (approximately seventeen cents US) a message in 2001 (Ellison A14).

Although pricing policies made SMS less expensive than voice calls in Asia and Europe, thus aiding the diffusion of the technology, US operators did not bypass their corporate cultures and as a result, upon its inception, text messaging was not developed as a cost efficient alternative to the phone; rather it cost approximately the same amount to make a phone call as it did to text a message (Rheingold 22). Telephone use in North America was established long before SMS technology emerged. For a culture embedded in the practice of using a telephone to communicate, the presentation of a new alternative with no benefits offered little interest. In fact, in 2003, the average number of messages sent per-subscriber in North America was as low as seven ("Business," 7). Given these cultural distinctions it is easy to comprehend why SMS technology was initially improved upon by Asian and European developers and not in North America.

Similarly, issues of compatibility and complexity also contributed to the development and design of SMS technology (Green 34). Where the former indicates issues of consistency with users' perceived existing product/technology skill set, the latter indicates the level of difficulty of use (Green 34). The emergence of SMS in Europe relied on one system called The Global System for Mobile Communication (GSM); this made mobile communication

uniform and seamless and indicates another factor that accounts for its development in Europe (Hafner R4). In contrast, although mobile phones in the US all have relatively the same user interface (you dial a number and press a button labeled 'ok', 'talk', or 'send'), the majority of text messaging services were originally not compatible. Unlike the European system, in order to send a message in the US an email address was needed, and not just a telephone number. The message was routed through the Internet instead of being sent directly over the cellular network (Hafner G9). Furthermore, North American telecom regulations encouraged different mobile operators to choose different, incompatible technologies, thus also contributing to the slow growth of SMS technology. Instead of a quick, intuitive, unified way of sending a message to any person with a cellular phone, the original system embraced by North America was rendered complex due to problems of incompatibility, logically inhibiting the development of the technology.

This failure of wireless carriers to establish interoperability across their networks was also characteristic of Canada's system. However, with the influx of more and more digital mobile phones onto the market, compatibility issues in both countries have, for the most part, been resolved. For example, in Canada, Bell Mobility, Microcell Connexions, Rogers AT&T Wireless and Telus Mobility signed an agreement in November 2002 to establish interoperability. Likewise, also in November of that year, the American company AT&T Wireless announced the ability to send text messages to any other wireless subscriber (McKeene 9). Inter-carrier text messaging allows wireless phone users to send and receive text messages to and from other wireless phone customers by simply addressing those messages to the recipient's ten-digit mobile phone number, regardless of the wireless service provider they use ("Does Text Sell?"). This system differs greatly from three years ago when

one could only text message via the same carrier. Since introducing an inter-operable network the volume of text messages has grown 300% annually to an average of thirty-seven million messages sent each month, most of which have been attributed to youth users ("Samsung").

SMS is taking off both in Canada and in the United States (Taylor R4). Although some mobile handsets, especially older models, can still only receive messages and cannot support two-way text messaging ("Business," 7) industry analysts estimate wireless messaging in the US will grow from one and a half million dollars in 2000 to fifteen million dollars by the year 2004 ("Multi-Tasking," 1). In fact, the growing market for SMS generated approximately four hundred and sixty-two million for the United States carriers in 2002, up from ninety-six million dollars in 2001. It is expected that the market will rise to one and a half billion dollars by the end of 2004 (Loftus B13D).

Although the growth of SMS technology in North America, has finally contributed to changes in the design of mobile phones as well as price packages by US telecommunications companies, issues of user cost, and technological incompatibility and complexity prohibited this development from happening earlier. Improvements were originally made on SMS technology because it proved accessible and useful to people in Asia and Europe. Such factors relate to both cost efficiency and technological and social compatibility.

The Typical SMS User

Issues of compatibility and complexity do not refer solely to the technological device, but also considers the level of compatibility and complexity between the user and the technology

(Green 34). In order to send a text message the user must type a message using the keypad on his or her cellular phone. These wireless gadgets do not possess enough physical space to accommodate the complete keyboard configuration that is available to their full-size computing counterparts. Therefore, a single button on the input keypad is most often assigned more than one character, thus creating plurality in character resolution that requires a disambiguation scheme to identify the original character intended by the user (Ha 687). Commonly known as multitap, this text entry method is somewhat complex as it requires some degree of memorization and in some cases is known for typing inefficiency and poor ergonomic design (Ha 687). The large concentration of buttons on a very limited physical space makes it difficult to search and actually type the appropriate keys. The user usually relies on both thumbs to perform the typing (Ha 637).

This inefficiency has in part contributed to the limited number of adult SMS users, particularly in North America. Text messaging is considered a novel development which people of older generations may be less inclined to try. Perhaps this is because of technological illiteracy. In addition, however, text messaging relies on at least two users (a sender and a receiver) in order to properly engage in communication. Thus, not only is one required to understand how to use the technology, they also have to ensure a willing respondent. For a demographic already apprehensive about SMS technology, having to find someone willing and able to engage in texting can cement the decision to not use the technology.

In contrast, the youth demographic, particularly in Asia and Europe, has proven to be avid users of SMS technology. For example, over 90% of the people in Finland under the age of

thirty own a cell phone and are avid SMS users (Aoki and Downes 351). Although this trend is considerable among Finnish youth, it is not unique to them. In Norway two-thirds of youth own or have access to mobile phones and SMS technology (Skog 255), while in Tokyo, by the spring of 2001, 90% of Tokyo-area high school students possessed a mobile phone and considered themselves "texters" (Rheingold 6). For youth, the technological know-how and the requirement of multiple users are not prohibiting factors. In fact, not only is text messaging particularly appropriate for cost-conscious youth who find that it is cheaper to text than to call, this cost efficient method of communication assures them a means to maintain social ties ("Business," 7). As the number of SMS users increase, the value of the technology itself increases, and so does the importance of being a user (Urbaczewski). They rely on text messaging in order to maintain the social circles integral to their livelihood and in turn the technology is further developed with these needs in mind (Urbaczewski).

The use of SMS technology by youth not only relates to issues of compatibility but also to what Green refers to as the type of group and the fulfillment of a felt need (Green 34). According to Rheingold, in Asia, the development of the mobile phone has freed youth from the tyranny of the landline shared by inquisitive family members (4). It has created a space for private communication and agency that has opened up possibilities for social action. In addition, it is less expensive for youth to own their own personal mobile phones than it is for homes to install landline phones. This allows teens the benefit of mobility, and in turn greater access to privacy (Rheingold 4).

Anthropologists Ito and Daisuke, who have been observing the ways that Tokyo youth use mobile phones argue:

[t]he space of the home, dominated by parents, accommodates their identity as child, but not as friend. It is too small, crowded, and saturated with family interests to be an appropriate place for gathering face to face. The home phone once was a means to monitor and regulate their children's relationships with their peers. (Ito and Daisuke 10)

Not only is the typical home small in comparison to North American standards, in addition children generally share bedrooms with siblings and sometimes even a parent. Furthermore, in North America youth are often provided with their own private phone. This practice is not common to Asian culture as a running landline costs approximately six hundred US dollars (Ito and Daisuke 9). As a result, while the phone was once a means for parents to keep an eye on their children, with the advent of the mobile phone Asian youth are able to call each other more freely (Ito and Daisuke 10) Furthermore, SMS technology has made it possible for young people to conduct conversations that cannot be overheard. It allows youth users to construct a portable place of intimacy, an open channel of contact (Rheingold 4). This access to text messaging allows youth, particularly in Asia, privacy previously unavailable to them (Rheingold 5).

In addition, as Mackenzie and Wajcman have argued, the social world in which we live has a profound impact on the way we understand and hence use technology. Technologies are used according to the needs and obligations of the user. Mobile phones and SMS technology not only provide youth users with a necessary amount of privacy, text messaging also acts as a medium through which one can cement their social relationships (Taylor and Harper 32). The exchanging of information in this way is akin to practices of gift-giving, involving one person who sends a message to someone else who, in turn, receives the message by opening and reading it. According to Alexander S. Taylor and Richard Harper the offered message

provides a tangible focus for the social exchange that is enacted. In order to fulfill the ritual, the receiver then replies to the message, thus fulfilling her obligation to return the gift (Taylor and Harper 6). Gift giving is such a prominent aspect of mobile phone interaction that issues, such as the ease of typing a message, are taken into account in the design and development of the mobile phone (Taylor and Harper 30). This practice is not new. As Taylor and Harper assert, “the exchange of the physical is designed to signify familiar feelings such as thanks, caring, love, and trust, and in turn is meant to result in pleasure or well being for the recipient”; it is a process that inevitably involves offering something of ourselves (7). Young people use the ritual of exchange to cement and demonstrate their social networks. As phones did in the past; SMS technology provides new ways to reinforce social ties (Taylor and Harper 33).

With the ever-growing popularity of SMS technology in Asia and Europe, text messaging is perceived by youth as a collective experience that is necessary to adolescent identification (Kasesniemi and Rautiainen 177). In fact, Kasesniemi and Rautiainen assert that the mobile phone and SMS technology are not the primary motivation for SMS use (177). The most significant factor in youth text messaging is the content of the messages. In the words of Kasesniemi and Rautiainen, “each of these practices is organized around the production and exchange of messages that enable adolescents to be teenagers and to manage their unique social position between childhood and adulthood” (Kasesniemi and Rautiainen 189) This is similar to Taylor and Harper’s assertion that the practice of text messaging affords the youth user the opportunity to participate in the custom of gift giving (2). Like Harper and Taylor, Kasesniemi and Rautiainen also assert that the social practices of youth “texters” shapes SMS technology.

Drawing from this, text messages are also interactive, unlike letters or notes. In this way, youth cultures are able to adapt written text into a type of conversational interaction (Kasesniemi and Rautiainen 186). As such, through text abbreviations and characters, what is arguably their own particular linguistic form, messages are assigned greater meaning and consequently increased value. Thus, SMS technology not only has value to youth users because of the functional purposes it serves, but also because of the meaning that is constructed through the particular use of the technology (Taylor and Harper 29). In addition, the value of SMS technology is further heightened when considering that young people have ownership over the messages they send, allowing for some amount of privacy and independence (Taylor and Harper 31).

By comparison, many middle to upper class North American youth tend to have an immense amount of private space that can accommodate their full social identities as well as their social networks. For the most part, their families have homes large enough to entertain friends, private bedrooms for children, computers with Internet access, and more than one phone line. These standards of living give North American youth privacy without having to leave the house. This is in striking contrast to Asian homes where youth have to occupy themselves in quasi-private space, such as domestic or public areas that are conducive to phone calls but conducive to text messaging, in order to gain some amount of privacy (Rheingold 23).

In addition, because of the prevalence of the personal computer in North America, there already exist two highly developed textual communication systems: email and instant

messaging (IM). According to the Pew Internet and American Life Project, in 2001, it was estimated that approximately seventeen million youth in the US between the ages of twelve and seventeen use the Internet. Furthermore, drawing from the same study, it was found that thirteen million youth use Instant Messaging (Lenhart 3). So, for North Americans, unlike their counterparts in Europe and Asia, where SMS developers faced less initial competition from the computer, there is no real demand for a personal communication device like text messaging. For these reasons, it is difficult for US wireless companies to thrive alongside the desktop machine—as well as alongside Internet service providers, including AOL and Microsoft's MSN service (Waters 18). Adding to this, issues of interoperability, the ill established development of SMS technology in North America becomes apparent. By contrast the dependence of youth in Asia and Europe on text messaging to provide some semblance of the privacy that the majority of youth in North America have indicates reason enough to initially develop a technology with the needs and social practices of the primary SMS user in mind. That said, however, designers of SMS technology are also aware of the recent increase in popularity of text messaging amongst youth in the US. As a result, much of the current changes to the technology consider the youth user at a broader level.

SMS Designs For and By the Youth User

It has been argued that “designing mobile applications for youth markets is a blind art, requiring developers to engineer unquantifiable properties like ‘fun’ and ‘cool’” (Gubbins). In fact, some companies go so far as to hire anthropologists to study tribes of teenagers in their native habitats, while others employ focus groups and usability studies (Gubbins). This raises the issue of exploitation, as marketers often turn to youth, who are unpaid, for their

opinion of the usability of the technology and the effectiveness of advertising techniques. Drawing from the apparent dependency of marketers of SMS technology on youth, it can be argued that young people are not only avid users of text messaging but in many ways play their hand at designing the technology as well.

There already exists a variety of services via SMS that are available to manage everyday concerns. These include news headlines, TV and movie listings, horoscopes, directory and address inquires, weather, sports scores, and dictionaries (Kasesniemi and Rautiainen 170). In addition, there are other features more definitive of youth interests. Take for example, Airborne Entertainment, founded in the year 2000, which describes itself as a “publisher of top-flight branded mobile entertainment” (“Airborne”). Some of their clients include 20th Century Fox, NHL, and Canadian Idol. The mandate of the company is to expand the brand of their client into the mobile world. So, for example, Airborne Entertainment has joined forces with Canadian Idol to provide, via SMS technology, what they refer to as “Canadian Idol Broadcast Reminders”, “Canadian Idol Trivia”, and “Canadian Idol Behind the Scenes” (“Airborne”). According to her preferences the user determines the presence of these features, combining elements that ultimately reflect her own tastes (Skog 255). In this way, the user plays an integral part in shaping the design of the technology.

Similarly, like the technological services that SMS provides users are likewise free to create uniquely individual mobile technologies by designing the appearance of their mobile phones, the carrier of text messaging. Wireless companies have designed phones to match traditional expectations of female and male inclinations. They combine technological facilities with a rich selection of colours, designs, ring tones, and logos thus catering to both the typical

female user who tends to focus on colour and design and to the typical male user who is more concerned with the technical profile (Skog 269). This relates to the notion of “gender script”, which refers to the “representations an artifact’s designers have or construct of gender relations and gender identities- representations that they then inscribe into the materiality of the artifact” (Van Oost 195). By providing options to stylize one’s phone –the carrier of SMS technology inadvertently genders it. In fact, some of the most sought after accessories for this season are everything and anything designed to personalize one’s mobile phone (“Samsung”).

For example, Samsung Telecommunications America partnered with Vogue Magazine to position technology as an “essential component through which to create, define and express “style”. They joined forces with Diane von Furstenberg (DVF), known for her legendary wrap dress, to create a limited edition designer phone called DVF Mobile by Samsung. Presented in October 2004, the phone was “created” by reproducing an Andy Warhol painting of Diane von Furstenberg’s own likeness onto the phone. According to her, the phone reflects a “commitment to creating desire amongst consumers”. Those who buy the so-called DVF mobile phone also have the option to download ring tones that are of DFV’s voice. As suggested by Samsung and Vogue public relations representatives, “the phone has emerged as the ultimate accessory, it is meant to represent the way women think about their relationship with design and technology” (“Samsung”). This is not the first time Samsung has tailored the design of a mobile phone with the female consumer in mind. For example, prior to the DFV phone, Samsung introduced the “Ladyphone”. This phone was designed to open like a makeup compact and, according to Leslie Regan Shade, came equipped with such gendered features as, “a biorhythm calculator, a fatness function that calculates a user’s

height-to-weight ratio, a calendar for keeping track of your menstrual cycle and a calorie-counting function” (Shade 304).

Whether we choose a pink, blue, diamond encrusted, or an “Andy Warhol” phone these options are gendered. Although, it is the mobile phone itself that is dressed according to masculine or feminine tastes, text messaging is an inevitable part of the cellular phone and ultimately reflects gender specificities. “Gender scripting” is in no way a new practice. In fact, the telephone was originally intended for use by men in a business setting, however once it proved more useful to meet the social and familial needs of housewives, the design of the phone was redeveloped into a much more “female friendly” technology. For example, stylistically it changed from plain black to pale hues (Shade 297).

Like these features, the written message, in large part the defining characteristic of SMS technology, is also the creation of the user. This corresponds to Ellen van Oost’s assertion that the “use context... is an important locus in which material objects can function as symbols expressing a gendered meaning” (194). The text message bears the hand-crafted ‘moniker’ of the sender. Like any crafted gift “[t]he object that is made by hand is not quite like any other object. It is unique, and carries the inescapable marks of the person who made it. The infusion of the person into the product... ” (Taylor and Harper 8). While both girls and boys have adopted SMS technology equally, boys tend to text brief messages stating the essentials in a near laconic tone, while girls’ messages tend to be wordy and involve a high degree of intimate, emotionally charged content (Oksman and Turtiainen). In this way text messages are as gendered as the personally-stylized devices that carry them.

The written message is an important object of social value, as young people have ownership of, or have immediate control over it. This raises the value of the text message even more as the object exchanged represents not only something that is personal, but also a symbol of young people's independence. The argument set forth by the notion of "gender scripting" can also be applied to other qualities specific to the design of SMS technology. A once forgotten technology, text messaging emerged in response to user demands; beyond this, its proven value to youth culture in Asia and Europe, led to its greater development. As such the design of the technology not only reveals a gendered script, but likewise proves to be a reflection of youth culture. For example, in response to the growing number of youth consumers of SMS technology, mobile phone companies now provide the possibility for users to download their favourite songs and use them as ring tones. In addition, Wallpaper Warehouse, in conjunction with Airborne Entertainment, provides users with a selection of images, from puppies and kittens to provocative photos of women that users can decorate on their mobile phone screen. Similarly, the popular men's magazine, Maxim provides various services like "Maxim the code", which gives subscribed users access to a text based information system about the do's and don'ts of courting women ("Airborne").

The variety of services available allows users to personalize their device and again potentially reflect gender and age-specific desires. As Taylor and Harper argue the phone and its content makes it possible for young people to differentiate themselves from family or household relations as well as to cement their own social networks (8). While text messaging allows the young person to withdraw from the world of the home and establish a 'micro-world' through the system of text exchange between social circles, with every message that is sent, SMS technology is uniquely redefined (Taylor and Harper 31).

Conclusion

Only a few years after text messaging was first developed did the technology become popular. It was not the technological components of the device itself that made it a useful technology; it was the social and cultural distinctions of Asia and Europe that led an unused gadget to develop into a major mobile communication device. The popularity of SMS technology largely grew amongst youth users. In particular, cost-conscious Asian and European youth found that it fulfilled their needs to maintain their social livelihoods. Although the diffusion of text messaging first took off amongst youth in Asia and Europe, North American youth have also begun to show interest in the technology. The youth demographic has greatly contributed to the development and design of the technology. Companies now provide users with an immense number of choices with respect to both appearance and added services. Not only can one design the look of their phone, they can also choose components of its operation. In addition, users contribute in large part to the design of SMS technology because of the simple fact that they are the creators of their own messages, the very thing that defines the technology.

In this chapter, I have suggested that the initial development of text messaging was a process that involved social and cultural forces. I have highlighted the important role played by the characteristics of the technology such as issues of technological compatibility, complexity, trialability, and relative advantage; its typical users (in this case the youth demographic); and the fulfillment of their needs which depend in large part on the social and cultural terrain in which the technology emerged. All of these factors have specifically been considered within relation to Asian and European cultural distinctions, as evidence has shown it is, for the

most part, these two societies that have initially contributed most to the inception, development, and design of SMS technology.

However, although youth users, for example, may play an important part in developing SMS technology, the many choices that have been afforded to them, are evidently linked to marketing strategies. Similarly, although the improvements that have been made to SMS technology to render it more compatible with US users have aided the development of the product in North America, these enhancements are no doubt related to issues of increased consumption and capitalism. As Mackay and Gillespie argue, “[m]arketing is a part of the social shaping of technology not only in that it informs design, but also, as we argue, in that it plays a part in constructing demand”. (Mackay and Gillespie 694) Drawing from this, it follows that the factors influencing the development of text messaging are unquestionably connected to the next sphere suggested by Mackay and Gillespie: marketing.

Chapter Three

The Marketing of SMS Technology

'Our sponsorship of *American Idol* has inextricably linked text messaging with American pop-culture,' said Andre Dahan, president of AT&T Wireless Mobile Multimedia Services, at the time. 'Television viewers now expect to be part of the action — and there's no turning back. The wireless phone has earned a permanent place alongside the television remote' (Spethmann).

According to a study conducted by the Cellular Telecommunications and Internet Association, in the US, the number of text messages increased from thirty-three million in June 2001 to nine hundred and thirty one messages one year later (Reidy). SMS technology is finally an established if not popular commodity in North America, particularly amongst youth. According to industry group Telephia, 53% of youth in the US, between the ages of thirteen and seventeen, use text messaging. This is an increase from 45% last year (Reidy). Similarly, the Yankee Group estimated that by 2005, youth wireless penetration in North America will reach an estimated 68%, surpassing total market penetration (Sewell). According to Green, the successful diffusion of an emerging technology relies not solely on the design and development process, but likewise critically depends on marketing and advertising techniques—what is the second sphere of the social shaping of technology referred to by MacKay and Gillespie (Green 31). In fact, the increased popularity of SMS technology in North America is in large part the result of strategic marketing on the part of mobile phone companies.

From traditional outlets such as television, films, and magazines, to more unconventional methods like posting advertisements in the stalls of public washrooms, there exists a

plethora of media through which marketers can advertise their products. Assuming that consumption is the driving force of advertising in North America, the main concern for marketers is to target the ideal consumer for the product being advertised. Marketers search for the demographic with “predictable specifications who will pay attention ... at predictable times to particular means of communication” (Smythe 270).

As in Asia and Europe, youth in the United States have recently proven to be a fruitful demographic for SMS marketers. Although marketers have been advertising text messaging through various media, SMS technology has proven to be a more difficult product to sell through traditional marketing strategies. The recent development of reality television, a popular genre amongst North American youth, is a particularly noteworthy phenomenon. Not only is reality TV considerably popular amongst young people, but it has also afforded SMS marketers a outlet through which they can successfully promote their product.

In 2004, eight out of the twenty most popular TV programs in the US amongst young viewers were unscripted series. In fact, American Idol episodes alone dominate among youth viewers, with half of the top twenty out of one hundred spots (Levin). Reality television appeals to the most sought after category of consumers –youth (Aoki 1). As a result, marketers of SMS technology have latched onto this genre of television not only because it is popular amongst youth, but also because its conventions of realism provide a unique means of attracting their demographic, and by extension encouraging consumption.

In the 1980s, when reality television first emerged in North America, the television industry was facing a substantial economic restructuring. Firstly, due to the number of video

distribution channels that were rapidly expanding and because of the advancement of cable television and VCRs, television audiences were increasingly fragmented and ad revenues had to be spread among a larger pool of distributors, broadcasters and cablecasters. As a result there was a need to cut per-program production costs. In addition, production budgets were cut due to the high level of corporate debt incurred by the big-three networks (ABC, CBS, and NBC) after each was sold in the mid 1980s. Lastly, a change in audience measurement techniques designed to identify specific market segments similarly hindered the economic safety of the television industry (Raphael 121).

It was hoped that reality TV would remedy this economic uncertainty. It fit the needs of producers and distributors alike for cheap programming as it is a genre of TV that relies on a mix of low cost professional and amateur editing and video styles often using handheld cameras and natural lighting (Raphael 121). Furthermore, reality television depends on low-cost stars, non-union talent and in most cases, as in programs such as American Idol, “non-actors” (Raphael 124). Not only did reality TV make sense economically, but also with this genre of programming, producers were able to comply with Federal Communication Commission rules that state that certain shows have to encourage local-programming and small independent producers (Raphael 125).

By 2001, major networks devoted three hours a week of their prime-time schedule to reality TV, and one year later it was up to at least eight hours per week (Magder 137-138). The increasing popularity of this genre of TV, especially amongst youth, is substantial. In fact, with the end of such celebrated television shows as Friends and Frasier and the continuation of such popular reality TV programs like American Idol in the Fall season 2004, producers

are choosing to cancel pilots in place of reality television. As West Coast President of NBC Scott Sassa stated, “reality programming is not just a fad, it’s a trend... .And it is here to stay” (Magder 141).

Although one might assume that reality television is a recent phenomenon, reality based shows are not new. They have existed for some time; one might take as an example such shows as America’s Most Wanted or Rescue 911 (Raphael 132). But its popularity as a genre seems to have grown exorbitantly. When Rescue 911 first aired, for example, there was no talk of so-called “Reality Television” taking over the television airwaves. What has changed? And, what has encouraged this resurgence in reality television?

The importance of celebrity has long been an essential characteristic of the social and cultural terrain of North American youth. With the re-emergence of reality TV the possibility of being a ‘star’ is now perceived as easier to attain. The message is that ordinary people can become important enough that millions of people will watch them (Reiss). In many ways it is for this reason that reality TV has become such a success. As McClellan writes, “the key to American Idol 3’s success, as is true of many reality series, ... will be the show’s ability to showcase charismatic talents that generate huge rooting interests with audiences” (McClellan). In other words, reality TV draws in its target audience through the marketing of celebrity *types*. From The Bachelor and Survivor, to The Apprentice and American Idol virtually all reality TV relies on “heroes” and villains to ratchet up fan interest.

The phenomenon of reality TV not only perpetuates this already popular myth of celebrity by going one step further and relying on “nobodies” as their “actors”, but it also allows the audience to play a part in the outcome of the show. As Guider writes, “the success of the reality show phenomenon is in part due to its anti-establishment spirit, by which kids from nowhere, with just a little talent and a modicum of professional advice, are turned into stars virtually overnight” (Guider); this process of “star” making is in large part dependent on the viewer’s vote.

For example, in the 2004 finale of the popular reality TV show, Survivor, not only was the winner of the “Survivor Challenge” awarded one million dollars, but in addition host Jeff Probst announced that the viewers would decide who, out of the thirty challengers should win an additional one million dollars. The audience was asked to cast their vote by text messaging via Cingular Wireless to a specified number, thus playing an essential role in the outcome of the show (Levin).

This relationship between mobile phone companies and reality TV is not unique to this particular program, but is evident in an overwhelming number of reality TV shows. In conjunction with its interactive qualities, SMS technology has acquired an important role in the celebrity-making world of reality television by becoming the tool through which viewers can vote for their favourite reality TV character. As such, marketers struggling to advertise SMS technology via traditional advertising methods have finally found a way to grab hold of the purse strings of youth consumers. A proper exploration of this sphere of the social shaping of SMS technology in North America requires first a brief consideration of

marketing strategies involving celebrity endorsement and product placement. Following from this, the chapter will continue to look at the current trend of telecommunication companies to merge the use of these traditional marketing tactics with the definitive characteristics of reality TV. In particular the popular reality TV show American Idol will be analyzed. With its conventions of realism and interactive qualities, the show not only celebrates real people becoming “American Idols”, it also suggests that this status is possible for anyone to attain. SMS advertisers have latched onto the interactive features of the show and in turn, this message, in an effort to promote consumption amongst youth. This has proven successful for mobile phone companies. Since the implementation of this marketing technique, awareness and use of SMS technology has increased significantly amongst North American youth. Text messaging offers viewers an “in”, into this world of “star” making and in turn reality TV gives mobile phone companies a chance to successfully sell SMS technology.

Celebrity Endorsement

Television takes up almost 50% of the time that North Americans spend with media products and cultural events; on average, each US household watches just over one thousand six hundred hours of television a year (Magder 141). In fact, only work, school, and sleep take up more time in a given week than watching television. Moreover, in 2002 youth spent an average of thirteen and a half hours watching TV per week (Ward 1).

In purely revenue-based terms, programming is a supplemental necessity in the television industry. Their business purpose is to secure an audience for the ads that, in large part,

appear between them. Drawing from this, Green argues that, in an effort to target youth specifically, television programming is produced to reflect popular culture, inevitably contributing to it. For example, the television channel that features programs that mirror the social and cultural distinctions of youth culture ultimately becomes the leading-edge channel and the springboard for new expressions of popular culture (Green 154). Profit is generated by attaching advertisements to a channel such as this (Kellner 94-96). Douglas Kellner argues that like any television program, commercials are a genre. He further claims that although similar, there exist some obvious differences between program genres and commercials. As an example, Kellner suggests that no matter how much the latter seems to blur the distinction between fictional and commercial modes of address, ads and programs occupy quite distinct positions within the structure of the television programming system (Kellner 95). To counter Kellner's argument, one might argue that the use of celebrity endorsement and product placement within films and television programs, in particular although encouraging popular culture, challenges this distinction between ad content and program content.

For example, in order to encourage consumption amongst viewers, production companies often construct celebrities. Viewers identify with these stars who appear in films or television shows and who in turn are directed to endorse various products, thus generating greater market sales. This marketing tactic relies on audience identification as there exist many types of celebrities and an equal number of different demographics; increasing consumption relies on matching the appropriate celebrity to the right audience (Gamson 68).

Jackie Stacey addresses two different forms of audience identification: identifactory fantasies and identifactory practices. The first form of identification involves “fantasies about the relationship between the identity of the star and the identity of the spectator” (Stacey 149). The youth’s self-image and psychological needs are measured, and the product (the star) that embodies characteristics that meet these needs are then provided or created. The celebrity, carefully selected to fit the marketing plan and demographic, is thus translated from human to commodity. As a result,

[t]he material reality sign—that is the actual person who is at the core of the representation—disappears into a cultural formation of meaning. Celebrity signs represent personalities—more specifically, personalities that are given heightened cultural significance within the social world. (Marshall 57)

Audience identification with the celebrity particularly unfolds as the youth relates to the celebrity on screen. In today’s society, there exists a constant tension between the economically powerful and the economically powerless. It is a conflict between those (the audience) struggling to gain whatever wealth, power, and prestige they feel they lack in the face of those they compare themselves to who, in their eyes, have already acquired such desired qualities. The star as a commodity supplies the notion that the audience can gain what they are lacking through their identification with the celebrity, if only symbolically by purchasing certain products. It is a phenomenon based on distance and tension, and is likewise reinforced by these factors as well (Stacey 149). Through a process of identification involving fantasy, the youth audience first embraces the distance produced by the differences between them and the star (Stacey 149). Then, as part of the pleasure of escapism the spectator learns to leave her world temporarily and become part of the star’s world (Stacey

152). Without this process of identification involving distance and fantasy the spectator does not relate as readily to the celebrity and as a result profit is not generated.

While identifactory fantasies involve the mental activity of identifying with a celebrity, the second form of identification addressed by Stacey called identifactory practices refers to the consumption-based activities engaged in as attempts at fulfilling those fantasies. This form of identification takes place outside of the primary media event (Stacey 149). The actor enters the world of celebrity through publicity. Publicity consists of the “extratextual movement of the screen actor into other forms of popular discourse” such as magazines, newspapers, tabloids, radio, and television talk shows (Marshall 82). The combination of such extratextual materials with the celebrity on the screen produces the image of the star (Marshall 83). The image is the real commodity, not the actual celebrity. The star thus becomes:

... tantalizingly close and similar, yet at the same time remote and dissimilar. Further, the star is a legitimate object for the desire of the viewer in so far as the star is like the viewer, and an impossible object for the desire of the viewer in so far as the star is extraordinary, unlike the viewer (Ellis 543).

Such notions give the celebrity a general allure, which is her value as a commodity. In addition, the star’s ‘ordinary’ elements are important as they promote a sense of connection and intimacy between the celebrity and her fans (Gamson 29). For example, in the popular magazine US weekly there is a section entitled “Stars–They’re Just Like Us” (“faces&places” 26). This features images of celebrities doing everyday tasks and affords the spectator the opportunity to identify with the star (“faces&places” 26). Noting these similarities suggests to the reader the possibility that anyone can be a star, and perpetuates a myth of accessibility.

This connection to everyday reality is counterbalanced by the star's extraordinary qualities. Film and television acting styles are perceived as "real" and "natural", as opposed to stage acting and requires the star to become the character (Fowles 168). As a result stars are chosen more on the basis of style and appearance than for their acting ability. Beauty, youth, and stereotyped appearances have become central to the profession of screen acting and consequently an essential commodity. These qualities are appealing to consumer capitalism because the star is an aesthetic of wealth and leisure and as such they define trends of modern society and are inevitably used to endorse products (Marshall 92). For example, a young viewer influenced by the marketed star, might buy various goods that have been promoted by that given actress believing that they will aid her in developing a similar appearance. While doing this, the consumer could logically argue to herself, this (chosen) star came from a small town just like me, if she is promoting the use of this product and if using it will give me the same results, then I will buy it. In short, the celebrity performs as a "consumer ideal", a representative of the modern way of life through which the young viewer identifies both based on difference and similarity, on screen and off (Marshall 92). With a combination such as this, the star has succeeded in generating exactly what the system was built for: profit (Gabler).

Product Placement

In addition to using celebrity to endorse product consumption amongst viewers, advertisers often rely on product placement as a means through which to encourage consumption. According to Nielsen Media Research, a product placement is an audible mention or visual appearance within the text of a television program or film that is seen for at least one second

(Aoki 1). This marketing technique does not necessarily involve direct promotion of the product by the characters of the program, rather in many cases the product is featured on the set without any mention of its benefits. For instance, for years companies have used product placement on the big screen as a way to showcase their latest products. For an example, one only need be reminded of the classic film ET when the friendly alien hands Eli some of his Reese's Pieces to sample. In this case, neither the film nor the character of ET promote the product directly but rather its position within the fabric of the film appears natural. The scene features ET sharing his Reese's Pieces with Eli. This moment is important not only because ET's offering and Eli's acceptance of the candy indicates a further solidification of their friendship, but also because this strengthening of friendship is coupled with the endorsement of Reese's Pieces, and as such encourages consumption of the candy by the audience.

Not only is product placement a good way to encourage consumerism, it also helps to cover production costs. In fact, as Ted Magder exemplifies, the early days of American television overtly engaged in this practice. In the 1950s, for example, Texaco Star Theatre, and The Colgate Comedy Hour, as the names suggest, incorporated the product names of their sponsors into the programs (Magder 148). Magder similarly recalls when cigarette manufacturer Philip Morris initially sponsored I Love Lucy and the show often featured Lucille Ball and Desi Arnaz puffing away on the product (Magder 148). By the 1960s, American television relied less on this model of funding.

However, although this marketing approach dwindled for a while, the introduction of early reality based programs like Who Wants to be a Millionaire? brought product placement back once again as a popular means of generating revenue for advertisers. Here, for example, as part of the game show, contestants are allowed to “phone a friend” and ask for help answering a question. Should the contestant choose to do so, host Regis Philbin calls the friend via AT&T. (Magder 148).

According to Nielsen Media Research, in September and October of this year, branded products made more than nine thousand appearances on prime-time network television (Aoki 1). The resurgence of this advertising practice is in large part a response to the inception of technologies like digital video recorders such as TiVo which have the ability to sidestep commercials entirely. As a result, companies are inserting their products directly into the show’s diegesis. So, for example, the forensic investigators of the popular TV program, *CSI: Miami* all drive Hummers provided by General Motors Corporation. The vehicles are supplied to the show for free and in return GM has an unsolicited endorsement by the program’s leading actors (Aoki 1).

Reality TV and Marketing SMS Technology

Drawing from these two examples—celebrity endorsements and product placement—it is evident that advertising is not limited to commercial breaks, but is often intertwined within the very fabric of the program. Now, with the advent of the recent stream of reality TV shows advertisers have found a whole new realm of advertising possibilities. Using to their advantage this notion of “reality” TV, the characteristic markers between ad content and

episode content have faded even more. The format provides a setting in which “real” people can use “real” products as part of their “everyday” lives, thus making it much easier to work products into the program (Aoki 1). Not only has advertising become an integral part of TV shows, but it is most often a part of programs that focus on the transformation of real people into celebrities. Here, the audience identification with the celebrity has changed. The distance between the star and the viewer has closed in. The “stars” are not perceived as “acting real” as with any film and television actor, they are not, in fact, seen as acting at all, but are instead perceived as “real” people (Guider). As a result, the viewer once taught to believe in the accessibility of celebrity through product consumption continues to consume, but now with the belief that celebrity is even closer, given the current abundance of reality television that celebrates “real” people (Guider). In turn, with these conventions of realism the distance between the product and its association with celebrity is minimized (Aoki1). These programs send the message to its young viewers that anyone can become a “star”, while in addition setting up an ideal platform through which advertisers can now more than ever attach their product to more attainable notions of celebrity (Goldman and Papson 58).

As part of this new system of marketing, reality TV has taken to extending the “program” beyond the confines of the box in the living room and now encourages audiences to pay to participate in the show’s dramatic arc by using interactive technology like SMS to stay in touch with the program (Magder 150). This has proven substantially more economically beneficial for both television networks and the companies that are involved in the sponsorship of these “interactive” shows.

The “realistic” conventions of American Idol offer a prime example of the use of these marketing techniques. The interactive quality of the show has allowed the lines between episode content and ad content to become blurred. These advertising strategies are particularly valuable to mobile phone companies in search of a means through which to advertise the interactive qualities of SMS technology. Not only can telecommunication companies rely on the conventions of reality based TV programs as a means through which to advertise to viewers the transformation of the unknown “real” person into a celebrity, interactive technologies have the benefit of featuring their product as a necessary means through which to actually participate in deciding the outcome of the show, taking the viewer one step closer to the myth of becoming a “someone”.

The first trial of SMS on television took place in the United Kingdom in 2000. The Reality TV show Big Brother had 24% of all votes cast by text messaging and an additional nine and a half million texts were generated by the show in just nine weeks (Griffiths 9). But now, in 2004, the co-mingling of the wireless reality TV world has leapt forward. Industry analyst Hugh Griffiths suggests reasons for this increase in popularity include the fact that now more than ever the technology is easily available. To support this claim Griffiths points to a report published by Van Dusseldorf which states that besides television and radio, the mobile phone has become the only other true, real-time mass-medium (Griffiths 9). Secondly, Griffiths suggests that mobile networks are more resilient and platforms can support the high volumes stimulated by big audiences. Lastly, Griffiths argues that due to billing mechanisms the revenue streams, which are shared with the producer and broadcaster, can be generated for everything on mobile phones, like voting via SMS (Griffiths 9).

Griffith is not alone in his suggestion of this seemingly flawless relationship between SMS and reality television. Realizing the growing popularity of the coupling of SMS and reality TV, Rhonda Wickham similarly argues that “interactive television is the missing link for the US text messaging market” (Wickham 29). She supports this claim by pointing out that of the ten reality-based shows airing, each captures nearly twenty million viewers. Most of these shows encourage viewers to electronically vote for their favourite participants. She argues, that, “if only 10% of each show’s twenty million viewers text someone off the Island or named someone an “Idol”, the volume of consumers would be substantial” (Wickham 29).

Although SMS has been a staple in European and Asian carrier revenue streams for several years, it was not heavily promoted to or used by consumers in the United States, until AT&T Wireless Services realized the success that European and Asian companies were having with the promotion of wireless services via interactive television programs. Advertisers saw the potential this genre of TV programming could offer to the marketing of their products. Drawing from this discovery, AT&T Wireless joined forces with Fox Network’s reality program, American Idol and came-up with an audience polling promotion involving SMS.

American Idol and SMS Technology

American Idol aired on Fox Television for the first time in January 2002. Inspired by the British television show Pop Idol, the premise of the series is to find America’s next big pop star. Three celebrity judges, Simon Cowell, Paula Abdul, and Randy Jackson, and one host, Ryan Seacrest, travel across the United States, offering auditions to any Americans between the ages of sixteen and twenty-five who believe that they have the talent to compete. Once

the hosts have selected the finalists, it is up to the viewers to tune into the show each week and vote for their favourite "American Idol". Viewers can either phone in their choice or text their vote using SMS technology. Once the votes are determined, the Idol with the least votes is cast out while the performers with the greatest number of votes remain to challenge each other the following week. The show, complete with its text based voting system, has become so popular that other countries such as Canada with Canadian Idol, have taken to having their own Idol shows.

In its first season in 2002, AT&T wireless built a relationship with the program that was based on straight sponsorship (Wasserman R4). In addition, AT&T subscribers could register to get program information and updates but there was no text vote (Spethmann). However, realizing the growth in popularity of reality television and more particularly of American Idol, by the time the second season of the show hit the airwaves, AT&T had negotiated a deal with the show to let viewers vote for their favourite idol by text messaging or phoning in their choice.

For example, the host of American Idol, Ryan Seacrest constantly reminds the viewer to vote for their favourite Idol simply by phoning or text messaging their choice. In fact, throughout the show, Seacrest instructs the viewer to vote, and in some cases with the help of one of the performers, demonstrates how to "text your vote". Using one of the idols as an example, Seacrest explains to the viewer that in order to text one's vote for that performer, one must dial a specific number in accordance with her performance (i.e. dial "i-d-o-l-2" for the second performer). Following from this, at the end of each performance, Seacrest and the Idol that sang remind viewers to text their vote; in essence it is the

performer's chance to campaign. For example, while Seacrest reminds the viewer verbally, the Idol directs the audience to vote for her by signaling with her fingers towards the camera the number that corresponds with her performance. In this way, we are not only led to believe that both Seacrest and the performers are users of the technology, and thus promoters of it, it is likewise implied that the viewer's involvement in the outcome of the show is prioritized.

The use of Seacrest and the performers to promote SMS technology in this way naturalizes the position of the mobile phone company within the text of the program. However, given that AT&T is a key sponsor of the show, a fact viewers are continuously reminded of throughout the series, the option to text your vote inadvertently becomes a means of promoting their product. This seamless integration of advertising and content is enhanced by the presence of traditional commercial breaks of which mobile telephony is also a part. For example, in American Idol, following Seacrest's demonstration of the proper use of SMS technology the viewers' attention is directed to a commercial break as Seacrest states, "stay tuned, more American Idol is on its way". This marks a clear distinction between ad content and episode content and in turn presents the "demonstration" as a part of the program itself by differentiating it from the clearly marked commercial breaks that feature distinct ads for mobile phones and SMS technology.

In addition, the Idol's presence in the program summons forth the values of individuality and recognizability that she has accumulated as a star and attempts to transfer them to the product. This marketing technique is not new. Thomas Frank, writing about the marketing of the rebelliousness of "hip" cultures of the 1960s, demonstrates how marketers sold youth

counterculture as “cool” and “trendy”. For example, Frank refers to the marketing strategies employed by Pepsi-Cola. In an effort to identify the drink with a certain model consumer, typically young and rebellious, Pepsi invented a fictional youth movement deemed the “Pepsi Generation” (Frank 170). The strategy of targeting a young demographic as well as marketing the ideal of “youth” in general, proved not only successful at the time, but continues to be used by marketers to this day (Frank). In fact, it is a technique greatly reflected in the advertising strategies of AT&T and their promotion of SMS technology. Attached to a celebrity pop cultural terrain, text messaging is presented as “youthful” and “cool”. In essence, AT&T, as well as other advertisers, use the “Idol endorsement” in the same way that Hollywood celebrities are used to endorse products; we feel that the residue of her celebrity adheres to SMS technology and through it we are offered an image of ourselves made glamorous and “cool”. The suggestion is that by buying the product we can turn ourselves into an object of envy and desire and through it be celebrated just like an American Idol.

This individuality and recognizability, however is contingent on our purchasing of products, as it is through them that our appearance is transformed and value attained (Goldman 107). Thus, mass produced products that give off appearances of celebrity are touted, ironically as having been made so that you can be your own Idol. Furthermore, the advertisement strategies of AT&T prompt viewers to connect the meaning system of an ordinary person gaining individuality and recognizability in the world with the meaning system of the product that gives one a trendy look (Williamson 270-277). This sense of individuation is reinforced by the continuous repetition of the personal pronoun in the show. Via a constant addressing to “you”, the viewer assists in generating the illusion of equivalence and then individuality

(Goldman 20). This is manifested even more by the use of “real” people, or so-called “celebrities-in-the-making”, as models (Goldman and Papson 90). As we, the viewers, witness the transformation of “one of us” into a celebrity, the illusion of fame seems all the more attainable and our desire for the products they endorse all the more alluring.

Not only is the viewer invited to play an interactive role in the show by auditioning to be an Idol, but she is also invited to influence the content from the audience’s perspective.

Affording this sort of power to the viewer is not new but has been employed from the time of the remote control’s first emergence when viewers were given the power to avoid ads with the simple push of a button. With the emergence of reality TV and the concept of voting for one’s favourite Idol, the influence of the audience has never been more apparent. Active viewers are drawn in by the fact that they are led to believe that they have power over the content of American Idol, in essence tailoring it according to their individual tastes. As a result they are sutured into the show’s narrative and by extension the ads that appear both within the text of the program and during the commercial breaks (Caldwell 261). Viewers are manipulated into believing that their vote has the power to turn a “nobody” into a “somebody”.

These marketing strategies inevitably proved successful, as it has helped to finally activate text messaging in the marketplace (Wasserman R4). In fact, by the end of the second season of American Idol, more than seven and a half million text messages had been sent by users. In addition, more than a third of those users had never sent a text message before the show. Moreover, the number of text votes jumped 5,000% from the first episode to the last, about 70% of users voting more than once (Wasserman R4).

According to Andre Dahan, president of AT&T Wireless Mobile Multimedia Services, “[AT&T’s] sponsorship of American Idol has inextricably linked text messaging with American pop-culture... . Television viewers now expect to be part of the action –and there’s no turning back. The wireless phone has earned a permanent place alongside the television remote” (Spethmann). AT&T Wireless has achieved an industry goal; aware of North American youth’s dependence on television and their obsession with pop culture, advertisers have realized the benefits of this new genre of television programming and have managed to locate an ideal means of incorporating their product –mobile phone technology–into the very fabric of what influences us as a culture today (Magder 150). In so doing, Americans have been enticed to try text messaging. For example, by the end of the second season of American Idol two and a half million AT&T subscribers across the US “put down their remote controls, picked up their mobile phones and sent text messages to vote for the winner of... American Idol” (Ankeny *long and short* 8). In addition, AT&T processed more than two thousand three hundred text votes per second. This campaign marks the “watershed moment that made text messaging commonplace in the US” (Spethmann). The relationship that has formed between reality TV and SMS technology has prompted mobile phone owners to try text messaging, inevitably contributing to the increased use of SMS technology in North America.

Furthermore, with product placement, advertisers have been able to increase profits through the expansion of merchandise tie-ins. Like product placement, tie-ins have been around since the beginning of television with, for example, the Hopalong gun and holster set popular amongst fans of the famous television program of the 1950s that featured cowboy

hero Hopalong Cassidy (Magder 150). As with product placement, however, reality TV has opened the gates even wider to a flood of products affiliated with virtually every reality television show. There are now over one hundred and fifty Survivor themed products available in the United States (Magder 150); furthermore, at Wal-Mart, American Idol as well as Canadian Idol fans can purchase clothing branded with the Idol logo. Moreover, at the finale of American Idol every year, one "Idol" reigns victorious. Included amongst her many rewards is a record contract. This means that the winner's and in many cases the runner-ups' self-titled CD is available to all American Idol fans. This is worth noting since, as Zollo argues, music is the interest shared by the largest number of youth (172). In fact, more than 80% of young people in the United States are active music buyers with the majority purchasing three or more CDs per month (Petroff). As suggested by Oliver Gers, overseer of North American licensing for the program's producer FremantleMedia, "we're turning Idol into a brand" (Keveney).

American Idol t-shirts aside, these promotions involve more than just ownership of an "Idol" accessory; the role played by SMS in reality TV has spurred "premium SMS promotions" (Marek *Media* 19). For example, by paying more than the standard SMS rates, subscribers are given the opportunity to interact more directly as the show comes to its end. In addition, they receive content and/or participate in certain types of promotions. For example, the Fox series The Next Joe Millionaire: An International Affair developed a SMS campaign called "Joe to Go". Any subscriber from Verizon Wireless, AT&T Wireless, Cingular Wireless, Sprint, Nextel Communications, and T-Mobile USA could participate in the promotion. The campaign promoted Wireless products via the show. It did this by charging the viewers a one-time fee of three US dollars plus standard SMS rates to

participate in the campaign for the entire ten-episode season. For the fee paid, subscribers had access to exclusive photos, behind the scenes information and ring tones with lines from the show; furthermore they could participate in the polls (Marek *Media* 19).

This initiative was similarly achieved with a campaign developed by AT&T Wireless for the promotion of American Idol. The campaign advertised the chance to “live like an Idol”. The premise was that it would bring the winner and her entourage of ten to either Los Angeles or New York. In addition, in an effort to further heighten the use of SMS beyond its voting capacity, every time an AT&T user sent a text message to a friend they also won entry into the contest; this inevitably influenced the usage of SMS technology (Wasserman R4).

By the end of 2003, nearly forty BMG albums were promoted through a text messaging program created by AT&T Wireless. This offers another example of how reality TV, in conjunction with text messaging, has been utilized to promote consumerism. Through this service, customers were sent digital coupons discounting various BMG titles purchased at Sam Goody Stores. AT&T Wireless customers who used their phones to vote via text messaging for their favourite “American Idol” were sent a text message asking if they wanted a two-dollar discount. Those who wanted the discount received a second message containing the coupon that was redeemable by showing the message to a Sam Goody clerk (Orshoski 8). Although the numbers were fairly small, the number of coupons that were actually used was considerably higher than the response that BMG normally sees from physical coupons, according to senior director of online marketing. Drawing from these statistics, in an effort to further expand the group of users receiving the digital coupons and to promote text messaging, AT&T Wireless sent one million customers a direct mail offer to receive text

messages in the future (Orshoski 8). The coupling of AT&T Wireless with American Idol was so successful that Cingular made a forty one billion dollar bid for AT&T Wireless. Now in its third season, Cingular has since taken over where AT&T left off (Wasserman R4).

In fact, of the mobile phone companies with SMS capabilities that are available to citizens in the US, Cingular is taking measures to ensure their place at the top of the list. They have recently merged with AT&T to form one company. As of February of 2004, Verizon Wireless had 24.3% of the market share, while Cingular had 15.6% and AT&T Wireless had 14.2% ("Top"). These figures, however, have no doubt changed since the recent merger between Cingular and AT&T.

In addition, Cingular has also taken steps to ensure their target demographic is reached. For example, not only have they launched a series of advertisements in an effort to encourage consumption of SMS technology amongst youth specifically, but the company also introduced its so-called "Shoutout portal" which is a website designed to allow young people to personalize the look and the sound of their phones, ring tones, and faceplates (Sewell).

The other major carriers of SMS technology in the US are Nextel Communications, Inc., Sprint, and T-Mobile. Although their market share is somewhat less than the leading two wireless companies, since interoperability was established in 2002, they have also made efforts to improve their market shares. In so doing, these companies have similarly "hipped-up" their advertising campaign and have marketed their messages at least in part towards youths (Marek *SMS*). All of these efforts to improve SMS use have proven successful. In

fact, in February of 2004, Cingular reported an increase of 450% in text messaging traffic (Marek *SMS*).

By comparison, the number of text messages in Canada has also significantly improved since interoperability was established. In 2003, twenty-one million messages were sent in the month of December alone. This marks a 110% increase since the introduction of the inter-carrier service ("text"). There are four major carriers of text messaging services in Canada. They include, Telus Mobility, Rogers AT&T Wireless, Bell Mobility, and Microcell Solutions, a branch of Fido. As consumers are still adjusting to this arguably new technology, mobile phone companies tend towards marketing their various mobile phone services, such as call waiting and call display features, before prioritizing their text messaging options. However, as wireless companies are beginning to see the market value of advertising to young people, they are in turn identifying and associating themselves with the trends that appeal to the youth demographic and as such are slowly realizing the need to market SMS technology more readily. For example, as with Cingular in the US, all four major wireless carriers have likewise sought to thoroughly advertise their text messaging service by playing the same interactive role on Canadian Idol as Cingular now plays on American Idol.

As these examples illustrate, reality TV offers an ideal means of producing interactive multimedia content and evidently provides wireless services with a seamless means of promoting their SMS products. Although reality TV programming functions in many ways as the primary force behind an array of alternative revenue generating schemes, sporting events, and award shows, even entertainment news programs such as Access Hollywood and MuchMusic are now using text votes as a means to allow the viewer to interact with the

unfolding events of the show (Magder 151). For example, in March 2004, CHUM Television remade MuchMusic's TakeOver show as a fully mobile-integrated show. Viewers are asked to vote for dueling guest hosts by sending text messages that instantly appear on screen along with the rest of the content of the program. As expressed by Roma Khanna, vice-president of CHUM Television, "this is what youth are doing, they've got cell phones in their back pockets and that's how they're communicating..." (Aoki 1). Sprint PCS capitalized in much the same way by asking viewers to vote for their favourite Superbowl commercial and received more than one hundred and sixty-seven thousand votes (Simmons 50). Furthermore, in a three-year deal with service providers Flytxt and Regenerator, the beauty pageant Miss World hosted what it claimed to be the first *global* text vote on its show, held in London in 2002. SMS messages sent from ninety-four countries contributed to half of the total votes, which helped determine the winner (Simmons 50).

Conclusion

The border between the secular world of stardom and the "real" world is closing in; reality TV hails individuals as unique and enviable and this message is in turn reinforced by specific kinds of messages that encourage consumption. The advertising strategies of mobile phone companies in American Idol, is an example of a popular trend in reality TV programming. The conventions of realism associated with the reality TV genre have allowed mobile phone marketers the opportunity to manipulate the viewer into believing in the importance of their role in determining the outcome of the show. In addition, this interactive quality provides the viewer with a sense of closeness to the secular world of stardom that was once a distant dream. Already believing in the importance of celebrity, the young viewer's interest is further

heightened to include beliefs in the transformation of the ordinary into celebrity and in the necessary consumption of the products associated with this makeover.

The main concern for advertisers is not for the quality of the content being offered to the audience, but in the guarantee of having the audience. In addition, advertisers like to know as much as they can about a potential consumer. They would ideally like to know each consumer as a unique individual, right down to the details of cyclical variations in mood (Gandy 329). Drawing from this, it is important to consider the potential for uncompensated social effects that flow from the use of particular sorts of content that attracts the most desirable audience (Smythe 272). In other words, advertisers want profit and if this can be achieved by selling to youth, they will, regardless of the social consequences of the messages it is sending to them. The nature of the content of the show means nothing next to the central purpose of the show, which is to ensure both the ideal audience and their attention (Smythe 272). In this way, the power granted to the viewer to take part in the outcome of the show is not as clear-cut as one may assume. The show's stage is already set by marketers vying for the largest market sales possible. The use of interactive technologies such as SMS technology on reality TV programs has heightened this possibility of surveillance by marketers.

We should, as consumers, consider the dark side of location-based services and wireless technologies in general (Ankeny *kids* 14). SMS has become attractive for broadcasters seeking alternative revenue streams from linear advertising for several reasons. Foremost amongst these reasons is the fact that marketers have found ways to learn even more about their viewers. This relates to Foucault's example of the Panopticon:

The Panopticon applied a form of mental, knowledge-based power through the constant observation of prisoners; each separated from the other and allowed no interaction. The structure would allow guards to continually see inside each cell from their vantage point in a high central tower, unseen themselves. The system of unobserved observation created a kind of knowledge in the mind of the inmate that was in itself a form of power. (Rheingold 189)

This idea can similarly be applied to the surveillance tactics available to mobile phone companies through the consumption of SMS technology. Unlike Orwell's scenarios of a Big Brother-controlled society, consumers are voluntarily trading privacy for convenience (Rheingold 186).

Virtually all technologies available to consumers in order to improve their viewing pleasure have a spy technique embedded within their technology (Miller et al 185). For example, new spy techniques concealed within gadgets have emerged from Silicon Valley that eliminate television advertisements and automatically record television shows that viewers want to see. The catch is that the devices are hooked up to the Internet to allow the service providers, TiVo and ReplayTV, to collect information on every choice, channel change and skipped commercial. From this they can compile a huge database of consumer information and pinpoint the identities and actions of individual television viewers (Miller et al 185). Similarly, MovieFone is a consumer spy operation owned by Time Warner that is disguised as a phone service offering movie times, locations and bookings (Miller et al 185). Both these surveillance operations conceal their spying activities by offering what looks like a free or low cost gift (Miller et al 187).

In applying this argument to American Idol and its relationship with SMS technology, it is important to consider the elements of surveillance involved with this technology and the potential effects they may have on the viewer. Interestingly, this is not exclusive to marketing; parents are similarly attracted to monitoring techniques when it comes to keeping track of their children. For example, in Britain, a wireless tracking device called SOS Response has been introduced as a means to follow one's child. The device is about the size of a mobile phone and is SMS capable. Furthermore, it "emits a signal that enables network operator QuickTrak to triangulate and pinpoint the child's location" (Ankeny *Kids* 14).

The debates concerning the audience as active or passive in their involvement with reality TV and their awareness of these advertising strategies and surveillance techniques is ongoing. As Green asserts, it is a popular belief that mass media is immensely powerful and greatly affects society. What is often referred to as the "hypodermic model", the most radical perspective of this nature, is that mass media has the power to "inject" information and values into passive audiences (Green 36). This ambivalence and fear has long been a part of the history of newly emerging technologies and is at issue once again with the introduction of the vast array of communication technologies that exist today. Many people are wary of digital communication technologies like the computer, Internet, and mobile phone. As with the dystopian expectations of the inception of television decades earlier, the concern is that these devices are powerful and uncontrollable (Spigel 3).

While some see the audience as "cultural dopes", to counter this argument, others recognize the audience as active participants. With the inception of an interactive technology such as SMS technology, the viewer has inadvertently also become a user, and as such must also be

considered as either an active or passive user. Frank argues that it is often taken for granted that,

[as] youth signifiers are appropriated, produced, and even invented by the entertainment industry ... resistance arises from the ways in which these signifiers are consumed by the young, used in ways that are divergent or contradictory to their manufacturers' oppressive intent. (Frank 17)

In other words, in keeping with their own social situation the youth audience not only decodes what they see before them on screen, but at the same time also finds ways to manipulate the interactive technology that they operate, in a manner that exceeds the intended uses (Miller et al 174). Drawing from this, we must consider not just the marketing of SMS technology as a definitive characteristic of what has come to shape text messaging in North America, but we must also explore the user behind the technology. SMS technology does not operate without a user. Although it may have found success through marketing techniques involving reality TV and pop culture, once the product finds itself in the hands of its user, the appropriation of it marks an entirely new sphere, a stage that is also greatly responsible for the inevitable shaping of the technology.

Chapter Four

The Appropriation of SMS Technology by its Users

This new, rapid-fire communication over cellular networks has already taken Europe by storm, producing a subculture of young, brutally efficient language-truncators known collectively as Gen- TXT (Generation Text). As Short Message Service comes to North American cell phone networks, experts say, this form of communication will continue to develop as it merges with existing forms of more established Internet-speak. (Sorensen)

From January to May 2004, Mazda implemented a contest targeted towards students at eighty-five colleges and universities throughout Canada. Posters and billboards that featured in the foreground an image of two Mazda3 cars and in the background a large image of a mobile phone screen were circulated throughout the campuses. Written in text on the screen was “sho dem U did gt somTIN outa Skul :)”. In addition on the reverse side of the ad it read, “gt D msg :-)”, “GradU8 2 a Mazda”.¹ The subtext of the ad read “Grads get up to \$1000 off any new purchase or lease”. Students were encouraged to send, via text messaging, the translation of the message to Mazda. In return, every student that participated received submission into a random draw for a new Mazda3 car.

This marketing campaign clearly distinguishes the target demographic as youth, more specifically “the graduate”. Keeping in mind that this advertising strategy was developed in an effort to sell cars and not mobile phones, the presence in the billboards and posters of the mobile phone screen exhibiting SMS text is significant. In an effort to reach this ideal consumer, marketers of Mazda have latched onto SMS technology and more specifically its definitive text based language.

¹ Translation: Show them you did get something out of school. Get the message. Graduate to a Mazda.

Play with typography is not new to marketing. For example, the popular toy store, *TOYS R US* is spelt with the 'R' written backwards in order to connote the impression of a child's writing (Danet 1). In this way, the store markets itself to its intended demographic. The difference, however, is that Mazda is inevitably advertising another product in order to reach the youth consumer. Mazda is not alone. The use of SMS text to sell products has become more and more popular. One need only be reminded of the continual use of SMS technology to encourage young viewers to watch various reality TV shows, or likewise the promotion of consumerism by such music stores as Sam Goody, who sent digital coupons via SMS technology for a two-dollar discount to anyone who texted their vote for American Idol. The fact is that SMS technology is a trend amongst youth; naturally, as with other trends, its incorporation into advertisements serves to benefit marketers trying to target the youth demographic.

It is not the presence of SMS text in advertisements that is at issue in this chapter, it is the fact that this "text messaging language" so pertinent to marketers, is not produced by them, but is in many ways the product of youth "texters". They are responsible for the growing popularity of this new text language. Users wanting to send a message are restricted for reasons of space and economics. In order to increase response time and decrease billing charges, words are abbreviated, and acronyms and symbols are used. Drawing from the influences of other text-based vernaculars, like that used in telegraphy, comic art, and more particularly, hacker culture, youth users have created a new text based language, a code of sorts. According to Oksman and Turtiainen, "forms of mobile communication and new media as forms of communication tend to reduce the traditional opposition between producer and recipient... the role of consumer and content producer cross paths and, in

some cases, overlap” (328). In this case, the design strategies and advertising strategies of producers of SMS technology have crossed paths with the user’s own construction of SMS text. This serves as a prime example of the third sphere of the social shaping of technology, what Mackay and Gillespie refer to as the appropriation of the technology by its users (Mackay and Gillespie).

According to Mackay and Gillespie the design of a technology and its users are interconnected (700). For example, Singer Sewing Company first introduced the sewing machine as a technology intended for the exclusive use by industrial manufacturers. Although at first this was unsuccessful, once the machine proved useful for domestic purposes its popularity was redefined (Mackay and Gillespie 695). As Mackay and Gillespie argue, “[p]eople are not merely malleable subjects who submit to the dictates of a technology; in their consumption they are not the passive dupes suggested by crude theorists of ideology, but active, creative and expressive, albeit socially situated- subjects” (698). In this way, the deployment of the sewing machine was not simply defined by its initial design nor by the way that it was marketed—what comprises the first and second spheres of the social shaping of a technology—but was equally determined by its users. From this, it follows that the social appropriation of text messaging is a crucial force in the social shaping of the technology and must be considered (Mackay and Gillespie 701).

Although SMS technology bears many unique features, such as the manner in which messages are sent, or the fact that the technology is encompassed within the mobile phone, it is the very feature which text messaging is named for that most defines this technology; that is, text. The basic function of SMS technology is to send *text*-based messages. Such

messages are the creation of the user. This chapter will explore the appropriation of SMS technology by its users; in particular it will look at SMS text as a creation of the youth user. It will first explore concepts of text and more specifically the qualities of digital text. It will consider not only the influence that written text has had on the development of SMS text based language, but also the power of oral tradition. Finally, this new language has come from somewhere. This chapter will further argue that following the influences of the telegraph, comic art, and most importantly, computer hacker culture, the development of the language of text messaging is in many ways the creation of SMS youth users, thus offering an ideal example of the third sphere of the social shaping of text messaging.

Qualities of Digital Text– Email, Instant Messaging, and SMS Text

Gutenberg's invention of the printing press in the fifteenth century introduced two distinctly different types of documents. Foremost amongst these two formats was the Bible. It was characteristically compiled of perfectly uninterrupted blocks of text, without any headings or any distinctions beyond the occasional initial letter (Danet 6). According to Johanna Drucker "these bibles were the archetype of the 'unmarked text', the text in which the words on the page 'appear to speak for themselves'" (qtd. in Danet 6). By contrast, other more pleasurable or indulgent writings that Gutenberg printed were much less "transparent". These texts, in comparison, displayed different sizes of type that were used to "hierarchize information and to create an order in the text so that different parts of it appeared to 'speak' differently" (Danet 6). Of these two forms of type, unmarked text was used most frequently for purposes of legibility. In fact, to this day it remains the most dominant model for written works. However, although perhaps less popular, marked text still continues to be used. It is

most often employed in visual poetry and advertising (Danet 6), as with the aforementioned example of the manipulation of the letter 'R' in *TOYS R US*.

With the phenomenal growth of the Internet, electronic mail, and now more recently text messaging, text-based digital communication is flourishing. Along with the growth of digital communication devices, the use of marked text has likewise increased exorbitantly. This is because such devices are used in large part to converse in text as one might do verbally over the phone or in a face-to-face encounter (Danet 11). Text is therefore marked in order to convey an interactive, conversational tone.

Email correspondence is very similar to text messaging. In particular, instant messaging, a popular communicative device available online to anyone with access to the Internet, is strikingly comparable to text messaging. One of the main differences between instant messaging and SMS technology is the manner in which one sends a message. While instant messaging is an online device that is employed from a computer using a keyboard, text messaging is a mobile technology encompassed within a cellular phone. In this case, messages are sent via the cellular phone network using the phones keypad to type the message.

Aside from these differences, both devices are characteristically used for "chatting".

Therefore, in order to say in writing what we are used to saying in speech both systems rely on the manipulation of text, or "marked" text. Just as some may use facial expressions or body gestures to colour their conversations, words, letters, and other typographic symbols are treated as objects that can similarly be played with (Danet 6). From this, it follows that

the text-based language used to email and instant message is almost identical to that used to text message. For this reason, as well as the fact that little scholarly work exists on SMS text, much of the argument made in this chapter will draw from works on emailing and instant messaging.

Emailing and Instant Messaging

Email was first introduced by the United States Department of Defense for defense purposes and was therefore initially perceived as a cold and anonymous medium, lacking in “social presence” (Danet 5). Not only was this because of its intended utilitarian purpose, but also because the technology was in large part not seen as “conversation friendly”. The absence of non-verbal cues such as facial expressions marked the technology as assumingly less accessible to the public (Danet 5). However, as with the Singer Sewing machine, eventually email found success outside of its originally proposed purpose. It emerged into the work force as a communicative alternative to the telephone and hand-written correspondence. With its diffusion into office space, the perceived qualities of email were slowly re-defined by its users and with it, its popularity as a communicative alternative grew considerably (Danet 5).

Although still a form of written communication, email is no longer considered by most as a cold and anonymous medium. With its mass appropriation, emailing has become a much more interactive and improvisational tool used by many to correspond with co-workers, friends, family, etc. The conventions of emailing involve a mix of written, verbal, and digital features and as such defines itself as somewhere between speech and written dialogue (Danet 11). These qualities characteristic of digital communication deeply challenge traditional

norms about language forms of writing (Danet 51). In combination, the written, verbal, and digital features of emailing have in essence led to the development of a new language complete with specific terms and grammatical rules (Danet 11).

For example, users have forgone the traditional rules of letter writing. Instead of addressing their emails with the more formal “dear”, in place users have turned to using a telephone-like “hello” or “hi” (Danet 55). In fact, sometimes the message is not addressed at all. In this way the written text is reminiscent of a verbal conversation. Furthermore, instead of the traditional letter format messages are often arranged in such a way that the text continues on the same line as the opening address (Danet 53). So, for example whereas a traditional letter might read,

Dear Kate,

I miss you very much and hope to see you again soon.

An email message would follow a different format. Not only would the initial address be less formal, the language used throughout the text would bear qualities much more reminiscent of a verbal conversation, like, for instance, the use of slang words and abbreviations (Danet 58). Furthermore, because of the informal format of emailing, one is also less inclined to worry about spelling or grammatical errors. In fact, writing in lower case for purposes of efficiency is very common. Added to this, the use of capitalization for heightened intonation brings the writing format of an email that much closer to speech (Danet 55). In comparison then, an email message might read,

hi katel i miss u SOOO much, hope i'll c u soon.

With the later development of instant messaging, the conventions of email writing were quickly adopted into the practices of instant messaging. In turn, such standards are now a definitive quality of text messaging. SMS messages are also composed of oral, written, and digital features that are strikingly similar, if not identical, to those features so characteristic of email messages and instant messages. Mackenzie and Wajcman argue that invention is often a matter of seeing ways in which an existing device can be improved. They assert that existing technology is an important pre-condition of new technology (Mackenzie and Wajcman 10). This argument can be applied to the development of text-based language. For example, because SMS users correspond via their mobile phone and not through a computer, their messages are inevitably shorter and rely even more on this new text based language. As a result, the development of text messaging has furthered the growth of this digital language; more specifically the SMS user, who is characteristically young, has enhanced these conventions.

The Impact of SMS Technology on Social Norms

According to James Carey, "language is a reflection of society's norms and values and will yield a clue as to how deeply embedded a new technology has become" (Carey 124).

Following from this, the apparent development of this new language demonstrates the influence that digital communication devices, in particular SMS technology, have had on North American youth culture and by extension the society at large. Surveying one thousand English-speaking Canadians between the ages of sixteen and fifty-four, Neil Randall found that the acronym LOL (laughing out loud) was recognized by 86% of respondents under the

age of twenty, and only 28% of those thirty-five or older (Bedell 1). He also found that 55% of users have created their own terms or abbreviations (Bedell 1). Considering that most users of text messaging are young, these statistics clearly demonstrate that SMS text has flourished as a result of this demographic. In fact, digital text has grown so strong that various reference guides of SMS abbreviations have been published. For example, one of the top selling books in Britain in 2000 was an English-to-text dictionary entitled Wan2Talk? Ltl Bk of Txt Msgs by Gabrielle Mander. Even the latest version of the Condensed Oxford English Dictionary includes a lexicon of abbreviations for saving time and space when text messaging.² Furthermore, a number of SMS text websites are now available for SMS users to access glossaries of terms and emoticons. One website called TransL8it.com will convert plain sentences into SMS text. As Dan Wilton, president of TransL8it.com argues, this service is a benefit to adults unfamiliar with this text-based language as, with a little practice they can familiarize themselves with some useful text sentences and send their children messages like, "wnt 2 go 4 dinR?"³ (Bedell 1). The impact of SMS technology in North America is perhaps best expressed by Randall, who suggests that, "if everybody starts using, 'How RU 2day?', ... it naturally and gradually [will become] part of the language" (Sorensen).

Similarly, the development of SMS text by youth and its impact on society is also evident when considering recent concerns voiced by various high school English teachers both in North America as well as in Europe and Asia. As journalist Chris Sorensen argues, growing

² Dictionaries, for example, advise users to leave no gaps between words, in order to save space. They suggest using capital letter at the beginning of each new word, as in 'WerVUBin?' (where have you been?). When a capital letter appears at the end of a word, it means a long vowel sound (ex. 'BaB' for 'baby'), and when a capital letter appears in the middle of a word it means a double letter (ex. 'BuBle' for 'bubble'). (Ellison A14) Such books also explain the number of "emoticons" that have been developed; like for example, :) (for happy) and :-Q (for confused). ("HOT..." 1)

³ Translation: Want to go for dinner?

up with instant messaging and Internet chat rooms is greatly influencing the way students write (Sorensen). In fact, a poll taken by Pollara found "that 80% of youths between the ages of sixteen and nineteen use some variation of instant messaging on their home computers. By comparison, only 31% of people over the age of thirty five use the function" (Sorensen).

Drawing from the same survey it was also found that 44% of those between the ages of sixteen to nineteen regularly use abbreviations like G2G (got to go) or TTYL (Talk to you later) in their messages (Sorensen). According to one teacher, a student handed in an essay that read, "My smmr hols wr CWOT. B4 we used 2 go2 NY 2C my bro, his GF & thr 3 :- kds FTF. ILNY, it's gr8 plc", translated into plain sentences this was meant to have read, "My summer holidays were a complete waste of time. Before, we used to go to New York to see my brother, his girlfriend and their three screaming kids face to face. I love New York. It's a great place ("SMS"). As argued by a teacher interviewed by Sorensen, the concern is that because of the appropriation of this technology by youth "[students] have no distinction between (Internet) chatting and formal communication" (Sorensen). In addition, students have also grown accustomed to text messaging during class, yet another concern for teachers (Ito and Daisuke 13).

Considering the impact that SMS text has had on North American youth culture, such an exploration cannot be complete without proper consideration of the influences behind this new language. Furthermore, although perhaps not directly created by the user, drawing from past influences SMS text is nonetheless a product of youth users. An exploration of each of the oral, written, and digital features will provide insight into the origins of this SMS

language and by extension will offer a better understanding of how the user has appropriated the technology.

SMS Text -- Influences of the Telegraph

Like oral dialogue, text messages are often composed of contractions and slang as well as colloquial expressions like 'ok' or even 'k' (Danet 57). Furthermore, text messages also often have writing-specific characteristics such as the use of abbreviations, non-standard spellings, and forms of shorthand or speedwriting, as in "u" for "you", "plz" for "please", cuz' for 'because', and 'L8' for 'late'. Both of these qualities are strikingly similar to the conventions of telegraphy and thus suggest an obvious influence (Loftus B13D).

The diffusion of SMS technology into society has also followed suit with the telegraph in that it has led to the development as well as the disappearance of forms of speech. Postman argues that with new technologies come new words and phrases having to do with the technologies. Take for example words like "telegram" or "telegraph". In his words, "new things require new words, but new things also modify old words, words that have deep-rooted meanings. For example the telegraph and the penny press changed what we once meant by 'information' later changed once again by the computer" (Postman 8). This point relates to SMS technology. Not only has our understanding of information changed, but so too has our conception of language. Not only do we now have in our vernacular words like "text message" and "texting", but we also have sentences like "c u l8tr" (see you later).

Furthermore, like the telegraph, a typical text message is not only text based and delivered instantaneously, it is also fairly short (approximately one hundred and sixty characters in

length) as words are expensive and take up a limited amount of space (Garfinkel 29-30). A result of shortened messages, in the case of both technologies, is the development of high-speed vocabulary, complete with a mix of all available icons, snappy acronyms and phonetic shorthand (Underhill 58). The parallel between this new form of language and the text employed in telegrams is so strong that a few expressions from World War II telegrams, including SWALK (sealed with a loving kiss) and TTFN (ta ta for now) are to this day often used in text messages (Ellison A14).

SMS Text -- Comic Art

While the bias of print culture has been to suppress stylization in the name of transparency of meaning, the features of SMS text invite us once again, as in oral culture, to pay attention to the form of messages (Danet 146). One strategy, for example, is to write out sequences of letters to convey sounds, as in “grrrr”, “oof”, or “bam!” This practice is commonly used in SMS correspondence and stems from the influence of comic art (Danet 105). As Brenda Danet asserts, for instance, “the use of all capital letters such as when a writer types ‘UGGGHHHHHHH!!!’ reinvents the conventions from the comics for interactional purpose” (Danet 18). The use of such techniques is intended to heighten the user’s ability to experience the words as if they were spoken in conversation (Danet 17). Furthermore, other conventions of comic art involved the use of symbols, for example #@\$%&! would express an obscenity. Digital features are similarly used in SMS messages to express emotions. For example, smiley icons exemplify humour or happiness. Often referred to as “emoticons”, icons such as :) or :(express happiness and sadness respectively (Danet 58). Through the simple manipulation of words and typographic symbols that are chosen according to their graphic shapes, SMS text “acts out” the message (Danet 101), thus in many ways supplying

the recipient non-verbal aspects of the conversation uncommon to written correspondence but typical of face-to-face interaction (Danet 18).

The use of abbreviated words as well as writing out sequences of letters to connote sound or using emoticons to indicate emotion may stem from conventions of telegraphy and comic art, but the standards of SMS text are not a direct product of these influences. Hacker culture has long played an important part in colouring the world of online communication and as such was in many ways the first to embrace these practices collectively.

The Influence of Hacker Culture

Borrowing from Douglas Thomas, hackers are,

a culture, a group of computer enthusiasts who operate in a space and manner that can be rightly defined by a sense of boundless curiosity and a desire to know how things work, but with the understanding that such knowledge is further defined by a broader cultural notion: secrecy. (3)

Hacker culture first flourished in the 1960s in the university computer labs of MIT, Cornell, and Harvard. While these early hackers were computer geniuses who would eventually create the personal computer, the hackers of today are young people who have grown up with computers and are already familiar with the language of computers (Thomas xi). Their concern is with PIN numbers and passwords. They are rebellious against industries and committed to unraveling anything that will unveil the secrets that preserve the identities of the institutions they aim to “hack”, all the while maintaining their own level of secrecy (Thomas xi).

In the hacker world of the 1980s, up to the present, while hackers aim to uncover corporate secrets and keep their own identities private, language has adapted to reflect the possibility of secrecy. Their computer savvy allows for play with words and symbols as well as punning and other clever, irreverent uses of language, as, for example, the use of the term “snail mail” (Danet 27). With this, a code of sorts has developed; a language that only those who are part of the hacker subculture can necessarily understand. In addition, the establishment of this “hacker speak” allows for a greater distance between the established language of North American culture and the form of language produced by hackers. This further reinforces the sense of being part of a unique culture where knowledge of the language equals membership into the group (Thomas 40). As with the older generation of hackers, those who are a part of this subculture see it as a way of life and an integral means of defining themselves (Thomas 32).

Appropriation of SMS Text by Youth Culture

Young people create their identities through a variety of factors—clothing, accessories, taste in music, technological gadgets, etc. Foremost amongst these factors is language. Slang words have long been a part of youth trends. Like the “dude” and “awesome” of the early 1990s, with the influx of communication technology into youth culture, SMS text slang, is used as a part of personal style concept. Although, the format of text messaging was originally intended for the communication needs of business people, it has since grown into a form of emotional communication that ties various youth-based social networks together (Oksman and Turtiainen 326).

In fact, as Danet argues, “younger people have had a huge influence on the style of writing... they have had the most influence on the development of the Internet. They have fashioned the style of writing according to their experience” (Danet 92). This same argument can be applied to the development of SMS text. Youth have appropriated some of the practices first established by hacker culture and have carried them over, first into conventions of emailing and instant messaging, which are now a defining quality of SMS messages. Through the use of a particular set of abbreviations, acronyms, symbols, and terms, youths design their own personal text messages that are experienced as a form of communication more intimate than a phone call, since its content cannot be overheard (Oksman and Turtiainen 326).

Writing in reference to the habits of youth “texter’s” in Finland, Oksman and Turtiainen assert that, “young people have acted as developer and pioneers of text message culture” (326). By employing this coded text-based language, ordinary youth, similar to hackers, inevitably secure membership into an exclusive culture of “texters” (Kasesniemi and Rautiainen 183). Unlike hacker culture however, according to a study by Oksman and Turtiainen, gender discrimination is less prominent within text culture. Although, initially girls expressed more reservations about SMS technology and were more uncomfortable with the appearance of the mobile phone, ultimately the majority of youth position themselves as computer savvy and unafraid of technological gadgets (Oksman and Turtiainen 333). Thus while hacker culture is characteristically masculine both genders have, for the most part, adopted the mobile phone equally (Oksman and Turtiainen 332). Although boys tend to text

brief messages that are to the point and unemotional, whereas girls' messages tend to be more verbose and full of emotional sharing, membership into this subculture of 'texters' is equally accessible to both girls and boys. According to Statistics Finland in 2000, 77% of youth aged fifteen to nineteen had a mobile phone irrespective of their gender (Oksman and Turtiainen 332). This further solidifies the argument that SMS technology is partially defined according to the ages of its consumers. From this, it follows that for the most part, although present, gender issues are less apparent. In other words SMS technology is a device that is heavily associated to youth culture.

Contra the relationship between telegraphy and comic-art-based language and the language style common to "texters", the specific features of hacker-based coding systems are not particularly similar to the specific characteristics of SMS text language styles. Rather, the comparison between these two systems holds at the level of motivation. Both groups have developed specified meaning-making systems that ensure secrecy and signify membership.

The notion of membership can be further applied to Richard Bauman's formulation of the nature of oral performance. As outlined by Danet, Bauman argues that digital communication involves an important element of performance. One of the overriding factors involved in the act of communicating online or via SMS technology is to show the other members of the group, be it the "hacker group" or "texter group", what you can do with the keyboard or keypad:

In this sense of performance, the act of communication is put on display, objectified, lifted out to a degree from its contextual surroundings, and opened up to scrutiny by an audience. Performance thus calls forth special

attention to and heightened awareness of the act of communication and gives license to the audience to regard it and the performer with special intensity. Performance makes one communicatively accountable; it assigns to an audience the responsibility of evaluating the relative skill and effectiveness of the performer's accomplishment. (qtd. in Danet 44)

Thus, the user must understand this form of communication, much like one is required to know their lines for a stage performance. In the case of SMS text, it is an improvisational script that includes a combination of verbal, written, and digital features (Danet 12). In turn, with the knowledge of a new language, the youth user not only gains membership but, in essence a greater sense of power and control (Danet 18). This corresponds with Richard Lanham's argument. Also highlighted by Danet, Lanham asserts that digital communication bears qualities of speed, flexibility, interactivity, and richness of possibilities that allows the user to be a kind of director. In other words SMS text allows users to be empowered as it gives them a feeling of agency (Danet 25).

Furthermore, the written text message is seen to be a personalized or crafted gift. It bears the "autograph" of the sender in that it is his or her creation, once again reinforcing this sense of independence and control over the technology. As Taylor and Harper write, "the object that is made by hand is not quite like any other object. It is unique, and carries the inescapable marks of the person who made it... The infusion of the person into the product" (8). Adding to this, the value attributed to the message is determined by the message itself, in other words, what it is and how it is formed. For example, according to youth "texters", the text message is seen to have greater or lesser value if written in a particular way. According to interviews with youth users, conducted in an ethnographic work by Taylor and Harper, there is an acceptable way to doing text messaging. Although it

falls outside the normal rules of written language, there are proper ways to construct messages; appropriate abbreviations, symbols, and in some cases invented terms. A message of this nature is a sign of true meaning and value (Taylor and Harper 21). Drawing from the influences of hacker culture, youth “texters” have developed their own high-speed vocabulary- a mix of available icons, acronyms and phonetic shorthand resulting in a new form of text-based language, which in many ways redefines methods of communication.

Conclusion

From this exploration of SMS text it is evident that the user plays an integral part in defining text messaging. Without the message itself, SMS technology would serve no great purpose, and as messages are the creation of the user, it follows that the user’s appropriation of the technology plays a necessary part in the social shaping of the technology. Drawing from this obvious assertion, the development and flourishing of SMS text further reinforces the importance of this third sphere. The user’s appropriation of SMS technology and the manipulation of the very thing that defines it not only indicates the important role played by the user, but also further serves to counter any technologically determinist assumptions, as the technology itself could not possibly be “shaped” without the creation of the text message.

Although the original purpose of the manipulation of text by SMS users was to improve on the speed and cost of message sending, it has nonetheless also proven to serve a deeper and more political role. This is not unique to SMS technology. In fact, history dictates many instances when groups manipulated text in order to counter power structures. The early

twentieth century avant-garde movements of Dadaism and Futurism, for instance, experimented with typography. These art movements used type as a means through which to counter the ideal of what art should be (Spencer). Now, decades later, although perhaps less intentionally, SMS youth users have proven to follow in their footsteps by the mere creation of their own language undetermined by the elite. Words have become so changed that it is practically incomprehensible to the non-SMS user, perceived by most youth to be the adult or authoritarian figure. Through the manipulation of SMS technology, youth have found a new way to communicate in secrecy and in essence a new way to gain control.

Drawing from this, it follows that one should look both to the past and to the future and question the possibilities that the diffusion of this technology may offer North American society. Is it possible for example, for users of text messaging to attain a greater “voice” within society? Although the development of SMS in North America first found its success through marketing strategies, is it feasible to imagine that through an alternate, or perhaps a more assertive means of appropriation, SMS technology could provide a venue for meaningful civic participation? Does this communication technology actually offer the potential for citizens to gain a “voice”, or is this possibility really just a myth constructed by marketers? Is this “voice” simply an advertising technique to encourage consumption? This issue of power and control has long been debated, but with the influx of an array of personally operated communication technologies it becomes more and more relevant and worthy of consideration. The following chapter will explore these questions. In so doing, it will provide some insight into the future of wireless communication technology.

Chapter Five

Conclusion

To a man with a pencil, everything looks like a list. To a man with a camera everything looks like an image. To a man with a computer, everything looks like data. And to a man with a grade sheet, everything looks like a number. But such prejudices are not always apparent at the start of a technology's journey, which is why we can safely conspire to be a winner in technological change. (Postman 14)

According to Mackay and Gillespie, "technologies are encoded with preferred forms of use, with or without intentionality" (692). Ideology is thus an inevitable part of each of the three spheres involved in defining a technology's social shaping: inception, development, and design; marketing; and appropriation by its user. Ideology is defined as a "set of assumptions of which we are barely conscious but which nonetheless directs our efforts to give shape and coherence to the world" (Postman 9). Drawing from this, technologies are not only prescribed with preferred uses, the possibility of apposing perspectives is likewise an inevitable part of any technology.

This last chapter will question the ideological bias of the powerful elite that is embedded in SMS technology. Following from this, it will also explore the potential for unforeseen uses of the technology. In this way, this chapter will go on to explore the unique part played by users of text messaging and the potential for a counter belief reflected by their empowerment over the technology. This will be particularly exemplified by certain instances around the world where SMS technology has been used for social mobilization. My intention here is not to define text messaging as strictly empowering to either the powerful elite or to the user, but rather to present both perspectives as they relate to SMS technology. I do this

in the hope of stimulating greater awareness and discussion of the role played by the many digital interactive communication technologies that are increasingly becoming a part of today's North American society.

Embedded Ideology

As I have argued, with its initial diffusion into society, SMS technology was not readily embraced by North American society. Not only was the invention and design of the technology for the most part propelled by Asian and European cultural distinctions, the successful entry of text messaging into the US was largely contingent on market strategy and not user demand. Through the unique fusion of big telecommunication companies and powerful television networks, many young consumers have finally been convinced of the usefulness of the interactive qualities of SMS technology. For example, in Canada, in the year 2002 one hundred and seventy-four million text messages were sent. By 2003, that number increased to three hundred and fifty messages, an average of more than eight million text messages sent per day ("Text"). This statistic indicates a substantial increase in the use of text messaging.

According to Postman, the benefits and deficits of a new technology are not distributed equally; there are so-called "winners" and "losers" (Postman 9). "Winners" are those who have control over the workings of a particular technology and thus accumulate power. In turn, those who do not have access to the specialized knowledge made available by the technology are subordinate. In a capitalist society like North America, those in control are more often than not those who design and market the technology in question, while in turn those who are deemed the "losers" are likely the naïve consumer who the technology is

marketed towards. Thus, with respect to the diffusion of SMS technology in the US, many would argue that the so-called “winners” of text messaging are the designers and marketers.

Drawing from this argument the successful diffusion of SMS technology in North America, corresponds to what Postman describes as the “winners” dazzling the “losers” with the wondrous feats of, in this case, text messaging (Postman 11). Initially, the features offered by SMS technology only had marginal relevance to the quality of the North American “loser’s” life, but as they proved nonetheless impressive, text messaging became a “want”. Eventually the “losers” have succumbed, in part because they have been convinced of the promises made by advertisers of this new technology and in part because, in a democratic culture such as North America, with a high receptivity to new technologies, people are much more likely to be enthusiastic about new and improved “gadgets” (Postman 11).

The marketing of SMS technology was not without bias. Ideological bias is a part of every technology, be it the inventor’s or the advertiser’s predisposition to “construct the world as one thing rather than another, to value one thing over another, or to amplify one sense of skill or attitude more loudly than another” (Postman 13). As Mackay and Gillespie argue, technologies are encoded with preferred forms of use, whether intentional or unintentional, such uses are more often than not determined by the producer or designer of the technology. (Mackay and Gillespie 692) Similarly, Nelly Oudshoorn and Trevor Pinch assert that technologies contain scripts (9). They explain that in the design and development phase of a technology, producers anticipate the interest, skills, motives, and behaviour of the future user and as a result, these representations of users become materialized into the design of the new technology (Oudshoorn and Pinch 9). In other words, social circumstances play an

inevitable part in determining the intended use of a technology. For example, Gutenberg, the father of printing, was also a devout Catholic. Through the printing press it was Gutenberg's intention to spread the word of God (Postman 15).

Although perhaps not directly related, text messaging was likewise branded with an intended use. It first emerged as a "just in case" technology, simply designed for the purpose of absorbing extra network costs. Eventually, as SMS technology proved to be useful to mobile phone users in Asia and Europe, the design was improved and in turn its marketing was enhanced. At this stage, although not determined as a necessarily valuable technology, the mere fact that it was only available through a cellular phone network indicates an ideological bias. Access to SMS technology is dependent on the user's ability to both afford the cost of a mobile phone and understand the workings of the technology, thus indicating prejudices towards class and age. Interesting, Frank discusses the marketing of "cool" and illustrates that youth stands in as a desirable signifier for people of all ages. The increase in marketing strategies aimed at young people suggests that in addition to the increased spending power of youth the selling of youth itself as a commodity has achieved its own ideological power (Frank 119).

This bias is further enhanced when we consider the marketing strategies that have been implemented by various telecommunication companies. SMS technology has not been advertised extensively via traditional media such as magazines and TV commercials. As the technology was not readily embraced by North American youth upon its initial development, perhaps advertisers turned to alternate means of promotion by highlighting the interactive

features of text messaging. As such, SMS technology has largely been advertised via television, for the most part within the text of reality TV shows, such as American Idol.

There do exist, however, other examples not related to reality TV promotion. For instance, on an episode of the popular TV program, The O.C., a soap opera about the trials and tribulations of teenage life in Orange County California, the young stars of the program go to a hip and trendy bar where they meet Paris Hilton. Awestruck by their encounter, they asked to have their picture taken using their mobile camera phone. In addition, throughout the episode, the characters communicate with each other via text messaging. This episode blatantly advertises mobile telephony, more specifically the camera phone and SMS technology. In fact, at one point during the program, one of the leading actresses even promotes the phone by suggesting that it is "*the* accessory of the twenty-first century", thus implying to a number of young pop cultural enthusiasts the necessity of owning the mobile phone.

Other media have similarly been used to advertise mobile technology. Take for example the New York Times newspaper. Every Sunday there are full-page ads for Verizon Wireless. These ads are promoted by actress Catherine Zeta-Jones, well known particularly amongst those people who can afford the leisure time to indulge in watching movies. The difference with these ads, however, is that, for the most part, they promote wireless services as a whole. This differs from the practice of incorporating text messaging on reality based TV shows as this advertising strategy does not specifically market SMS technology.

Rather than advertising extensively through media that are much more at large and accessible to a greater number of potential consumers, advertisers of mobile technology have targeted a specific demographic, one that can afford cable television, one that reads the New York Times, and in turn one who has the disposable income to purchase a mobile phone. This is a group of consumers that fit a certain standard of living and as such exhibit some of the prejudices embedded within SMS technology.

Unforeseen Consequences

Despite such biases, often there exist unforeseen consequences that stand in the way of seeing clearly the direction in which a new technology will take. To return to the example of the printing press for instance, the mass-production of the Bible not only spread the word of God but inevitably led each Christian to become her own theologian (Postman 15).

Similarly, SMS technology has also led a “double-life” of sorts, one which, according to Mackay and Gillespie, “conformed not only to the intentions of designers and interests of power, but another that contradicts them—proceeding behind the back of their architects to yield unintended consequences and unanticipated possibilities” (Mackay and Gillespie 698). For example, inventors and marketers seek to encourage consumption of the technology and likewise hope to provide an alternative medium through which advertisers of other products can improve sales; as such SMS technology reinforces capitalist initiatives. A result of this is that now more than ever SMS users have become easy targets for the powerful elite in society, be they advertisers, politicians, etc. (Postman 11). In particular, through the surveillance techniques of SMS, the user’s access to privacy has been significantly reduced and the so-called “winners” have managed to strengthen their authority.

However, this accessibility granted to the elite is not restricted to them. Although perhaps less evident, the technology has also provided users, those who may be perceived as the “losers”, with unforeseen benefits. SMS users are not simply conforming to consumer trends, but in turn text messaging allows them to gain a greater sense of involvement, outside of market predictions. Through the networking possibilities of the technology users can organize mass meetings of sorts, thus granting an improved access to public forums and in turn a greater sense of empowerment. It is apparent that Postman’s suggestion of “winners” and “losers” is restricted in that there is no room for negotiation between what defines “winners” and losers”. For example, Postman’s argument omits the possibility for an SMS user, whom he might arguably describe as the “loser”, to gain even a modicum of power.

Some evidence proves, however, that this opportunity does exist. For example, since text messaging functions through a cellular phone, this communication technology is mobile. Coupled with this mobility, professional operators do not control the technology; instead communication is managed by each individual sender and receiver. This relates to the issue of technological literacy. Similar to Postman’s argument, according to Carolyn Marvin, “[i]n the late 19th century... electricians placed scientific textuality and certified interpreters of scientific texts at the center of their claim to public authority” (Marvin 12). They became the “winners” through their claims of expertise. In turn, they attempted to persuade those less technically lettered, what Postman would refer to as the “losers”, of the validity of that strategy (Marvin 12). In the past, the vast majority of society did not have to technically manage the communication technology in order to send a message; that was the job of

professionally trained technicians and operators. As a result, as Marvin claims, a common frustration of the technologically unempowered was a loss of personal control. (Marvin 22) In comparison, for the most part users of SMS are technologically literate. They control their own personal communication service and thus assume both the part of the operator and the receiver; the power and control is in their hands and, as such, their role as “winners” is inevitably more accessible.

In addition, not only are users afforded greater control through the operation of their own personal communication device, the digital environment provided by text messaging also gives the user a sense of psychological immersion into a world outside of the “real-world”. We are surrounded by a completely other reality different from our familiar world (Danet 26). As a result, “texters” are able to do things textually that they might not have done in public (Danet 140). As Danet argues, “just as we feel lighter when we are immersed in water so too are we freed in cyberspace” (Danet 26). SMS technology allows users to wear “masks”—textual ones—that transforms their identities and gives them license to be and do what they want regardless of power structures and social decorum (Danet 141). Scholars argue that such newfound ground for communication not only enables people to correspond more liberally but also across great distances using interconnected networks (Standage 206).

This sense of empowerment has long been a part of hacker practices. (Danet 27) For example, computers and the Internet are intrinsic to hacker practices. Similarly, music is important to this culture. However, as Thomas argues, there exists a distinction between these two modes of expression which rests on materiality. He writes:

[f]or music to be expressed, it needs a material venue. Whether that venue be a public performance, a nightclub, a recording studio, or a local gathering, that material element represents a point of intersection between subculture and parent culture. That point of intersection is one that allows parent culture to prohibit expression (for example, arresting a performer for indecent lyrics) or to recontextualize that expression itself... (Thomas 143)

Alternatively, online communication does not depend on a material venue, but rather the material element is replaced by cyberspace, a virtual environment that does not involve a point of intersection between parent culture and subculture. This is not unique to hacker culture but can also be applied to youth culture in general who have turned to the Internet, as well as other modes of digital communication like SMS technology, as a preferred medium of expression (Thomas 141). Not only do these methods of communication offer access to information of typical value to youth culture, such as music, fashion, and pop culture, they also express issues representative of the culture, namely, rebellion and resistance (Thomas 141). As Thomas argues, such qualities illustrate a “particular aspect of online culture that is more properly called a subculture, a culture that is both inherently tied to a larger parental culture, but also resistant to it” (Thomas 142). Identification with subculture is about resistance to authority and in particular resistance to methods, styles, and mannerisms of the larger, parental culture. (Thomas 142) Although SMS youth users are not necessarily intentionally resistant towards authority, the appropriation of text messaging by youth and their specific use of SMS text indicates an element of challenge towards established language forms.

In other words, if we define ideology as “a set of assumptions of which we are barely conscious but which nonetheless directs our efforts to give shape and coherence to the world...” (Postman 124) than, as Postman suggests, “our most powerful ideological

instrument is the technology of language itself. Language is pure ideology...” (Postman 124).

In the words of Postman:

[t]o put it simply, like any important piece of machinery—television or the computer, for example—language has an ideological agenda that is apt to be hidden from view. ... Unlike television or the computer, language appears to be not an extension of our powers but simply a natural expression of who and what we are. This is the great secret of language: Because it comes from inside us, we believe it to be a direct, unedited, unbiased, apolitical expression of how the world really is. A machine, on the other hand, is outside of us clearly created by us, modifiable by us, even discardable by us; it is easier to see how a machine re-creates the world in its own image. But in many respects, a sentence functions very much like a machine. (Postman 125)

In consideration of the fundamental distinctions that make SMS text a unique and alternative language from the established norm, it follows that with this opposing language form is attached an opposing or counter ideological bias, one that already proves resistant to authority. Thus, while those behind the invention and marketing of SMS technology are granted perhaps undeserved authority and prestige by those who have no such competence and as such their ideological bias rules (Postman 124), there still exists plenty of room for negotiation.

There have already been many instances where SMS technology has been used as a way to mobilize social groups, inevitably encouraging the possibility of network communication and revolt against authority. Gerald Holzman writes: “[i]n times of war or otherwise, when important events take place that might affect the whole country, many thousands of people depend on the speedy transmission of information in order to take the appropriate measures” (Standage 120). The downfall of Philippine President Joseph Estrada in Manila, in January 2001, is no doubt by now, a well known example that demonstrates the power bestowed on people when they are well “armed”, in this case, with mobile phones that

deliver short, simple text messages. This, however, is not an isolated case. According to Rheingold, on November 30, 1999, demonstrators protested the meeting of the World Trade Organization using cell phones and text messaging amongst other digital technology. The use of these devices helped in the co-ordination of some of the actions which led to the winning of the "Battle of Seattle" (Rheingold 161). Similarly in Britain in September 2000, outraged citizens protested the hike in gas prices through the coordination of blockades preventing fuel trucks from access to service stations. This was accomplished, using among other things, SMS technology (Rheingold 158).

This form of social protest, referred to as, netwar (Rheingold 162), is an emerging mode of conflict. In general, the protagonists are social activists such as those who protested in Manila, Seattle, and Britain; however terrorists and criminal organizations have also used networked forms of organization and technology of the information age (Rheingold 162). One need only be reminded of the September 11, 2001 terrorist attacks on America when two planes crashed into the World Trade Center killing thousands of people. It has been speculated that terrorists may have used wireless technology to coordinate the attacks (Romero C10). As Rheingold asserts, both civil and uncivil societies are increasingly engaging in new waves of dissent, these networks are proving very powerful organizations. They operate in small, dispersed units that can ultimately be deployed anywhere and at anytime (Rheingold 162).

Such methods of communication hold potential for enhancing democratic forms of decision-making and collective actions. In the words of Rheingold, "if we are connected and communicating in the right way, populations of humans can exhibit an even greater kind of

'collective intelligence' that ultimately has the power to undermine authority" (Rheingold 179). Although at an entirely different level, this possibility has been exemplified by the substantial interactivity of the American Idol audience. Despite the apparent ideological differences between using this technology in the context of celebrity and pop culture versus active political mobilization, this formula used in reality TV programming has proven so successful that a recent decision was made to use SMS technology as a means through which politicians can communicate with fellow Canadians. Referred to as Youth Text 2004, this initiative was implemented to particularly engage young voters in the issues of upcoming federal elections (Harris 2004). As journalist Misty Harris suggests,

... recent studies indicate Canadians aged 18 to 24 are among the most likely to use text messaging and the least likely to vote. The last federal election saw voter turnout in this age group sink to an all time low, with only 25% of eligible voters casting a ballot. This is a way to make politics relevant and engaging. We are going to talk to young people through the means they are talking amongst themselves (Harris 2004).

With the hope of gaining more active participation from youth, SMS technology is now being used as a polling service of sorts, a system that will provide a venue through which politicians can solicit opinions from youth (Wickham 29). This is not unique to Canada but is also a strategy that is being implemented in other countries. For example, in Britain, in 2003, for English local elections, an e-voting trial system was implemented whereby citizens could use either the Internet, telephone, TV, or SMS technology to vote. While there was not a tremendous increase in the number of votes, it did nonetheless improve ("E-voting").

Oudshoorn and Pinch's theorizations about the role of the user in the development of technology highlight the importance of not only what technology does to its users, but also what users do with technology. These two scholars acknowledge both the possibility of a

prescribed use of a technology and the role played by users as not only consumers, but as self-conscious groups as well (Oudshoorn and Pinch 2). Oudshoorn and Pinch ask the same question that I have proposed here: can we perceive the role of users to be “an important new political group, or a new form of social movement?” (2).

The examples I have presented here, not only showcase the specific qualities of SMS technology and the shape that it has taken in North America and elsewhere, but more importantly they highlight the necessity of considering the user’s engagement with technology. For example, SMS technology is not only mobile, but it is likewise a personally operated, interactive communication device. The latter two qualities particularly draw attention to the role of the SMS user. Drawing from this, our need to question more thoroughly, not only the impact of communication technologies in general, but likewise the user’s engagements with them, is brought to light. In other words, the example of SMS encourages us to consider more carefully the possibility of unexpected uses of technology. In addition, it highlights the error of making black and white claims, such as those made by Postman, with regards to power and non-power when theorizing about technology more generally.

While I have explored SMS technology as a particular example, this case study draws attention to the importance of considering the three spheres of the social shaping of technology: conception, invention, development and design; marketing; and, appropriation by users (Mackay and Gillespie 691) when examining technological development and diffusion in general. It seems likely that as text messaging provides a uniquely clear illustration of the interaction of these three spheres, its development and diffusion may also

present a more explicit case for the active nature of media users in general. Though the active nature of media use in relation to other technologies may be less overt, its subtlety should not be considered an absence.

As Jürgen Wilke writes: “mass communication activities should not just be regarded as a side effect of the main historical process, but as the nucleus of a different historical reality” (Wilke 376). Arguing in reference to the French Revolution, Wilke suggests that from 1788-1789, a large number of pamphlets and brochures had a revolutionary effect on social communication in France; they criticized the monarchy and attacked authorities, ultimately contributing to the revolution (Wilke 376). However, it was the design, promotion, and use by revolutionaries that defined these pamphlets for what they were. In the same way that societies use of SMS technology contributed to a revolutionary climate in Manila, Seattle, and Britain, the use of pamphlets and brochures offered an outlet for revolutionary protest in France.

Although the important place of communication technology becomes apparent in cases of social mobilization, this does not mean that their place within the everyday should be forgotten. The relationship between a technology and society is perhaps better defined according to its day to day function and not its use in extreme circumstances. Throughout history, communication technologies have played an essential role in altering relations of power and control, not only in revolutionary climates like pamphlets in eighteenth century France, but also in daily activities, like text messaging and the creation of a coded text based language. Communication is an integral part of any society. With the inception of new methods of communication into our cultural terrain it is necessary to not only consider the

impact they have on existing ideas of communication but likewise to explore the role that we play in shaping these technologies according to our needs. Without accepting the part played by society in defining SMS technology, for example it would remain an unused “just in case” network absorbing technology.

Drawing from this, MacKay and Gillespie’s extension of the social shaping of technology approach offers an ideal framework through which to negotiate the role played by, not only the technology itself, but also agency, and structure in defining communication technologies, all of which are a definitive part of each of the three spheres suggested by Mackay and Gillespie.

A technology is defined not solely by its invention, development, and design, but also by the manner in which it is marketed; and appropriated by the user. As has been explored, all three of these stages continue to play an integral part in defining SMS technology in North American youth culture. For example, although the development of text messaging first took shape as a result of Asian and European cultural influences it is nonetheless an important stage of the technology’s diffusion in the US. Yes, through marketing strategies text messaging is successfully being integrated into North American youth culture; however, although advertisers have defined the technology culturally important for social networking, this use was originally presented by Asian and European cultures. In fact, it has been argued that because of the high penetration of SMS technology in Asia and Europe, developers in the US have looked to them for creative inspiration (Gubbins).

This example alone proves the importance of the first sphere in defining SMS technology in the US. Furthermore, it highlights the influence that cultures other than North America may have played in determining the current shape of text messaging in the US. It is the second sphere, marketing, that has played the most apparent role in initially shaping SMS technology in North America. This is not surprising given the capitalistic nature that defines both the US and Canada. However, the third sphere, the appropriation of text messaging by the youth user has likewise defined SMS technology, particularly in the manner in which the users have come to establish their own text-based language.

It is worth noting that although explored separately here, each sphere inadvertently affects the other. So, for example, as with the aforementioned Mazda advertising campaign, the development by youth of text language becomes part of market strategies to increase sales or, similarly, as sales increase mobile phone companies reassess their designs and develop new styles to improve text efficiency, in turn catering even more to both consumption and user appropriation.

At the 2004 Billboard Music Awards, a new category was introduced titled, "Most Popular Ring Tone". The winner was rapper 50cents' song "In the Club", presented by none other than well-known American Idol host Ryan Seacrest. The development of this award is not only a reflection of the place mobile communication technology has come to find in our society, but is likewise a reminder to youth of its importance as a symbol of recognition and "cool".

Similarly, a recent advertisement in the Montreal Gazette for the CanSpell National Spelling Bee used SMS text as a means to grab the attention of teachers and parents. In bold black text lettering it reads, "C U l8r @ the B*"⁴. Underneath the text is an image of four students. In subtext it is written, "kids have no trouble finding words to express themselves, but in these times of text-messaging, spelling takes a short cut". This notice to adults is likewise an indication of the impact the relationship that has formed between youth and SMS technology.

From these and other examples, it is apparent that text messaging has found an undeniable place within our society. We are witnessing an age where technologies that are still considered "new", like text messaging, are being rapidly replaced by newer digital communication gadgets. At the time of writing this paper, SMS technology has gone from being a new craze to a standard youth communication device, and now it is competing if not being slowly replaced by the camera phone and video phone. These "newer" gadgets have emerged into North American society as the next "big things". They are mobile phones that not only store dates and phone numbers, and are Internet accessible, complete with email and text messaging capabilities, but they are made even more glamorous by adding additional functions such as a digital camera or video camera. The inundation of technological devices into current North American society becomes even more impressive when considering their qualities of interactivity, mobility, and personal operation. As these technologies continue to proliferate in our cultural terrain, it is necessary to consider the mutual constitution of technological design, marketing, and everyday uses by diverse citizens.

⁴ Translation: "See you later at the bee".

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