#### CONNECTING THROUGH FACEBOOK: THE INFLUENCE OF SOCIAL NETWORKING ON COMMUNICATION

By

#### JASON TYSON

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Approved By:

Ananda Mitra, Ph. D., Advisor

Examining Committee:

Randall G. Rogan, Ph.D., Chairman

Leah P. McCoy, Ph. D.

#### **Abstract and Thesis Statement**

The current popularity of social networking has been cited in numerous recently published studies and articles and while the majority of users of these types of sites are young adults, other age groups are also showing increasing spikes in usage. I will argue that while modes of communicating using technology such as text messaging, e-mail and instant messaging remain dominant forms of interaction, messaging on the socialnetworking site; particularly on the popular site Facebook; has joined this group as another primary form of communication. I will further argue that this phenomenon will continue to have a lasting effect on human ideas about how to communicate with one another, both positively and negatively.

Further discussion will look at how this idea has affected interpersonal communications by altering the way that people interact with one another; both positively and negatively, citing statistical data compiled from various sources, as well as small survey results collected from users of the site. The widespread use of communicating using networks will be compared to that of text messaging, telephone use and even television watching, to demonstrate the effect the sites are having on social habits. I will also investigate the ways in which people are choosing to communicate on the site and consider whether that decision is out of accessibility or preference to the format, citing ideas put forth by current and past technology scholars and writers.

#### Chapter 1

#### Introduction

Our world is made up of connections. We are connected to the natural environment around us and affect that environment with our actions. We are linked to one another by biological and social connections such as family and work associations and by physical and situational conditions such as proximity, timing and movement. We are also connected to each other by commonalities, shared experiences and similar points of view. In most interpersonal cases, facilitating and fostering connections with one another requires some type of communication. (Sproull and Kiesler 16) Related to this is the idea that we seek value and meaning in the world and conduct this search intentionally. (Bugental 67) It is well established that human beings need friendships, what Aristotle called "Philia;" and that they are necessary for our survival, as Maslow, C.S. Lewis and others have argued. (Maslow 25)

Human attempts to connect to one another are intertwined with our progress and survival. Since our entire existence has been spent searching for innovative ways to convey our thoughts to one another, it can be argued that our own evolution is guided by the very tools that we use to communicate. (Putnam 171) Because we have evolved by using these tools, the rapid increase in modern technology and the development of user-friendly devices has accelerated and accentuated the levels at which we attempt to communicate. The ways in which people connect are changing every day; we are finding new ways to transmit information and access that information. However, the basic primary needs for communicating remain. No matter how technologically sophisticated the channels or how vast the audience, communicators must share meaning with one another. (Trenholm and Jensen 16) This is more likely with physical interactions and verbal cues.

Before the advent and mass use of the telephone, the written word and face-to-face

communication were the primary modes people used to communicate on an interpersonal level. The invention of the telephone had a drastic effect on the lives of Americans, simultaneously deterring and enhancing American notions of communicating. "The telephone seems to have had the effect of reinforcing, not transforming or replacing, existing personal networks". (Putnam 169)

Before the telephone, personal social networks were less stable and concrete, and existed largely on proximity. The telegraph, the predecessor to the telephone, was one of the first devices to significantly influence global communication. One essay, "Bell's Electrical Toy" by Sydney Aronson, argues that the telephone was the first modern technological invention that connected people on a more intimate level, however, this transition did not come easily: "The advantage of the telegraph over the telephone, as those who ran the telegraph industry saw it, was that telegraphy left a permanent record." (Aronson via Pool 15) The telephone eventually caught on, and its importance with regard to communicating in the Twentieth century cannot be overstated. Now, at the beginning of the twenty-first century, the telephone itself has been upgraded by advancements, making it more functional and portable. The development of the phone and its consequent synergy with other technologies, has transformed it into a hand-held wireless computer, with several distinct modes of text and voice-based applications, games and Web access.

While the older, primary modes remain, computer technologies have revolutionized new methods of communication, that have in turn been adapted into use at an astronomical rate, and this revolution has affected our interactions socially, culturally and even biologically. It has also altered how we see others and how we present ourselves to them. In 2007, Walther underscored this notion, when he opened a recent study with the observation, "forming and managing impressions is a fundamental process and one that has been complicated by new

communication technologies." (2539)

Technology has allowed for more choices, and individuals are choosing to communicate with using it in greater numbers. The rapid increase in technological adaptation is also allowing people the choice to communicate in larger and more public arenas. As administrators encourage these new technologies, the public is increasingly drawn to dialogue in these settings. The interactions are challenging our perceptions, eliminating social barriers and altering our lexicon. "Our conversations about nature and about ourselves are conducted in whatever languages we found it possible and convenient to employ. We do not see nature or intelligence or human motivation or ideology as "it" is but only as our languages are." (Postman 13)

This drastic alteration of language by technology is a recent development in the context of the history of communication. This development is continually being studied, even as this process accelerates and changes. "We need to be particularly critical as we approach the tools we use to explore Internet culture, even the words we choose to employ," wrote Shawn Wilbur in his article "An Archeology of Cyberspaces." It comes as no surprise then that even the terminology itself is evolving faster than scholars can pin it down and study it adequately. Wilbur further argues that the term "community" and "virtual" must be used carefully by scholars and researchers when exploring issues of the influence of technology, for what may appear to be concrete social issues in real life are more abstract if applied to situations that occur on the Internet. (47)

Many personal technological channels people use are governed by an overseer, such as a cell phone network, virtual community or network administrator. A rise in the use of online communities and the increasing financial success they have achieved, in concert with the larger governing networks, has created several layers of digital cities inside of one another.

These communities inside of networks now form the basic fundamental framework for future connections. (Rheingold, Heim, Walther, etc.) While the umbrella term "online communities" can refer to chat rooms, message boards, virtual worlds, online games, news groups, blogs, video and file sharing websites, as well as many other variations, a new type of communitybased Web site has dominated the aforementioned escalation of technological communication during the first decade of the new century: social networking sites (SNS). A social networking site has distinct characteristics, particularly the ability to create and manage a personal profile that allows users to communicate with others. This is the primary function of most SNS: to communicate with others. Some Web sites, such as the video upload and sharing site Youtube.com, may have this aspect as more of a secondary function. While the study of online communities involves various elements that require unique investigations, SNSs have aspects that relate to the discipline of communication in many ways: "any study of virtual community will involve us in the difficult job of picking a path across a shifting terrain, where issues of presence, reality, illusion, morality, power, feeling, trust, love, and much more, set up roadblocks at every turn." (Wilbur 54)

Due to this "shifting terrain," the ways in which the Internet is affecting communication changes frequently, and the modes being used in this platform are undergoing current analysis and scholarship. We are just now beginning to see how web-based communities with larger user populations are faring online. With technology in this constant state of flux, the impact is harder to pinpoint, and the future harder to predict. Detailed specific investigations into the framework of individual sites can yield smaller pictures of the broader phenomenon, allowing researchers can gather inferences from those, but many questions remain. It is difficult to streamline the data due to the uniqueness of each site. However the commonalities between

sites allow investigators to establish some fluid data. The investigation into a single SNS that follows takes these factors into account. "SNSs constitute an important research context for scholars investigating processes of impression management, self-presentation, and friendship performance." (boyd and Ellison 360)

In 1999, Barry Wellman and Milena Gulia posed an important question: "Can online relationships between people who never see, smell or hear each other be supportive and intimate?" With a large portion of the world's developed population using dating sites, virtual worlds, chat rooms, newsgroups, message boards, social networking sites and online games since that time, widespread use certainly seems to answer the question in the affirmative. But are the masses seeking social connections online simply because community is highly sought after or are the same people simply looking to be entertained or distracted in some way? Models of current networks have shown that there is the capacity to do important things, but knowing what those things are exactly remains a question. "At their best, social networks are said to renew community by strengthening the bonds that connect us to a wider social world while simultaneously increasing our power in that world." (Kollock and Smith 5)

#### Chapter 2

#### **Literature Review**

Texts about social networks usually fall into one of several categories: Those who wrote about online interactions before broad public use of the internet usually focused on topics such as futurism, virtual reality, cyberspaces and machine intelligence, as well as general psychological and biological implications of emerging technology. The novels of Adolus Huxley and George Orwell certainly inspired writings about computer technology from a dystopian standpoint, while writers such as Buckminster Fuller influenced ideas of a technological utopia. In some ways their predictions have come true, while other ideas have yet to reach fruition, or will exist forever as fiction. The scholars who wrote in the 1990s during the early periods of online communities focused on either the observational or ethnographic study of newsgroups or chat rooms. Current scholars have more data to construct their arguments, using statistical charts and graphs to reveal trends inside social networks.

More recent scholars credit Howard Rheingold, Sherry Turkle and the author William Gibson as three writers from the 80's and 90's, as having an influence on current critical thinking about online communities, as well as concepts that have been applied to social networking sites themselves. Other writers such as Michael Heim and David Gelernter published works on the social and metaphysical implications of cyberspace in the 1990's, using the concepts put forth by Rheingold and others to theorize on the relationship between the virtual world and the real one.

Rheingold's impact has especially been well documented, often cited among journal articles that deal with both virtual communities and SNS. His 1993 book *The Virtual Community* was written after his membership and experiences in the Whole Earth 'Lectronic

Link or "Well", which was formed in 1985 and is currently the longest running newsgroup on the Web still in use. Rheingold discussed sincerity in computer mediated communication early in his work that stemmed from his observations in the early virtual communities:

"Are relationships and commitments as we know them even possible in a place where identities are fluid? [where we] deliberately experiment with fracturing traditional notions of identity by living as multiple simultaneous personae in different virtual neighborhoods [where] people lack the genuine personal commitments to one another that form the bedrock of [community]." (Virtual 60-61)

Turkle's work also has had a profound influence on recent scholarship. Two of her works, 1984's *The Second Self* and 1995's *Life on the Screen*, center round the psychological aspects of people's relationships with technology. The former work discussed the mental effect computers have on children, and used specific examples as a basis for a human understanding of them, while her later book used concepts explored in multi-user dungeons to examine questions of identity and the search for meaningful experiences. Turkle also delved into the evolutionary timeline of the machine, and how human perceptions of it have evolved from perceiving it as a simple machine to one that can "think". As SNS become as much about interacting with the site itself as it does about interacting with others through the site, Turkle's ideas take relevance here, especially when she asks who or what is doing the interacting.

These writers also heavily influenced those who currently write about the effects of the internet on the people who are engaged within it. As stated before, many of these writers use ethnographic studies and empirical data to back their conclusions. Studies the way the net affects human beings have become embedded into the discourse of other disciplines, such as sociology, psychology and even biology. These types of studies have encouraged different ways of analyzing online behaviors previously thought of as non-academic or tangential. One example of an author who has written such a crossover work is Adam Joinson, who discussed how internet use and participation in online communities affects user psychologically. In his

#### book Understanding the Psychology of Internet Behavior: Virtual Worlds, Real Lives, Joinson

argues that people feel the need to legitimize themselves in any community setting:

"The debate about the exact nature of virtual community has left a legacy of doubt as to whether or not on-line community membership provides the same support or benefits of membership as membership of a real-life community. Indeed, some research even suggested that there might be a quantifiable cost in terms of mental health and social isolation due to internet use." (4)

Robert Putnam, a Harvard University professor, analyzed the positive and negative impact of the movement of community online as part of his 2000 sociological study of community in America, *Bowling Alone*. While Putnam believes that the decline of community among various social groups that occurred during the late Twentieth century is not necessarily linked to the rise of online community, he both questions the social capital value of online interactions, while at the same time, showing cautious optimism that CMC will complement, but never fully replace, physical human interactions. (175) Two other professors associated with Harvard, John Palfrey and Urs Gasser examined the broader implications for infants born and raised in the digital world in a 2008 book titled *Born Digital*. The authors point out the identities of this new generation who have grown up in a fully digital world, and use examples from Turkle's work about multiple online identities; particularly applying those from the third chapter of *The Second Self* to the group the book discusses.

Important recent scholarship most applicable to SNS and Facebook itself has been published or overseen by scholars at Michigan State University and at the Massachusetts Institute of Technology. Joseph Walther and Nicole Ellison from Michigan State have published at length on the topic of computer-mediated communication, and cite its major influence on how people perceive one another. Walther's journal articles and books are especially crucial to this topic and, as we will see later, are cited numerously as the basis for many of the findings presented here. His early journal articles from the early 1990s dealt with the forming of impressions and the effects of CMC relationships. Later works he either authored or co-authored took his early ideas regarding CMC and applied them to behaviors exhibited on Social Networking sites.

An article Walther co-authored in early 2008 titled "The Role of Friends' Appearance and Behavior on Evaluations on Facebook: Are We Known by the Company We Keep?" found, among other ideas, that the physical attractiveness of user's photos had some significant effect on the value of wall postings and online social standing of the intended person. "The degree to which impressions formulate or dissipate may depend on the perceived independence or collusion the material leading to them appears to have and whether it remains independent or consensual." (Walther, et. al 532)

A 2007 study, co-authored by Ellison, examined the relationship between use of Facebook and the formation and maintenance of social capital. "We can definitely state that there is a positive relationship between certain kinds of Facebook use and the maintenance and creation of social capital. Although we cannot say which precedes the other, Facebook appears to play an important role in the process by which students form and maintain social capital..." (Ellison, Steinfield and Lampe 1161)

MIT's Judith Donath has also written extensively on social media online, specifically focusing on topics such as identity, trust and signaling. "In today's online, text-based worlds, facelessness is the norm and the extent to which participants are identified or left anonymous is a design feature of the various environments" (5) To consider how Donath's observations regarding how use of social networks effect the identity of the people that use them, an investigation into what exactly these networks are is necessary.

#### The Definition of Social networks

When applied to real life situations, social networks refer to the ties or nodes (mostly individuals or organizations) that connect people to one another by at least one association. The networks normally contain a relationship between the entities in it, an association such as a shared value, kinship, friendship, business transaction or other system. "A social system is a society, organization, group, or other social entity consisting of interdependent people, events and behaviors." (Sproull and Kiesler 1) The networking that occurs influences an individual's thoughts, feelings and ideas and is an essential element of human interaction.

In the age of the internet, social networking has taken on a different meaning, but one that is related to the definition cited above. Online social networks most commonly refer to the way that people are connecting online, as well as the platform they are using to do this. But they can also allude to groups that are assembled inside of the platforms themselves. In some ways each time a person shares information in any capacity on the Web, they are engaging in a type of networking with the general public, a sphere that is accessible to anyone with an internet connection and computer. But without a channel to communicate, a call and response, the true components of networking are not inherent. Any group of individuals that is connected to each other in some fashion, be it physical or less linear ways, can be considered a network. This broader implication is not as relevant in this paper as the types of platforms people are using to share information online. The origin of social networking Web sites lie in online communities, and in the way people are connecting to each other, which has mirrored the evolution of the internet itself. Communicating in these environments has evolved from trading message board chats in a newsgroup to 24-hour updating on personal web pages and this transition has occurred over a brief amount of time. The exchange of some type of information dominates the way social networks operate, and it is this exchange that makes up

the core of their existence.

"Regular patterns of relations; such as specific types of resource exchanges; reveal themselves as social networks, with actors as nodes and relations between actors as connectors between nodes. Social network analysis strives to derive social structure empirically, based on observed exchanges among actors." (Haythornthwaite 125)

While researchers can analyze traditional social networks by posing specific questions relating to individual experience in physical social situations, this practice proves more difficult in an online social network. Often members with both strong and weak ties interact together in the same space, and deciphering cues is more challenging when a user is attempting to portray themselves in a certain manner to this larger pool of people on the Web. It is also hard to separate what is real from what is fabricated in some online communities, as some people mask all or parts of their personality and past to others, by assuming false identities, while others attempt to portray themselves as close as possible to their real self. It is harder to do this in a place where others who know the user from a real life community are connected online, as users can influence the content of profile page in many social networks, such as Facebook. People spend considerable effort and time forming and managing impressions, especially when anticipating or engaging in the initial stage of interactions. (Berger & Calabrese 94) Being able to self-present to others in a positive manner has also been tied to both the social and physical survival of humans. (Hogan, Jones & Cheek 176)

Self presenting to others and the managing of impressions are not features of social networks, but rather by-products of it. "Most sites support the maintenance of pre-existing social networks, but others help strangers connect based on shared interests, political views, or activities. Some sites cater to diverse audiences, while others attract people based on common language or shared racial, sexual, religious, or nationality-based identities. Sites also vary in

the extent to which they incorporate new information and communication tools, such as mobile connectivity, blogging, and photo/video-sharing." (boyd and Ellison 12)

For the purposes of study, a social networking site also shows physical community models in a visual way, and allows social scientists to theoretically examine real life systems they have proposed in their writings. While the structure of social networks in real life were always intrinsic, Web sites have found a way to display them to the people who are in their own network, by making people officially acknowledge or establish their common individual ties. Over the years, sociologists have constructed models of how individuals in the real world are connected to each other. John Barnes is credited with coining the notion of social networks, an outflow of his study of a Norwegian island parish in the early 1950s. Barnes viewed social interactions as "set of points some of which are joined by lines" and that the informal set of interpersonal relations composed a "partial network" within this structure. (43)

Trying to study the phenomenon of online social networks in comparison to real world situations can also be troubling for social scientists, as the theoretical concepts of networking, while seemingly mirrored to each other in a networking site, are harder to put into practice online. "People who hang out together, at a French cafe', Canadian hockey rink, New York street corner, or Chilean barrio, can be studied as either a group or a social network. Those who study them as groups assume that they know the membership and boundaries of the groups." (Wellman 152)

This is one reason why the ability to selectively choose who someone interacts with, as they do in online communities, can prove troublesome for researchers. But this can also work in the opposite way as well. A person who meets up with friends in real life has some measure of control over who they interact with in a cafe; if they visit a chat room, their interactions are less controlled, as their postings are broadcasted to the entire chat room and they have less control over who is listening. Most social networking sites allow a person to control who they wish to allow access to their profile; and comments or wall postings; usually reserved for an individual; can be read by all the people, unless the user decides otherwise. This has a different effect in this type of online community than a chat room, where the multiple voices of strangers interact together all at once. These scenarios are all part of the complex matrix of social networking that is occurring, as Rheingold believed: "Each of the small colonies of micro-organisms; the communities on the Net; is a social experiment that nobody planned but that is happening nevertheless." (Virtual 35)

Scholarly research into social networking sites has dealt with topics such as identity, privacy and other various effects sites have on interactions. "Recent network literature has forced sociologists to take notice of the fact that although they have talked about social structure for decades, (but) they really have not faced up to the task of what a true structural analysis would look like." (Aldrich 281) Others have investigated SNS contributions to social capital, both from a business model aspect and from various contributions made to web-based communication such as bridging and bonding. (Ellison, Steinfield and Lampe 1152)

The rise in social networking online can also be attributed to an increase in greater access to both technology and networks that have been made available to a larger number of people in the world. An increase in public access points such as Wi-Fi spots and wireless networks have allowed greater connectivity and accessibility. Computer stations at libraries, internet cafes and cheaper hardware have allowed those who once could not own a computer the ability to get access. (Rheingold 2003) The introduction of computers into schools and the workplace in greater numbers has contributed to more usage as well. As will be shown below, the mobilization of the Web to hand-held devices has allowed individuals to get access the internet from any location. Internet use is also progressing further among middle-aged adults and senior citizens. One-third of adults over the age of 64 were using the internet between 2006 and 2008, according to a survey conducted by the Pew Research Center.<sup>i</sup> The majority of younger adults who attend college own a computer, or have access to one. A report by Kvavik and Caruso (2005) found that 62 percent of students own a desktop computer.<sup>ii</sup> Membership in leading sites varies dramatically by age. MySpace and Facebook were dominant among young people, while LinkedIn and Classmates.com have a large percentage of adults in its respective populations. Between 60-82 percent of social networking users between the ages of 15-30 have an account on Facebook, according to one media consulting firm.<sup>iii</sup>

Social networks differ from other online communities in several distinct ways, most notably in setup and function. For example, while the primary goal of users of online dating is to establish an intimate connection with someone, the setup of social networking is largely geared toward identifying the friends that are members of the site and interacting with them. The way this functions on most social networking sites is for a user to search for an individual that that user is already acquainted with in the real world who has also created an account on the site. A second goal of the social networking format is reconnecting online with individuals a user has meet in real life and after amassing them as "friends," gets to know them better by viewing their page, timeline, associations or family lineage. "On Facebook, the meaning of friend does not always have traditional connotations, and therefore the socio-metric coefficient of the number of friends one has provides clues of a different nature about one's character." (Walther 535) Most sites have various search functions embedded in them to allow users to find people they know by name, e-mail or other characteristic. It is also possible to search for a user to search for their circle of existing acquaintances, especially if others are posting their real names, and to allow communication among those who know each other through real associations. Users are able to add a wide variety of items to their personal pages: to both

indicate common interests, to connect with others, and the option to decide whether or not these attributes are searchable.

These networks have allowed users to be connected to a larger number of people and to be connected to others on a global scale. Studies have shown that if there is a substantial amount of people communicating together online together, that other people will be drawn to that place, whether gradually, or more immediately, in order to stay in contact with one another. (Wellman 28, Aldrich 35, Heim 72) At the same time, there are a number of various factors that are likely to cause people to share information about themselves in online social networks. People are more likely to share personal information about themselves on a Web site if some portion of their acquaintances are sharing info. This type of "signaling", a non-verbal way that any organism communicates, can have a great influence on how others manage their own profiles. Because the perceived benefit of selectively revealing data to strangers may appear larger than the perceived costs of possible privacy invasions, a person is more likely to share information about themselves to total strangers. (Gross and Acquisiti 1)

While the phenomenon of social networking sites in the large-scale public sphere of usage is a recent development, some networks have a longer history than others. In order to fully understand how the popularizing of online social networks came into their current state, it is important to look at their evolution from a historical perspective. It will also be helpful to show how common types operate and function.

#### **History of Online networks**

Forms of social networks existed in the early stages of the internet, via Usenet and newsgroups. Some were developed to connect, not those with common interests, but those with physical ties to each other. Because this investigation is concerned with how the recent phenomenon of social networking has affected communication, the genus of these networks is more rooted in early Web sites of the mid-1990s in terms of similarities, function and development. Classmates.com, which was first founded to keep schoolmates in touch with each other, was first conceived in 1995 and it has outlasted many of its contemporaries; currently having more than 40 million active members in the United States and Canada. This makes it the third most visited SNS in the U.S. as of Feb. 2008.<sup>iv</sup> Reunion.com, a similar site that helps former classmates keep track of each other throughout the different phases of life, had 48 million active users in a Jan. 2008 survey conducted by Alexa.<sup>v</sup>

It was sites that were established to re-connect with former classmates that began large public awareness and usage of SNSs. However, it was not until after the new millennium that social networks as they are known today began to take shape. Between 2002 and 2004, three social networks emerged as particularly popular sites, and their accessibility and features helped networking online reach mainstream users across the globe. Friendster.com was first established in 2002 and experienced a small initial growth in 2003, during which the search engine site Google attempted to purchase and develop the site. In 2003, following the launch of Friendster, several employees of an internet marketing company called eUniverse (now known as Intermix) created Myspace.com as a rival site. Friendster's membership numbers began to dwindle as more and more people switched to Myspace as their primary networking site in 2004 and 2005, and the new site emerged as a popular online destination. Due to this shift to the new shift to Myspace, Friendster's population began to suffer. Friendster's time

spent online plummeted nearly 75 percent by December of 2007, in comparison to its numbers from the previous year.<sup>vi</sup> The site would later manage to rebound somewhat outside of the U.S. market, and it is still the leading social networking site used in Asia as of 2008, as over 77 percent of users of Frienster from that continent have created a profile, according to a survey conducted by Pipl.com.<sup>vii</sup>

After Friendster's entrance, spark and quick fade, Myspace experienced a slightly larger stay at the top of the SNS food chain, as imitators began to spring up. Due to the initial popularities of Friendster and Myspace, social networking sites experienced a boom in new user sign-ups between 2004 and early 2007, but time spent on these two sites began to drop as the initial public interest faded. After peaking in October of 2007 with 71.9 million users, MySpace saw its audience fall back to around 68.9 million unique visitors, according to the website Hitwise.<sup>viii</sup> December saw no changes in growth over November during that previous year, month-to-month, but Myspace had a "squeaky wheel" before 2007. Time spent on the site had dropped from 234 minutes per visitor back in Dec. 2006, to 179 minutes per in Dec. 2007, and that was down from 196 minutes in November. That decline equated to a 24 percent yearover-year drop. What drew people to the site was the format and developer intent to collect friends online, rather than the narrower focus of dating sites such as match.com, eharmony.com and a collection of searchable profiles managed by Spring Street Networks. Attempts to follow Myspace's format and lead were met with mixed results. A site originally set up for the U.S. market in 2003 was Orkut.com, developed by a Tukish-born Google employee. Orkut had yet to catch on in the states as of 2008 as it was initially intended to, but it had become the most visited Web site in Brazil and the second most visited site in India at the start of that year. Orkut suffered from many of the same bugs and spam issues that plagued its fellow sites. Myspace and Friendster had trouble policing

many of the false profiles that spammers had created, and many members were irritated after receiving unsolicited requests and messages from those accounts.

Some sites have strayed from the traditional SN format in attempts to lure users with various niches. Twitter.com, which formed in 2006 and has close to five million users as of Sept. 2008, implements micro-blogging as a major component to their site and Plazes.com, a site recently purchased by Nokia, uses geo-tagging to track current user locations as a networking features. New variations of the social networking platform are showing up every month, and even sites whose primary purpose is not networking often have an added social component. YouTube, a video upload and viewing site, Pandora, a jukebox-style music site and Flickr, a photo uploading site, all offer the user the ability to seek out others and link with them. Meetup.com uses social online groups as a secondary function to groups that meet in person. Social networking even began to flourish as a component of business internet strategy.

In March of 2005, Yahoo launched its own site, Yahoo! 360°, to help them compete with the phenomenon. It is estimated that combined there are now over 200 social networking sites using these existing and emerging social networking models. While each unique SNS offers the chance for further research and analysis; because each site has its own individual qualities and features; which challenges conventions about both technology and interpersonal communication. "They are novel because, in comparison to typical conversations and in contrast to traditional CMC, the information on these sites contains information provided not only by the creator, but by the creator's friends, not to mention by the computational programs embedded in the systems themselves." (Walther, et al 532)

Currently, the most popular social networking site is Facebook, originally created by a college student to connect Harvard students across their own campus. Other schools were soon allowed to join and businesses and other organizations were added for people to connect to

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others they work with in early 2006. Later that year, Facebook opened to the non-US college community. In December 2007, Facebook claimed abut 35 million visitors; double its year-ago 2006 audience of 19 million.<sup>ix</sup> That number more than tripled in June 2008, with the site seeing 135,105 unique visitors that month, according to Comscore figures.<sup>x</sup>

The site finally opened to any person with an e-mail account in early 2008; allowing those who wish to connect with others the ability to create a page on the site without any limitations to access. This quickly expanded its membership numbers. With more than 120 million active users (does not indicate measure of active), according to self compiled statistics, Facebook is, as of 2008, the fourth most-trafficked website in the world. It also has more than 400,000 developers of applications and entrepreneurs from over 160 countries. Over 52,000 applications are currently available on Facebook Platform, as of October of 2008. <sup>xi</sup> Facebook itself estimates that it will have 215 million active members in 2009, will be used on all seven continents, and be the eighth most populated "country" in the world, according to a blog posted by its founder Mark Zuckerberg.<sup>xii</sup>

The site's rise in popularity has altered the way a large group of people interact and communicate with one another. As with any other virtual community, relationships are being formed which transcend traditional physical boundaries of time, geography and context. Users of the site not only communicate through e-mail like messaging but also use other direct and indirect methods to provide information to people they are "friends" with.

The visual elements of Facebook, Myspace and others are mostly confined to either addon applications or games. There are fewer avatar- or graphic-based ways of networking on the sites, and in this case, the link between social networks and virtual worlds is confined only to networking that occurs inside of virtual worlds, rather than any graphic elements that may exist in a social networking site. Those who enter a virtual world can find the support and community-based structure that exists in social networks, but the identity of other users is more questionable for the reasons stated above. Users can hide behind a self-composed graphic image they created in a virtual world, and they can also make up information in their profiles on either site that is false. "Disembodied online encounters enable people to hide their undesired physical features, and anonymity allows individuals to re-create their biography and personality." (Zhao, Grasmuck and Martin 1818)

There are a number of reasons Facebook has already had a longer shelf-life than previously-popular sites like Friendster or Myspace. The first is the idea that Facebook usage has been tied to daily rituals among people, a fact that has been backed up by data to support this. User engagement numbers for Facebook fared better in year three of the site's large-scale popularity than it did for those predecessors. In 2007, Facebook began allowing externallydeveloped add-on applications, and some applications enabled the graphing of a user's own social network, linking social networks and social networking. Other unique characteristics of the site include user control of information shared with others, managed to very specific levels. Facebook, along with Twitter, was also one of the first widely used SNS to implement the micro-blogging feature known as "status updates", a small window that allows users to post, in a sentence or two, what they are doing, feeling or thinking about. It is these type of features that, while not necessarily unique to Facebook, supplement its format, which we will analyze next.

Due to the sites' current high popularity and because the functions associated with Facebook are common with other social networking sites: encouragement and support, the establishment of identity, need for inclusion and the opportunity to interact with others, the site is a good example to analyze user habits in order to craft conclusions about it and the phenomenon in general. Both the use of applications and site features play important roles in image creation and indirect communication to others in Facebook. "One way in which Facebook differs from other online sites for self-presentation, has to do precisely with the degree to which some personal information is presented, by means other than disclosure by the person to whom it refers." (Walther 29) Because the recent trend of social networking is just as much about interacting with the site as it is interacting with others, deciphering the ways people are communicating with each other can be difficult from discerning the ways in which people are keeping themselves entertained. One reason is because of the many different types of ways people can communicate on the site. Among those that we shall consider "direct" means of communicating with someone include: sending someone a message, posting a link, video or note on a friends "wall", commenting on a photo or update, sending a "gift" or object to someone and adding them as a friend. Among the more indirect means of communicating include: joining a group, uploading a photograph, updating personal information, adding an application, adding someone as a friend. Adding someone as a friend can be classified as both direct and indirect because a user is communicating directly with the person they are adding, while the people that can see the friend add, once accepted are receiving indirect communication.

Classifying these actions is important, as the following suggests. Research by Lewis, Coursol, and Khan (2001) and Kvavik and Caruso (2005) have demonstrated that students use technology for social reasons to connect with peers. While this is certainly a major use of technology, results of their studies show that student's psychosocial development regarding peer relationships is not positively impacted by the use of technology. Several studies concluded that the use of Facebook has a negative effect on students' peer relationships. (Kim 44) Walter argued that the effect of impressions "garnered via CMC, may or may not be just like those that occur from face-to-face encounters. In online interaction, there are fewer cues to observe and those that remain are under greater control of the persons to whom those cues pertain." (Walther 321)

While Facebook does provide students with an opportunity to communicate with one another, it may not be as conducive to developing relationships as fully or deeply as direct contact would allow. It is possible this is because students are using Facebook as a substitute for direct contact with others or because the kinds of interaction that dominate inside Facebook do not promote independence as much as other forms of contact. In other words some who heavily use Facebook may be relying on the site as their primary tool of communication, be it good or bad. There are many components of the site, such as the filing out of surveys, use of applications that quote from TV shows or plays, or the playing of games designed to be used while logged onto the site, that may point to this. SNS users embrace of these types of programs are evidence that the masses are seeking not only to connect with others, but also to be entertained while using the site. According to self-reported statistics, Facebook reported that it is receiving 700 million photos uploaded to the site each month.<sup>xiii</sup> These types of online activities thrive inside of the social network, but their benefit is more to the individual and less to the positive social capital aspects the sites are claiming to promote. There may also be other ramifications for prolonged use of SNS. Treuer and Belote (1997) raised a similar concern about "cocooning," in which students withdrew from social environments. This technology may offer ways to avoid direct interaction with peers and therefore impede psychosocial development.

#### Chapter 3

#### **Research Questions and Methods**

This particular study will not investigate specific ontological aspects of the people who use social networks, though it does consider some choices made once logged on to the site in the investigation. Most importantly it will consider how the members are communicating on the site, and what site features they are using in particular. It will also focus on the choices users make while they are logged on, the devices they use to present themselves publicly and the manner and frequency in which they are communicating with others. The survey presupposes the students surveyed are using Facebook, but how frequently they are doing so is measured, taking into account the time spent on this particular site, and the number of hours spent per week. Finally it will hope to asses how other social networking sites and forms of technological communication are adding to their need to connect with others. The results of the survey will hope to better understand a clearer idea of these questions.

A selective survey was sent out to 100 members of Facebook, all who are or were students at Wake Forest University, and they were asked to respond to five questions about their personal social networking usage, followed by two optional control questions regarding their gender and age range. Because the survey was conducted in a controlled environment and answered by students from just a single specific school, levels of randomness and geographical reach were not as high as a survey taken by students who attended different schools in various geographical areas. Other factors such as ethnicity and an individual's access to technology were not known and thus not taken into account. Although age and gender were optional in the survey, most of the respondents answered the control questions, giving us some measure as to the type of people who are responding. The questions we hoped to find an answer to through the survey included the following:

- How often are people logging in to Facebook to check their page and status update?
- How often are students logging in to check their Facebook account per week and how many hours per week are they spending on the site?
- Is Facebook being used in conjunction with other SNS such as Friendster and Myspace or is it the student's singular primary SNS?

In asking these questions, this study hypothesizes that Facebook users are not only using it to communicate, but that they are using it as often as they use other technological devices such as IM, e-mail and cellular phones. Communication on the site can involve any number of multiple ways previously listed. The five survey questions and two control questions were multiple-choice and respondents were given no time-limit to answer them. They were also administered anonymously; the respondents had not option or field in which to submit their name. They were given instructions beforehand as to the number of questions and that there would be two optional questions at the end. (see Appendix I) The questions were set up on a group page on Facebook and invitations were sent out to Wake Forest students via messages posted to various groups on Facebook affiliated with the campus.

As stated earlier in the work, Facebook usage has been tied to daily rituals among users, and, as of Dec. 2008, Facebook reported that 13 million of its users were updating their status each day.<sup>xiv</sup> Because Facebook got its start at a University, and has expanded to nearly every college campus' network in the country, looking at how students at a college campus used Facebook would give us an ideal sample of how Facebook users are interacting with the site. Wake Forest University is a private school, with approximately 6,500 graduate and post-graduate students. It is a fairly social campus, sporting Greek organizations, clubs, intramural sports, volunteer groups and interest groups such as a radio station, religious/political affiliated organizations and music ensembles for the student. On a campus with fewer options

for physical interactions, a device like Facebook would have the ability to be a primary tool for social capital on-campus. But as such, Facebook would ideally serve as more of a supplemental, if not equally important, role in social networking on a campus so rich with physical social outlets. Thus Wake Forest and Facebook's role within it are most-likely fairly typical of an American college or university, and the results may reflect that. The University's Information Systems department issues new laptop computers to all undergraduate and graduate students, as well as its faculty, and it was one of the first universities in the United State to offer this to its community. It was also one of the first campuses to offer high speed wireless and wired Internet access across its entire campus. This level of access makes the university optimal for this type of study and is in line with the type of access most state and private universities currently offer on its campuses. The results to the surveys were tabulated based on a percentage out of 101 responses and were added up and calculated using these percentages.

#### Chapter 4

#### Results

The answers to the survey provide insight to the questions the survey set out to address. (see Appendix II) The results of the first question insinuate, from a small sample size, that people are spending different amounts of time on Facebook each week. In conjunction with the findings of Ellison, Steinfield and Lampe (2007), the respondents answered in Question 3 similarly that they used Facebook to keep in touch with old friends to "maintain or intensify relationships characterized by some form of offline connection such as dormitory or shared class" (1162). Few of those surveyed answered that they used Facebook to either play games or to post photos of themselves. Surely there are people using games and other applications to amuse themselves on Facebook, but the majority of the respondents were not in this group. The answers to Question 4 also revealed the level at which multiple social networking sites are being used. The results show that most people are members of two or less sites, and a good portion (71 percent) are just a member of one or less such sites.

A 2008 Nielsen survey revealed that the combination of social networking and blogging were the fourth most popular activity online at that point, surpassing e-mail. In addition, the study found that this type of activity accounted for nearly 10 percent of all online activity and those two types of sites were visited by two-thirds (67 percent) of the global online population.<sup>xv</sup> These findings were corroborated in the answers to Question 5, which tells us that using Facebook as a person's dominate form of communication is close in comparison to the other methods (cell phones, texting, "IM-ing" and emailing).

The questions and answers to Questions 1 and 2 dealt with time spent on the site. Not surprisingly, the respondents logged into Facebook a varying number of times per week. The most significant number of respondents was 31 percent, those that typically logged on to

#### Facebook 7

to 10 times a week. The other three answers only received between 22 and 24 percent of the responses. Surprisingly, only 22 percent of respondents reported logging in to Facebook more than 10 times a week. The answers to Question 2 showed more definition in terms of minutes spent online per week. (See Fig. 1) Seventy-two percent of the respondents answered that they spent between five minutes and an hour on Facebook each week, while only 14 percent reported that they spent more than an hour on the site each week. While a user may be logged on to the site for much longer periods of time, actual use in this area shows that most of the respondents in this group used it frequently but not for a great period of time. This may point to the answers in Questions 3 and 4, which showed that the respondents were using Facebook to send messages, write wall postings or check the status updates of their friends.

Sixty-nine percent of the users who took this survey reported that they used Facebook for those reasons and only 16 percent reported that their primary reason for using Facebook was to post photos or play games inside of the site. (See Fig. 2) While these reasons may be secondary usages for the site, the primary reason respondents reported using Facebook was the reason the supposed purpose of the tool, to connect with friends, even if they are doing so in short punchy intervals that they check frequently. Finally, respondents reported their primary means of staying in touch with acquaintances in Question 5. The survey asked people to choose their primary means of communicating via a technological tool, with cell phones, IM, e-mail and Facebook among the options. (see Fig. 3) More than half (56 percent), reported that they used cell phone calling or text messaging to stay in contact with others, but Facebook (20 percent) nearly equaled IM conversations and e-mailing combined.

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#### Chapter 5

#### Discussion

There are many ethnographic topics that can be studied in Facebook, and also several that site functions eliminate. Anonymity is less of an issue on sites where wall postings are written by those users a person knows and those who have created a legitimate profile. Because the perceived rudimentary goal of SNS is user legitimacy, public wall postings are often more guarded, and thus less frank. This offsets the negative components of anonymous wall postings, such as flaming or hate speech that exist in other forums. Facebook has allowed users to manage the extent with which people can view postings they have published, making the level of public access up to each user. Users also control the amount and level of postings they receive from each of their friends in their Newsfeed. Facebook has thus allowed its users almost complete control over the amount, level and type of information a person receives when they first log on. "If a friend sends me more than zero invitations to support his made-up "Stop Dog Fighting Now!" cause, I will deploy Facebook's "Ignore All Invites from This Friend" safeguard. And if anyone posts even one old photograph from my soul-patch days, as far as Facebook, is concerned, that person is dead to me." (Levin 164)

Many social networking sites have started to offer a similar application in which users can customize their information. Flaming, unwanted commenting or embarrassing information posted by a friend can only be controlled once the person actually sees it, and others may have access to the information before the user can get to it. The micro-blogging feature of status updates has had one of the greatest impacts on how Facebook works as an interpersonal communication tool, and the results of the survey indicate that it is now a dominant function in Facebook. The daily events of an individual's life on a day-to-day, hour-to-hour, minute-tominute, and yes, even second-by-second basis are now up for display in the public sphere of discourse. Twitter, a SNS on the rise, exists based on that final type of updating. People, are choosing to reveal, because the site allows, encourages and promotes it, the daily minutia activities of their existence, things no one used to care about before the technology existed. This is both a fascinating and frightening development.

While having background information that was obtained solely through information on a person's Web page may help progress a face-to-face interaction, the user must assume some level of responsibility. If a person is willing to share knowledge about themselves publicly, they must assume for it to be both accessible to everyone and a suitable topic of discussion when they encounter a person who has seen it in real life. The reality television phenomenon of the late 1990s contributed to public fascination of seemingly ordinary persons activities as fueled by a technological medium. It is no surprise that social networking began to take shape around the same time and there is a similarity in the two, if only for diversion or infotainment. Social networks are very much like a reality television show, on a much smaller or more localized scale, and the ability to self-promote through a SN page or a blog allows users to create a celebrity-like personae. It takes greater ability to self-promote and personalize one's own page outside of a rigid structure such as Facebook, and this fact may make blogging more attractive to those who wish to further express themselves through writing. One poster on socialtimes.com noted one possible benefit blogs have over social networks: "I'll probably get bored with them quicker than I ever will with blogging. At least on my blog, I've got my own really huge soapbox, and a great Google page rank to boot."<sup>xv1</sup>

Having a "really huge soapbox" as this poster put it, may seem like a greater advantage bloggers have over SNS users, the number of friends reached may be greater on a SNS due to features such as News Feeds that create more interconnectivity. Bloggers can set up their own networks among their like-minded constituents, but one often has to see the content posted either by visiting the site directly or through a link posted on a separate Web site. Piers of SNS users need only visit the parent site to see what their friends and acquaintances are posting to the public.

As simulated interaction becomes more and more accepted, a part of social interaction becomes more and more loss. Face-to-Face Communication becomes less common, and random communication with strangers in a virtual setting becomes more social acceptable, while random communication in a real environment becomes more frowned upon. The more we blur the lines and wash away what is socially acceptable, the more social norms and respect are impacted.

Historically membership in a group served an evolutionary survival function, as people felt safer about something if a larger group of people they know are doing it. This type of peer pressure associated with social network joining could amount to the need for acceptance among a person's social group. If an individual has strong ties to the people in their physical social networks, but is not a member of a corresponding online group with the same peers, it is possible their lack of membership could hamper real-life social relationships. While research into group psychology has shown us the effects that being more socially connected can have on a person, there has been very little to show how this applies to marketer's attempts to monetize an online community or introduce a group to their brand.

Because the art of persuasion is harder when a person says "buy this product" rather than simply "join this group," joiners are less tied to their page if it is easily attainable. But this concept can also be applied more heavily toward a person who is not so easily swayed by their peers. Furthermore, because joining Facebook really does not constitute a commitment from an individual, the act of being sold on a product is much more of a committal. Having some sort of monetary investment would theoretically propel people to be more tied to their Facebook page, but most are tied to it anyway.

#### Conclusions

Despite reaching some conclusions, there are still many unanswered questions. It is obvious that online users are craving for a way to connect with friends and acquaintances, current and older, as well as to maintain a presence online. Outside statistics, sources and selfcompiled survey results point to an increasing dialog occurring inside of social networks. The results of this study as a whole tell us that, as speculated, communicating through social networking has joined e-mailing, instant messaging and cell phone talking/texting as a dominant form of communicating, as shown in the amount of time spent among the sample size off the respondents. The majority of those surveyed had less than two social networking sites they claimed membership in and a similar majority used their preferred site to communicate with friends instead of gaming, picture uploading or other activities. In this particular survey networking is occurring the way it was intended to. The sites have evolved in their short history and will continue to. But what will be the way in which they do this and the format they will use? If the history of Web sites is any indication, the phenomenon of social networking must evolve to continue as a relevant entity, as many sites change their appearance and features in attempts to stay fresh and popular. The larger social implications that face new types of social networking use in the future face this flux, as many bloggers and internet users are attempt to rush in "Web 2.0," a phrase that describes new trends in blogging, tagging and sharing information.

There are plenty of theories and even more speculation. Some writers, such as Heim and Turkle, tell us that online networks must become more interactive, and able to be applicable to real world use. The premise of some, such as Meetup.com, a site created in 2001 which encourages it members to form online groups that meet in person, or LinkedIn, which revolves around business and professional networking, are the types of networks that fit into this model. Avatar-based virtual worlds such as Second Life that have social networking components existing inside of them also fit into this second generation, which itself is known as "Social Media 2.0." There are future trends toward the meshing of social networking and online gaming, with the intent that users can share experiences online, while, at the same time interact and exchange information with one other.

But not everyone that participates in social networks enjoys playing video games. While the meshing of networking online with gaming, worlds or action-oriented community groups could be one such bridge that takes us from the former Social Media 1.0 into this next new phase, there will likely be many incantations. The internet is now a mobile entity and social networking has adapted to this mobility. With this change comes the ability to stay connected to the people 24 hours a day, as well as the ability to broadcast your thoughts, feelings and goings on to a large number of people who are simultaneously constantly connected. Social bookmarking, through sites such as del.ic.ous, have allowed users to tag or log their web bookmarks for public or private use, and has emerged as a popular tool for those engaged in both networking and blogging, and it has been argued that this feature will be more prevalent in Web 2.0. "(W)e've all witnessed Social Networking 1.0; we've beaten that dead horse. And if we aren't absolutely inundated by people-glut and info-glut within the social networks, then we simply become bored and return to our real lives. What's left to keep us engaged?," writes technology blogger Randy Hamilton.<sup>xvii</sup>

The root purpose of all of this connectivity in this medium is a positive one. As stated earlier, social networking sites were constructed to connect with others and, for the most part, the sites are being used in this manner in some way. As with any form of technology, we rely on it to deliver our messages, convey our thoughts and feelings, gather information about each other. The important aspect of all of this is that it is being used to communicate in a way that forms such as the already established cell phones, instant messaging and e-mailing. Users may also use it for our pictures, entertainment and memories, and those practices fall under the umbrella of communicating. Chatter in some form is still chatter. "The low level rumble that humans make in an enclosed space," Don Delillo wrote. (18)

But there are still major issues. Space will continue to be the major issue both in favor of and against social networks. As stated earlier, location is an important factor in friendships that involve physical interaction and people that do not live in close proximity to one another often rely on various modes, technological or not, in order to communicate. But we have seen that more and more of those modes are in fact technological, specifically social networks. As a greater number of a person's peers and friends join networks, this content becomes a bigger part of their life, and a relationship is developed with the content on a page instead of or in addition to the person themselves. Emotions and meaning available to physical communicators has been replaced by fabricated elements such as emoticons that attempt to symbolize those physically manifested cues. While the context and undeniable fact of social networks is that they provide an avenue for people to stay in touch with others who are connected to the same network, they do not compare in these aspects to the physical interaction. Are we happier staring at pictures of our friends on a computer screen, or are we happier staring them in the face? The continuing development and use of technology indicates the former, even if users would rather have the access to friends in some way than not.

Most sensible dystopian arguments do not suggest that social networking sites will be the cause of any plausible science fiction scenarios of humans living in virtual reality nor will they reap the possible utopian benefits those virtual elements offer. Those that wish to access the fantastical elements of an online community usually flock to virtual worlds or online roleplaying games, where they can alter their identity to role-play, mask or deceive those they come in contact with. Since a user's identity is harder to skew in a social network, where messaging and profile posting are more sincere and based on real and true events. "Unlike the anonymous setting in which individuals feel free to be whatever they want to, the nonymous environment places constraints on the freedom of identity claims. A faculty member on his or her department listserv, for example, cannot claim to be someone else without prompting an immediate inquiry." (Zhao et al. 1818) Since virtual worlds bill themselves as fundamentally rooted in fantasy, those seeking escapism or a different online identity naturally flock to those environments en masse, rather than a place where sincerity is higher, such as a SNS. Most users participate in a virtual world to connect with others, in one way or the other. While spamming and online predators are still factors in SNS, this sincerity of communication in these sites versus communication occurring in Multi-Member Online Role Playing Games (MMORPGs) is reassuring for those who wish to communicate with other legitimately online.

SNS users will also have to continually deal with marketers and advertisers trying to communicate with them while logged in to communicate. Marketing via online ads can interfere with the experience in a SNS, especially when the solicitation is unwarranted. Arthur M. Saltzman, in his review of Delillo's *White Noise* said "(Advertisers) have preprogrammed the content and destination of our associations so even when we imagine, we tend to imagine in the direction of media induced debts." (Appendix: IV) This literary comment of a novel is a reality on Facebook, where a program called Beacon was installed on Facebook in 2007. Beacon allowed data to be sent from advertisers to Facebook. Small advertisements posted on the site were then sent to members based on actions they performed, such as joining a group, commenting on a message board, or adding an application. Ads were thus targeted to match

the brand to the seeming interests of the individual user. It is predicted that e-commerce sales will increase by 57 percent over the \$42 billion dollars that users spent in 2000.<sup>xviii</sup>

The recent mobilizing aspects of social networking and the fact that they are assimilating themselves with devices such as the iPhone, Blackberry, Treo or other portable machines reveal their future trajectory. The hand-held information-accessible era has begun at a furious pace. Asia, Europe and North America have already crossed over; just as people have access to the internet anywhere they go; they also now have access to their online communities anywhere. "With cordless and then private cellular telephones, and "remote controls" and then hand-held computers communicating across the airwaves too, the very significance of geographical location at all scales begins to be questioned." (Benedikt via Bell 115)

Because of its potential influence on so many people's beliefs and perceptions, the futures of community, democracy, education, science and also intellectual life, some of the human institutions people hold most dear, are now directly tied to the net, and this will happen whether or not people know or care about the future of computer technology. (Rheingold, "Virtual" 21) This is not the first time it has been predicted that machine technology would interfere with the core bedrocks that encompass human thought and process. The fate of the future of technology communication as a discipline and practice is now directly tied to the fate of this new mobility; it can even be argued that the fate of communication itself is tied to it. (Rheingold, "Virtual" 123)

Not all scholarship views Facebook use as a sign of positive involvement in the social process for those that use it. A common argument against emerging technology is to focus the blame of the loss of something familiar on changes associated with new adoptions. The Middletown studies focused on radios and how that new technology of the 1920's was leading to the downfall of morality and other common habits. But while the medium of the radio may

have provided their listeners access to information they might otherwise would not have attained, creations of multiple profiles as well mobility make social networking via the net a more personal technology, one that has more difficulty functioning correctly without our input and participation. The radio does not necessarily require us to talk back, submit information or maintain a presence on it to function. The same could also be said for the television.

In the 1980s, Neil Postman; in his book Amusing Ourselves to Death; argued that the medium of television had a negative influence on the fundamental tenants of human beings: philosophy, reason, ethics, faith and self-image. If this television-ized viewpoint of Postman is correct, the similar effect the Web is having on those ideas alters and filters them to an even greater degree. Actually, this influence on the fundamental tenants of humanity has actually already occurred. The Web is now influencing individual thoughts and ideas. We see ourselves and others through the double-coated filters of television and Web, a dual-saturated point of view; and with this is the altered perception of reality. Viewing the world through these mediums has the potential to be dangerous. Social networks are relevant to this point in that they are just another portal in which to access information, albeit about other people instead of events or news. Communicating through social networks allows users to stay in touch with the people currently or formerly in their lives in some way; as well as those who are only in a person's life through the Web itself. But in the end, just as we have the access to information, we are tied to this technology, just as we are tied to each other. The general consequences of current emerging technologies create problems if human beings rely too much on it.

Humans have become increasingly attached to their technological objects. (Turkle, Rheingold, Heim, Gross) Many cannot travel anywhere by road without a GPS guidance system, our cell phones and portable computers we carry around are practically tied to our hips, cell-phone users fall asleep holding them and are bothered if we do not have them in our pockets. The computer does the work for us. Diners are unable to find the best restaurant to go out to eat to without looking it up online first. Travelers search and jockey for the electrical outlets at airports to plug into and we huddle at the coffee shops with the best wireless connections. Police officers have lap-top computers they can access from the dashboard of their squad car, even as they drive. Readers don't have time to immerse themselves in a long novel, so they just look-over the summarized Wikipedia entry about it instead. They have trouble paying attention because computer texts move faster than the printed word. (Heim 74) Surfers read a person's blog or status update just to see what they are doing at that exact moment. Friends can't be bothered to talk on the phone anymore, so they just text-message friends all day instead. The first thought after taking a photo with a digital camera is how fast it can be uploaded to a photo sharing site. The convenience of new technologies is having sweeping drastic effects on human communications. These are trends which are showing no signs of reversing. Our use and dependence upon computer technology is nearly completely out of the hands of the user. Any person who wishes to be actively involved in much of the duties and interactions of life will have to use it in some shape or form. The students who took the survey for this study will continue to use those technological resources into adulthood. The children mentioned in Pelfrey and Glasser's book will not know a world that not reliant on these devices. With the hand-held computing revolution in full swing, these examples and hundreds of others will continue to become more and more realized, as people will demand high-speed internet access anywhere in the world 24-hours a day. However, social networks as stand-alone sites or inside of virtual worlds do not have to be a device that will turn humans into "cyborgs" or even non-physical interactive beings. We are not also doomed to become lifeless entities whose brains are trapped inside of these spaces while our bodies sit motionless, because of the format of the SNS. They require no attachable hardware in their current form.

A more Utopian view of networking online focuses on positive aspects of greater connectivity, better understanding of those from diverse backgrounds and access to information at any time and place. As online access becomes available to more and more people who formerly did not have access to it, the Web will have the opportunity to be a crosscultural force, capable of surpassing the marginalization certain types of people have faced in the past. Social networking is beginning to be used in developing nations, although it has yet to reach other third world countries.<sup>xix</sup> In the past, factors such as geography, climate, business, pleasure propelled people to move, to travel to go places. Now, the technology that allows us to be in constant contact with one another is not simply serving as an accessory to this movement, it is the cause of it, a "digital diaspora". (Thurlow, Lengel and Tomic, 214) The movements occurring inside of online spaces, from one place to the other, are creating discursive formations that were not present before. Today, information communication technologies bind together trans-national diaspora communities, facilitate new and efficient networks in both the host and home countries, and increase identity that belongs to a greater transnational community. This movement is also occurring inside of social networks. People are connecting to each other, not based on a sense of space, but rather on the basis of similar interests, and this is a trend that will continue (Heim, Putnam, Rheingold, etc.)

In the most positive way, social networks do provide users with encouragement or support, an establishment of at least one identity, the need to feel included and an outlet for social status and control over their image. We learn more about each other and have more information about people without having to ask them for it. In the United States, the transforming decade of the 2010's could resemble the transforming decade of the 1950's, from a technological evolutionary comparison standpoint. Both decades share the commonality of the rapid development and embrace of modernization. Doomsday prognosticators have long proclaimed that the technology will advance at such a rate that human beings have not been able to control it, while utopians have called on it to advance the potential of human achievement. Both ideas are important and equally viable. Fuller best expressed this duality in later writings "The electronics revolution has been prosaic and severely mechanistic, but it has brought all the music of all history to all people everywhere." (Fuller 27) It cannot be said with certainty whether or not technology will enhance or degrade human sociology, but we can say that it is a force that has already changed this part of us forever.

Nevertheless, Web sites will change formats and places, but what will ultimately be our future relationship with online networking is unknown. "One central question, of course, is whether 'virtual social capital' is itself a contradiction in terms. There is no easy answer. The early, deeply flawed conjectures about the social implications of the telephone warn us that our own (early) conjectures about the Internet are likely to be similarly flawed." (Putnam 180) It is apparent that social technology has become more intrusive, more a part of us, and more involved with our daily dependencies. Our communications with each other are tied to the daily whims social technology experiences. Social networks are a perfect example of this. Bloggers type away whether an audience is listening or not, we cannot get in touch with each other if e-mail is down, and cell phone users panic if their devices have no signal.

Twenty-five years ago, Neil Postman believed the television would turn us into beings who simply sought entertainment and that it would control us more than we could control it. The same could be said about present day internet use. "I don't think any of us can do much about the rapid growth of new technology. However, it is possible for us to learn how to control our own uses of technology. The "forum" that I think is best suited for this is our educational system. If students get a sound education in the history, social effects and psychological biases of technology, they may grow to be adults who use technology rather than be used by it." (Postman 150) We must accept the notion that online identities, those inside and outside of social networks, will remain fractured; sincerity and authenticity will remain questionable. We must also actively realize that these perceptions have started, and will continue to, influence our thinking about ourselves and each other in a major way. Because our identities online have been affected by social networks, our identities offline have also been affected by them exponentially. (Turkle 25; Haythornthwaite 16) If this knowledge is used wisely and the technology implemented responsible, social networks have tremendous power and potential, a wonderful tool users can use to connect, share our lives with others and gain information we otherwise would have no access to. If not the technology has the ability to control our actions, perceptions and lives. The constantly shifting paradox that is both the future of social networking and its impact on us is one that is unpredictable and deserves to be studied due to its possibilities. It is hoped that human beings will use technology responsibly and harness it to promote their lives, rather than letting it control them.

#### **Appendix I: Questions**

1. How many times a Week do you access your Facebook page?

- a. 0 to 2
- b. 3 to 7
- c. 7 to 10
- d. 10 or more

2. How much time would you say that you spend on Facebook per Week?

- a. five minutes or less
- b. six to 20 minutes.
- c. 21 to 45 minutes
- d. 46 minutes to an hour
- e. more than an hour

3. What is you number one primary use when logged into Facebook? (choose one answer only)

- a. send messages/wall posts to friends
- b. check status updates of friends
- c. search for people you meet in person
- d. post photos you have taken.
- e. play games or use applications
- f. none of the above

4. Do you use other social networking sites? If so, which ones are you a member of?

- a. Myspace.com
- b. Twitter.com
- c. LinkedIn.com
- d. Myyearbook.com
- e. Other
- f. I am not a member of any other social networking site.

5. What is the primary means you use to stay in contact with friends and acquaintances?

- a. cell phone calls
- b. cell phone text messages
- c. e-mails
- d. instant messages
- e. Facebook

Here are the two further optional questions were included at the end of the survey:

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What is your Gender?

a. Male

b. Female

Are you between the ages of 18-25?

a. Yes

b. No

#### **Appendix II: Results**

The answers to each multiple choice question are listed below. (out of 101 responses)

1. How many times a Week do you access your Facebook page?

a. 0 to 2 23%
b. 3 to 7 24%
c. 7 to 10 31%
d. 10 or more 22%

2. How much time would you say that you spend on Facebook per Week?

a. five minutes or less 14%

- b. six to 20 minutes 23%
- c. 21 to 45 minutes 18%
- d. 46 minutes to an hour 31%
- e. more than an hour 14%

3. What is your number one primary use when logged into Facebook? (choose one)

- a. send messages/wall posts to friends 29%
- b. check status updates of friends 40%
- c. search for people you meet in person 12%
- d. post photos that you uploaded 11%
- e. play games or use applications 5%
- f. none of the above 3%

4. Do you use other social networking sites? If so, which ones are you a member of?

- a. Myspace.com 27%
- b. Twitter.com 24%
- c. LinkedIn.com 9%
- d. Myyearbook.com 12.5%
- e. Other 7.5%
- f. I am not a member of any other social networking site. 30%

5. What is the primary means you use to stay in contact with friends and acquaintances? (choose one answer only)

- a. cell phone calls 31%b. cell phone text messages 25%c. e-mails 13%
- d. instant messages 11%
- e. Facebook 20%

There were two further optional control questions were included at the end of the survey:

What is your Gender?

a. Male 42 %b. Female 57 %

Are you between the ages of 18-25?

a. Yes 89 % b. No 7 %

#### **Bibliography**

- Acquisti, Alessandro and Gross, Ralph. "Imagined communities: Awareness, information sharing and privacy on Facebook." in Proceedings of the 6<sup>th</sup> Workshop on Privacy Enhancing Technologies, Cambridge, UK: Robinson College, pp. 36-58.
- -- "Information Revelation and Privacy in Online Social Networks." ACM Workshop on Privacy in the Electronic Society (WPES '05) Nov. 2005.
- Aldrich, Howard "The Origins and Persistence of Social Networks: A Comment" in *Social structure and network analysis*, edited by P. Marsden and N. Lin, Sage, Pp. 281-293
- Atwan, Greg and Lushing, Greg The Facebook Book. New York Abrams Image, 2008.
- Barnes, John, "Class and Committees in a Norwegian Island Parish."*Models and Interpretations: Selected Essays.* Cambridge University Press, 1990.
- Berger, C., and Calabrese R. "Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication." *Human Communication Research, Vol. 1*, pps. 99-112, 1975
- Bell, David. (Ed.) The Cybercultures Reader Routledge, 2000.
- boyd, Dana and Ellison, N.B. "Social network sites: Definition, history, and scholarship." *Journal of Computer-Mediated Communication*, Issue 13, Article 11, 2007.
- Delillo, Don. White Noise. New York: Penguin, 1998.
- Donath, Judith."Mediated Faces" *Cognitive Technology: Instruments of Mind.* Proceedings of the 4th International Conference In M. Beynon, C.L. Nehaniv, K. Dautenhahn (Eds.). 2001.
- Ellison, N. B., Steinfield, Charles, Cliff Lame. "The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites." Journal of Computer-Mediated Communication. 12 (2007) pps. 1143-1168.
- Fuller, Buckminster. Utopian of Oblivion: The Prospects for Humanity. Bantam Books New York, 1969.
- Haythornthwaite, C. *Strong, weak and latent ties and the impact of new media.* The Information Society, 18 (5) 1-17, 2002.
- Heim, Michael. The Metaphysics of Virtual Reality. New York: Oxford University Press, 1993.
- Hogan, R., Jones, W., & Cheek, J. M.: "Socioanalytic theory: an alternative to armadillo psychology. In B. R. Schlenker (Ed.), pp. 166-167, 1985.

- Holtzman, Steven R. *Digital Mantras: The Languages of Abstract and Virtual Worlds.* Cambridge: MIT Press, 1994.
- Joinson, Adam N. Understanding the Psychology of Internet Behavior: Virtual Worlds, Real Lives. New York: Palgrave Macmillan, 2003.
- Jones, Steve, ed. CyberSociety, 2.0. Newbury Park, Ca.: Sage Publications, 1998.
- Kim. R. J.. "Out on facebook." Advocate, 949, 44-46, 2005.
- Kvavik, R. B., & Caruso, J. B. *ECAR study of students and information technology: Convenience, connection, control, and learning.* 2005. Retrieved March 2009 from http://www.educause.edu/ir/library/pdf/ers0506/rs/ERS0506w.pdf
- Levin, Todd. "Would You Like to Delete This Friend?" *GQ Magazine*, March 2009, pps 162-164.
- Lewis, Coursol, and Khan "College studentsattech.edu: Study of comfort and the use of technology" *Journal of College Student Development*, Nov. 2001.
- Maslow, Abraham. The Farther Reaches of Human Nature. New York: Penguin, 1993.
- Pacey, Arnold, The Culture of Technology. The MIT Press. Cambridge, Mass., 1985.
- Palfrey, John and Gasser, Urs. Born Digital: Understanding The First Generation of Digital Natives. New York: Basic Books, 2008.
- Pool, Ithiel de Sola.(ed.) *The Social Impact of the Telephone*. Journal of Social History, Vol. 12, No. 3, Cambridge: The MIT Press, 1977.
- Postman, Neil. Amusing Ourselves to Death. New York: Penguin, 1985.
- Putnam, Robert D., *Bowling Alone: The Collapse and Revival of the American Community*. New York: Simon & Schuster, 2000.
- Rheingold, Howard. The Virtual Community. Cambridge: The MIT Press, 1993
- -- Smart Mobs: The Next Social Revolution, New York: Basic Books, 2003
- Sproull, Lee and Kiesler, Sara. *Connections: New Ways of Working in the Networked Organization*. The MIT Press. Cambridge, Mass. 1991.
- Thurlow, Lengel and Tomic. *Computer Mediated Communication*. Sage Productions Ltd. 2004.

Treuer, P., & Belote, L. "Current and emerging application technology to promote student involvement and learning." In Engstrom, C. M. & Kruger, K. W. Using technology to promote student learning. New Directions for Student Services, 78, 17–30, 1997.

Turkle, Sherry. The Second Self. New York: Simon and Schuster, 1984.

- Wellman, Barry and Gulia, Milena. *Networks in the Global Village*. Michigan: Westview Press, 1999.
- Walther, J. B., Van Der Heide, B., Kim, S., Westerman, D., & Tong, S. T. "The Role of Friends' Appearance and Behavior on Evaluations of individuals' on Facebook: Are we known by the company we keep?" *Human Communication Research*. Issue 34. 2008 pgs. 28-49.
- Walther, J. B. "Nonverbal dynamics in computer-mediated communication, or : (and the net : ('s with you, : ) and you : ) alone." In V. Manusov & M. L. Patterson (Eds.), *Handbook of nonverbal communication*. Thousand Oaks, CA: Sage. 2006 pp. 461-479.
- Zhao, Shanyang. Grasmuck, Sherri and Martin, Jason. "Identity construction on Facebook: Digital empowerment in anchored relationships." *Computers in Human Behavior*. Issue 24. 2008 pps. 1816-1836.

Web sites used for statistical data: (see footnotes for specific site references):

Facebook.com Meetup.com Bebo.com Myspace.com socialtimes.com rubiconconsulting.com pipl.com nielsen.com comscore.com alexa.com

- x http://www.comscore.com/press/release.asp?press=2396 (last accessed Jan. 2008)
- xi http://www.facebook.com/press/info.php?statistics (last accessed Oct. 2008)
- xii http://blog.facebook.com/blog.php?blog\_id=company&blogger=4 (last accessed Jan. 2009)
- xiiihttp://www.facebook.com/press/info.php?statistics (last accessed March 2009)
- xivhttp://www.facebook.com/press/info.php?statistics (last accessed March 2009)
- xv<u>http://www.nielsen-online.com/pr/pr\_090309.pdf</u> (last accessed March 2009)
- xvi<u>http://www.socialtimes.com/2008/01/the-social-network-sky-is-falling-run-for-the-hills/</u> (last accessed March 2009) xvii <u>http://socialstormblog.com/tag/social-media-20/</u> (last accessed March 2009)
- xviii <u>http://www.users.muohio.edu/shermarc/aps01.htm</u> (last accessed March 2009)
- xix http://www.web-strategist.com/blog/2006/08/21/internet-usage-in-third-world-countries/ (last accessed April 2009)

i http://pewresearch.org/pubs/323/luxury-or-necessity (last accessed April 2009)

ii <u>http://publications.naspa.org/cgi/viewcontent.cgi?article=1832&context=naspajournal</u> (last accessed March 2009)

iii <u>http://www.scribd.com/doc/9744542/Rubicon-Web-Community</u> (last accessed Jan. 2009)

iv <u>http://www.nielsen-online.com/pr/pr\_090309.pdf</u> (last accessed Jan. 2009)

v http://www.alexa.com/siteinfo/reunion.com (last accessed March 2008)

vi http://www.mediapost.com/publications/index.cfm?fa=Articles.showEdition&art\_send\_date=2008-1-31&art\_type=42 (last accessed Dec. 2008)

vii http://pipl.com/statistics/social-networks/size-growth/?l=1142 (last accessed March 2009)

viii<u>http://hitwise.com/press-center/hitwiseHS2004/myspace-received-percent-us-visits.php</u> (last accessed April 2009)

ix http://www.businessinsider.com/2008/1/myspace-and-facebooks-real-problem-bored-users (last accessed Nov. 2008)

# Figure 1

## **Time spent on Facebook**



# Primary Facebook Use



## Figure 3

### Facebook has become a primary way people communicate with technology

