

Living in a Techno-social World: Cultures of Connectivity in College

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Abstract

In the latter half of the 20th century the widespread use of information and communication technologies has transformed the cultural landscape of the United States. These transformations have led to fundamental questions about the nature of social interaction, the meaning of privacy and connection and the practices of social interaction. In this article I explore how the use of communication technologies has transformed social interaction and the meanings derived from such interactions. Specifically, I argue that the link between technologies and perceptions of being connected and present in a relationship has transformed the social experience of relationships among college students. Analyzing interviews with 38 participants, I explore how they construct understandings of presence, absence, connection and disconnection within peer social groups and intimate relationships. I suggest that technological developments have enabled forms of interaction that encourage frequent connection and idealize constant communication among these participants. Further, this research suggests that disconnection from technological connectivity is constructed as rejection of social interaction and intimacy. Such transformations in practice and meaning have contributed to the overall techno-social culture that is quickly taking center stage in the social networks of young people.

Keywords

Communication technology, social interaction, presence, connectivity, technology, culture.

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The experience of connectivity is at the heart of contemporary social experience; an experience which is fundamentally integrated into a deeply technologically mediated world. The contemporary social and cultural experience of the US population is increasingly shaped by the relationship between technologies and sociality. This work examines how one cohort, contemporary college students, can help us better understand how technological interaction and the use of communication technologies shape social interactions. Specifically, this work will explore the ways in which technological development may have transformed social interactions, and in doing so, reshaped the meaning of connection, disconnection and being present in a relationship.

Developments in information and communication technologies in the last 20 years have given rise to questions about their impact on the development and maintenance of interpersonal relationships (Birkets 1994). Some thinkers viewed the Internet as an isolating technology that disrupts relationships and damages social skills (Sanders et.al 2000, Reid and Reid 2005, Hampton et.al. 2009). While others have argued that technological innovation has provided As a result, concerns about the degradation of social skills, especially among teens and young adults, have emerged in both popular culture and among researchers (Engelberg and Sjöberg 2004, Kraut et al 1998). These fantasies of a dangerous technological innovations are often countered by imaginaries of utopian social connections. The imaginary of a relationship free of social stigma in which participants can be more real with one another (Wellman and Guilia 1997, Mckenna and Bargh 1997, Mckenna et. al. 2002,) is central to this thinking. Yet, as early as the mid 1990's at least one author was arguing that connection was not necessarily utopian and it

was not isolation but integration and hyper-connection that society should be concerned about (Birkets1994).

Today, the debate about the impact of technology on social practices, and especially on relationships continues. To contribute to this debate, I created this project in order to better understand the ways in which technology use and relationships are given meaning and how that meaning making shapes the experiences and behaviors of a specific population, those in early adulthood. College students age 18-22, sometimes called digital natives (Palfrey and Gasser 2008), are on the forefront of the integration of technological communication into intimate interpersonal relationships. Having grown up with technology in their lives, this age group has a special insight into the impact of technology on relationships and their social constructions will surely shape the near future.

In this article I consider the role of meaning and values of connection, disconnection and *hyper-connection* among contemporary college students. I pay particular attention to how students derive meaning from connection and disconnection as it relates to presence and absence within social groups or networks. The focus of this work is on the relationship between social interactions and the development of individual values and behavior related to technological communication. My goal is to explore the way(s) in which techno-social practices have meaning and value to participants within interpersonal social interactions. First, I consider how the idea of connection is constructed in social networks, though the establishment of online presence. Next, I explore the meanings attached to disconnection and lack of technologically mediated interactions. I go on to consider the perceived consequences of disconnection among participants. Finally, I examine how these constructions of connection, disconnection and presence as normal results in social pressure towards compliance in a social network.

THEORETICAL BACKGROUND

The theoretical framework of this project draws together classical sociological traditions of constructivism and the role of communication in establishing social structures and relations with the contemporary practices of techno-mediated communication. I also explore the conceptual apparatus surrounding the interrelated and networked concepts of self, identity and the social.

Meads' theorization of a psychological construct of the self-knowledge is based on feedback from others and more importantly from the "generalized other" which is the aggregation of feedback, real and fantasized, about the self. Symbolic interactionism is a social psychological tradition that embraces the concept of "...individual actors as reflexive, purposive creators of their own social reality" (Schwandt 1994:124). In symbolic interactionism, the self and social are intertwined, a mutually constitutive and interdependent space where "... the individual is not separateable from the human whole, but a living member of it, deriving his life from the whole through social and hereditary transmission as truly as if men were literally one body" (Cooley 1998:131). Cooley presents a theory in which these concepts are not merely interconnected on some superficial level, but deeply and powerfully intimate, in what he calls an "organic relation" (1998:131)

Blumer additionally argues that people respond to each other's actions based on the meanings that each individual assigns to both their own actions, and the actions of others. These meanings are developed, generated, nuanced, and reinforced through those very same interactions that are mediated by symbolic meanings. These interactions are themselves shaped by the communicative processes of technology, image and symbol. Therefore, the self and social exist in a constant state of reflexivity, creating one another. This occurs, in part, because

abstract ideas about what the self and the social are and how they function come from both social world and from the self (Giddens 1991). For Giddens, the self and social are abstractions that function somewhat independently but are also deeply rooted in processes of communication. Technologies of communication, including language and media, are spaces in which self and social are embedded and negotiated. This notion of meanings is taken up by communication researcher Marshall McLuhan.

McLuhan makes the explicit argument that the means of transmission, the very medium of communication that messages go through, transforms and reshapes the message received (McLuhan 1964). The messages we send shape the social world and the messages we receive and use to shape our self are in turn shaped by the means by which they are transmitted. In shaping the social world via micro-electronics and technologically based communication practices, the creation of a network society is possible. Network society is the result of human interaction via technological means and also the framework within which that interaction occurs (Castells 2004). Yet, the relationship between technology, the self and social for Castells and McLuhan is just as deeply interdependent as the relationship between the self and social is for Mead. The addition of technological intervention in the communication that occurs between the self and social shapes both the society and the individual. For Mead, the relationship between the self and the social is interdependent, with a sense of self that is shaped by messages sent by the social world and the social world, in turn, shaped by the individual selves of members of the society. For Castells and McLuhan, the interdependence of the self and the social is nuanced by the medium of communication through which these messages are sent. Still, the self is shaped by the social world and vice versa, however, now the nature of the messages are changed by the

medium through which they are sent. The medium of technology sends an additional message in addition to the content of any given message (McLuhan 1964).

McLuhan addresses the issue of the technological social self. Rooted in the idea of a social prosthesis, communication technologies function as an extension of the senses (McLuhan 1964) to the point at which the dichotomy between the self and the other fractures. As noted earlier in the discussion, Mead's "generalized other" and Cooley's "looking glass self" act as fantasy arbiters, who send and receive messages via mediums of technology, establishing social scripts to be acted out by the individual self. Such social scripts are shaped by the nature and structure of the technology itself. Internet technology is means of transmission, a social carrier of content delivered. Additional information is passed on as the message is shaped by the characteristics of the medium itself (McLuhan 1964).

Technology can send messages between individuals, and shape experience by transmitting both simple content and complex meaning associated with the means of transmission. For example, for participants in this study, the use of text messaged conversations throughout the day acted as means to reinforce relationship commitment even if the content of the message was not about commitment. Further, commitment was also communicated by linking two Facebook pages together using the "in a relationship" feature that I will discuss elsewhere in this work. Thus the structures of Internet technologies not only provide conditions from which social options can arise, such as frequent contact or public proclamations of relationship status but, in doing so, shape the way that options are communicated and structured. We see a challenge to the idea of a separation between social interaction and technologically mediated communication as they make "...thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other

distinctions that used to apply to organisms and machines” (Haraway 1991: 152). Technology then functions as a partner for embodied physical communications, and a socially constructed assemblage of symbolic meanings.

McLuhan’s argument, that the medium of the communication impacts the nature of the message, suggests that face-to-face communication and technology both function as symbolic mediums through which communication flows. This notion is central to understanding network logic, in which technological developments and social expectations influence one another. In exploring the relationship between deeply interconnected mediums, I suggest that the mediums function together as a set of techno-social processes that have characteristics of both face-to-face and technologically mediated communication mediums as well as characteristics that are unique to the hybrid medium. Thus the relationships, which are connected by techno-social communication mediums, are shaped by the messages within the medium, and as such may potentially have characteristics that are unique to that medium. Thus, the relationships themselves and the “self” built on such relationships and communication processes also have unique characteristics. The goal of this work is to explore the relationships and self-perceptions built through processes of symbolic interactionism, using a techno-social medium that impacts the nature of communication and sociality. I will utilize McLuhan’s notion that the nature of communication shapes the messages sent between the self and the social, thus impacting both aspects of social existence. Further, Castells argues that networked and Internet technologies share a unique character. This unique character is evidenced in the messages sent between individuals and society in a network society.

This work expands the existing research on interpersonal relationships and technology, as well as addresses the importance of techno-mediation in online and offline contexts. I do

this by focusing my exploration on the experiences of college students, for whom Internet communication technologies are historically and institutionally supported. For this group technology is not “new” and there seems to be no clear ideological separation between online and offline identities or representations. Technological innovation, in the forms of Internet accessible wireless devices, has detached the experience of accessing the Internet from static location. Wireless networks and cellular data transmission have made the Internet accessible from just about everywhere. Moving away from the notion of immersion into a separate technological world and toward the idea of a symbiotic relationship between technology and the social world “offline” allows for new directions in thinking and research. Pushing beyond research that focuses on the experience of online and offline as dichotomous, other researchers explore the more complex relationship between the social and the cyber. The Internet and its attendant technologies exist as structure to transmit information, and a force to shape social possibility. The transmission of information and content via the Internet is not limited to uni-direction or bi-directional communication like television; rather it is about the development of collective knowledge. Cyberspace can function as an external memory, a social collective in which knowledge and information are fragmented, disassembled and reassembled (Haraway 1997) by the forces of history and imagination. The possibility looms of a totalizing space, where forces of social control constrain and imaginaries of the “real” are internalized and externalized by media forces. It’s also *simultaneously* a space where context and fragmentation are experienced side by side (Lévy 2001). The Internet allows the individual to become “...armed with what appears to be almost random access to memories beyond belief and beyond limit” (Pfohl 1992:73).

Yet the hybrid form that Internet technologies take can be viewed as more than just a

means of transmission or a storage space for data. The struggle to define what this new space, articulated by Haraway, Pfohl and others, actually *means* is also the focus of work by Manuel Castells. Castells articulates the existence of a “network society” in which individuals and groups are linked by micro-electronic technological devices (Castells 2004). He articulates information technology as a defining characteristic of *network society*, fundamental to its nature. The implications of such a society and how it shapes and is shaped by the individuals that inhabit it is also of interest to Castells (2004). Yet, it is the work of an earlier thinker, Marshal McLuhan, that lays the groundwork for an analysis of the social implications of inhabiting a network society.

McLuhan articulates the relationship between techno-media and individual experience as one in which the technologies are essentially extensions of human senses and the social collective. “The new media and technologies by which we amplify and extend ourselves constitute a huge collective surgery carried out on the social body...” (McLuhan 1964:64). Digital media become the extension of our senses, the amplification of our voices, the repository for our external social and collective memory, all experienced with the sensations of seeing, hearing, knowing. This can be experienced via an ever-growing number of devices and technologies. The growth of the wireless device, the rise of the social networking site, the technological innovations in content delivery, all shape the means by which communication occurs.

Social theorist Donna Haraway further discusses the notion of a technological and social assemblage. The traditional vision of a cyborg is a human or animal body in which technological devices and objects are embedded, creating an amalgamation of flesh and technology (Haraway 1991). Haraway argues that the digital world is one in which technology

and humanity function together, not only at the individual level, but also in the political and social arenas of contemporary popular culture (Haraway 1991). This results in a techno-social model of sociality, effectively a *network society* in which human interaction is managed through the use of technological devices. Today, the contemporary social world, particularly among young adults, has the character of a network society (Castells 2005). Within network society, the relationship between social structure, behavior, and meaning is mediated by information technologies (Castells et. al. 2004). Thus, not only structure, but also discourse and techno-social culture shape the experiences of individuals within contemporary network society.

The construction of a network society is perhaps one of the most important areas of research in the analysis of computer mediated relationships. Yet, the focus of the majority of research in the field has been on online relationships as separate from, a threat to, or a replacement for, offline inactions. Thus a major gap in existing research surrounding Internet technology mediated relationships is the failure to examine the complex relationships that are mediated by Internet based communication technologies, yet do not exist exclusively online or offline. Such relationships exist between family members, friends and romantic partners, and are mediated through communication technologies including: Internet blogs, chats and social networking sites, accessed by smartphones, desktops and laptops. College students are one of the groups that have been most dramatically impacted by the rise of the techno-mediated devices as mediums for social interaction. Yet, only a small amount of such work exists and themes are still emerging in the literature.

Despite changes in the way in which college age adults use technology, face-to-face communication is still the primary mode of communication among college students (Baym 2004) though for some people, in particular those with anxiety or social discomfort, technological

mediation provides a sense of support and control in interpersonal relationships (Stevens 2007).

Rather than replacing face-to-face communication in interpersonal relationships, technological connectivity acts as supplement to other forms of social interaction.

METHODS

In order to explore how college students integrate technological communication use into their social lives, and consider new possibilities for social interactions that occur due to the use of such technology, I developed a case study that focuses on the experiences of college students in a private university in the northeast of the United States. Using ethnographic data collection techniques, including interview and observation, I gathered data about everyday activities, opinions, experiences, and expectation of participants. Specifically, I used traditional face-to-face interviews as the primary source of my data then supplement the work with online ethnographic data collection methods. I began by trying to discuss topics such as: how relationships are established and maintained and how communication and connections are understood and imagined. Yet my participants quickly showed me what really matted, how technology is experienced, interpreted and internalized by individuals and by peers. How relationships are reshaped and reformed through emerging experiences that integrate both face to face and online communication into a messy, deeply interconnected whole. Within this narrative, I was better able to imagine and experience the collective perceptions of intimacy and privacy. I began with an interview guide that developed substantially throughout the project.

This process allowed me to most effectively examine the attitudes, feelings, behavior, and experiences of participants. I collected interview data on 38 participants, between the ages of 18 and 24. The interviews themselves were between about 45 and 90 minutes long and tended to

be around one hour on average. In addition, I followed 7 participants online via social media over the course of 4 months, generating several hundred pages of postings and field notes.

I established contact with participants and conducted interviews primarily by making announcements of the project in classes from a variety of disciplines. I provided some basic information on the topic of the study and invited students to sign up with their email address for more information if they were interested. I then emailed the students relevant information, including a project description letter and a copy of the consent form. Potential participants were given about a week to consider, then I emailed them again and, if they agree to participate, set up an interview time and date. Further participants were recruited using the “snowball” method. I asked interviewees for recommendations of persons who might participate at the end of the interviews. Participants in the online observation portion of this research project were recruited from among interviewees.

Each of the 7 individuals I “followed” on Facebook gave permission after an interview. For those that agreed to participate in the online observation portion of the study, I sent them a friendship request via Facebook. Each participant had to accept the digital request in order for me to view his or her Facebook postings. Once I was given access to their online environment, I collected data in two ways. First, I kept a log of Facebook Wall postings for each individual, for about 4 months. I also maintained a set of field notes, in which I comment on and describe portions of the postings. The data used here is from the field notes, which does not use names or identifying information. I specifically *do not* use quotations from postings because they might be potentially searchable and thus compromise the privacy of participants. Thus the online observation is similar to participant observation in a physical setting, in which description of events or actions from field notes is the source of data.

CONNECTIVITY AND THE SOCIAL

My research indicates that the early narratives of isolation or utopia that emerged in the 1990's have been replaced by something much closer to the techno-social collective that Birkets imagined. Rather than technology resulting in isolation and disconnection, it has resulted in an experience of *hyper-connection* in which being connected, being available, functions not simply as part of social relationships, but forms their core. This hyper-connectivity is such that near constant access to communication with others is considered the norm. Participants contact one another via text or by posting on Facebook dozens or even hundreds of times per day. This has resulted in a perception of near constant availability. Even among participants who only text or post a few times a day, the idea that such contacts are always possible, and thus they are always connected with others is central to their understanding of social convention. Being disconnected or going "offline" is met largely with fear and discomfort. This sense of being always available is central to social interactions, and it increasingly shapes social behavior.

Thus hyper-connectivity among participants is not only the result of emerging technology, but is the goal of emerging social actions and individual behavior. The notion of being connected is to be present and available to friends and family and thus strengthen interpersonal relationships and social ties. Achieving this sense of "presence" is tied to *techno-interactive* behaviors, in which social interaction occurs through the use of communication technologies. The importance of availability for intimacy and collective social experience is an idea that is shared by many participants. William is deeply involved in Greek culture on campus. He claims that the technological bonds that tie him to peers shape his social status.

If I were to put my phone down and turn my phone off for a little bit... like... I could be missing out on so much. That's one of the reasons why I got the Blackberry, is because e-mails would go rapid fire from the list serve at the

fraternity and I'd walk... let's say I'd come over to you, like, yo, did you see, like, the stuff going on the list serve, and he'd say, like, no, dude, I'm not by my computer, you know what I mean, so I hadn't seen it. But you know, already there would be this whole argument that would pan out over the e-mail list serve that I would just completely miss. So, now, I'm connected into that. I can see it.

The fear of being lost or left behind is a concern for individuals who are connected to friendship groups and social networks. Interconnected social relationships are shaped by, and connected by, near instant communication. As Olivia explains,

...since I commute, like, people I'm taking classes with, like, I'll add them, especially the group projects – it's the easier way to communicate, 'cause some people will check their Facebook more than they actually e-mail. So, that's one of the good things about it.

Presence or what we might call “potential presence” is a foundational idea here. This concept is closely related the idea of “constant availability” or the idea that individuals seek to have “ a community of like-minded others available at your disposal wherever you go whenever you need it” (Chayko 2008, pp 114). Essentially, potential presence is the theoretical element of constant availability, the idea which underpins the experience. The social expectation that someone is available if needed functions as a kind of glue that holds groups of friends, and even extended social networks, together (Zhao2003). Rather than desiring or engaging in constant or in some cases even frequent contact, individuals rely on the ideal that contact is always possible, *in theory*. As will be discussed a bit later in this section, potential presence assumes that contact is a possibility, or a social option, at any point. Phones, especially, smart phones become a symbol of potential presence, in that they allow the possibility of contact and connection at any time.

Thus potential presence and the theoretical accessibility of the individual self also works as a social imperative that is necessary to demonstrate belonging within peer groups and friendship networks. The following respondent explains the consequences of being without a

technological device, of being literally disconnected from technology, and how that results in disconnection from social interaction. Being disconnected means that not only can an individual not access the social collective, he or she also removes themselves from the social network that provides potential presence for others, which becomes a rejection of the social contract. William explains,

I can't call somebody and be like, "Hey, you know, I'm gonna be there in a little bit," or, "Where are you?" Or, let's say I'm going someplace to meet and I don't see them.... Like the old days, you just wait around and hope and then maybe go somewhere, and like, go to a phone and leave a message for them and say, "Hey, I missed you blah, blah, blah." Like, no, expectations like that are completely different. You can't do that."

While on the surface such problems may seem to be merely logistical, a deeper meaning emerges quickly. This is about availability, and perhaps more importantly, about the availability of individuals to be *present* in a social situation even if such "presence" takes the form of technological interactions. This collectivity and hyper-connectivity draws a sharp contrast not only to the stereotypes about technological use but also the preceding generation, which according to some authors is deeply isolated with regard to social interactions (Putnam 2000). That notion of disconnection is tied to the vision of the isolated cyberpunk or the technologically dependent loner, but the social reality of the digital natives may be very different. For example, Ruth discusses the social risks that she runs by having a policy of delaying responses to texts in certain circumstances.

I'm horrible...they texted me and I don't text back, right away. Like, I don't like texting in class. Like, a lot of people you see texting in class – I hate that – 'cause I know a lot of teachers, they find that simply disrespectful. So I'm late on text back right away, so a lot of people say that I'm rude ... because, you know, people want a quick response.

Ruth's internalization of herself as "horrible" is important to understanding just how necessary the technologies of availability are to her social group. While not a genuine self-judgment, she goes to explain that this term is an indicator of how she imagines others will perceive her. She has violated the rules of social interaction, and in doing so imagines the possibility of an externally applied sanctions from her social group. Her sense of identity is being shaped by the demands of interaction. Her interactions with peers, and just as importantly, her lack of interaction create a social reality in which she is deviant. Ruth has violated social expectations and that violation sends a message about her value, she is "horrible" because she doesn't text back. The meaning Ruth derives from these interactions suggests the construction of clear sense of shared meaning among her peers.

MEANING MAKING IN TECHNO-INTERACTION

The idea that disconnecting, and thus being absent from the flow of communication within a peer group has real social consequences, is a theme many respondents agree with. For many participants, not following rules about how quickly they should respond to text messages, how often they post on Facebook and how available they are via Internet enabled mobile devices such as iPhones, is understood to be matters of respect. As one respondent, Tyler, suggests such delays are "being just you know...cold and ...disrespectful to your friends." He goes on to explain that lack of response or lack of availability sends a very clear message to others, a message of rejection. Jessie outlines the consequences of not responding to text messages or not responding to Facebook messages.

It means that you're ignoring them. I have... one of my roommates, he's been having this little conflict with one of his friends because he doesn't always answer her phone calls and he doesn't always answer texts, because he's busy. He's in class. He's in lab. He's doing things. He's running around all day. He does not have time for that, but she... she'll post messages to his Facebook wall, later,

saying, “Hey, how come you don’t respond to my text? Hey, how come you don’t respond to my phone calls? Hey, how come... you have a cell phone – like, use it” Respond to me; all the time, now, now, now, now, now.

Ze1 goes on to explain that messages being sent between hir roommate and his friend are clear and understood by all parties. It’s about commitment to the relationship, and about the friendship as a priority. The medium of technology sends a message beyond just the words present in the communication (McLuhan, 1964).

The message being sent by a speedy response is that the friendship is valuable and important to both parties. A delayed response is an indication that the friendship is not valued by the “slower” respondent. This may be because speedy communication is a means of “being there” or establishing presence despite physical distance. As Kate notes, it makes communication possible.

All over the world; at least all over the United States, you can text your friends all day long. I have friends that go to school in Connecticut. I have friends that go to school in Florida and California, and so it’s nice to be able to text them – it’s like they’re there without being there.

This notion of “being there without being there” is key in understanding the messages which technological use sends independently of the words themselves. By establishing presence in a social situation from which you are physically absent, technological communication allows a message about the value of the relationship to be sent. Hallie explains the importance of technology in her relationships.

I use Skype a lot because my boyfriend lives on Long Island. So we’re pretty far apart. And he just graduated, so, I feel like technology... if we didn’t have technology, we probably wouldn’t stay together. So it would be... and me and my dad, pretty much, only communicate via e-mail. So we don’t see each other very often, or anything.

1 Jessie is genderqueer and prefers to use gender-neutral pronouns. Thus ze is in place of he or she and hir in place of him or her.

The degree to which an individual is perceived to value a relationship with others is an indicator of how invested he or she is in the relationship. By establishing one's presence online, and making oneself hyper-connected or "always" present, a social environment is formed. This environment encourages further investment in the idea of hyper-connection. This creates a relationship between social interactions, such as availability via text, and group expectations, such as those about appropriate availability, based on the meanings attached to techno-interactive processes. Mia notes that her relationship with text messaging is rooted in acknowledging the importance of other people, through communication and "being there."

I can keep a conversation going, for, like, two days straight, with, like, one person, and so that'll be back and forth, constantly, all day. And we don't really talk about anything important, it just kind of... I don't know...being there.

The relevance of simply being present and having access to the presence of others is reinforced not only by peers but also her own perception about what is "normal" in the techno-social world. This socially constructed need for co-presence is at the root of the hyper-connection of the social world. One must not only be technologically present in order to provide social connection to others but there is also an expectation of reciprocity. This reciprocity is based on the idea that techno-interaction is made possible because technology extends to human senses, allowing us to experience interaction virtually. Thus, through technology, the individual is never really alone.

GETTING OUT AND FEELING LOSS

However, it is not in discussing presence and connection where participants most clearly articulate the meanings attached to techno-interaction, but in the discussion of loss and disconnection. The medium of technology, as theorist Marshall McLuhan notes, is about the extension of human senses. He argues technological mediums of communication carry inherent

messages about their use, which are interpreted along with the message itself (McLuhan 1964).

The technologies of communication that are employed by participants extend the senses across geographic space to encounter others, friends, family etc. In acknowledging or rejecting the importance of utilizing these virtual senses to render an individual self as present or, conversely, to acknowledge the presence of another, a message about the value of the other is being sent. The presumption of some kind of ability to extend the senses, to connect with the other, demonstrates a sense of connectivity. Among many participants in this study the extension of the virtual senses becomes most relevant when the extension is truncated. To be cut off from technologically mediated social interaction via the loss of a phone or Internet access, results in emotional distress.

Essentially, for many of the participants in this study to lose the instrument of technological communication is to lose the intimate connection to one's community and to the self that is deeply rooted in that community. Allen explains that for him, the loss would be in access to friends and to his social network.

I don't think that I would have as much friends as I do now. Because of the Internet, I can stay connected with my former classmates and my close friends. I think my life would also be more boring.

William also connects the idea of disconnection with a sense of loss, but articulates a much more intense experience. He suggests that his connection with technology is so important that he has complex feelings about even contemplating the loss of technologically mediated connections.

When I asked him to tell me what it would be like if he lost his phone, he explained in terms of disconnection and fear.

I've lost it, I've... you almost feel like... naked... I can't really be without my cell phone. Like when... if my phone dies... it's... it's... let's say my phone...

my phone just died and shuts off? I do feel off., you can't contact people right away if I need to or anything. I can't get in contact with them. And it's almost like... I'm like, disconnected. Nobody can reach me, and people... I can't reach them, I mean, just think about this. It's the craziest thing for me, is like, OK, so my phone dies, right. I don't know what time it is. That's one of the things right there. I don't carry a watch. Nobody carries a watch.... I don't know what time it is. No access to e-mails, unless I go onto a computer, but I'm not always around a computer, so I can't get my e-mails, right away. Nobody can reach me. I can't reach them.... What am I supposed to do?

This question, "what am I supposed to do" lies at the heart of the presence/absence narrative. The techno-social world of participants shapes behavior and individual perceptions of the self, through the real and imagined interactional expectations of other people. If the medium of communication "dies," it is no longer available to provide a connection with friends and the imagined other. Ruth agrees, becoming emotional at the thought of being disconnected.

I wouldn't... I won't... I would have to communicate with people more personally. Um... like, face-to-face. Because, I use texts a lot. I don't text my mom, because she doesn't really... she doesn't speak English, so I would have to call her, but I... there's a lot of things I, like, I use text for. There's so many arguments that I've won over text. It's crazy. So, since I even wish Happy Birthday.

Without this means of accessing peers, the notion of feeling naked, disconnected, and detached from the world arises. When an individual becomes absent technologically he or she is unreachable, untouchable, the expanded senses have failed. Not only can William not "contact people right away" but also he himself becomes someone who "nobody can reach."

Logistically, William is unable to contact his friends easily, to get information and support or even make plans about meetings and activities. However, socially he is also isolated, separated from his friends and peers in a way that engenders in him a sense of loss. Of particular note is that for William this loss is an imagined experience that causes an emotional response.

The loss of a technological means of communication, or even the contemplation of such

an event, is imagined to result in both the truncation of the expanded senses, but also a resulting disconnection that occurs when the connection is cut off. Aiden agrees, explaining,

Without a [internet enabled] cell phone I would not have a social life because my phone is my outlet and source into my social world! I would not be able to survive without my phone because I wouldn't be able to speak to my mother and I also wouldn't be able to speak to most of my friends plus then I'd have nothing to entertain me during class.

This is a frequent theme when respondents contemplate life without technology. Not only do respondents feel emotional discomfort at the idea, but also often express concern about their compliance to social expectations, and even their ability to conduct day-to-day activities. As William tries to explain, “it’s a dependency, and it’s like you’re locked in. And if you’re not in it, you’re just out of the loop.” Like William, others have conflicted feelings about technology but even then, there is a clear sense of a social imperative. One respondent notes both conflicted feelings about the medium itself but also about the way in which it functions as a social imperative. Jessie mentions how ze will sometimes play hooky with hir phone.

... I don't like to be tied to my phone. There are days, and if I have a day off, often times I'll chuck my phone, like, underneath, or like, behind my bed, or something. And I'll go sit out on the porch for half the day. I'm gonna enjoy the sunlight and the peace and quiet and the not ringing of my cell phone and the not vibrating of my cell phone, constantly demanding my attention. And my computer will stay off and I'll do... like, I'll read a book.

Yet, ze also notes that there are consequences to such behavior, as ze is likely to have dozens of text messages, Facebook messages and instant message contacts when ze does check hir phone. Furthermore, ze explains the increasingly frantic tones of such messages. Nevertheless, for hir, the momentary disconnection is worth it.

Jessie goes on to explain that the constant need to be immediately present via technology is at once draining and comforting. Anna too, occasionally attempts to disconnect but struggles to do so, as social pressures to remain connected are intense.

[Sometimes] I turn off my Facebook. And much of it's hard, 'cause all my friends are messaging me through the Facebook. Like organizing things through it. I mean, so, then I'm forced to use it because that's what they're using. You know, that's how I can keep in contact with them.

Kacy agrees, explaining that she too feels a pressure to be present and in contact with her friends despite her own desires. Despite Kacy's dislike of texting she gives in to pressure,

...if you want to text me... I sigh and just slump away, kind of., 'cause I just didn't want to do it. [but]I don't want to lose my friend, it's not that much of a hassle just to learn to do it. I did. And, now, I'm not an advanced user, like, I can't do it under the table without looking at the word, but I still use it sometimes.

The pressure to "be present" for others is via technology, for Jessie, Anna and Kacy at least, is sometimes overwhelming. Kacy remains resistant to the norms of text messaging and struggles to set boundaries around her technology use in social situations.

It's like, with this particular friend in mind, she has unlimited minutes and unlimited text messaging, and I understand that she'll text in class, cause she's not going to sit there on the phone and have a conversation in front of her professor, but maybe she's in class and I'm in class, and I don't want text, 'cause I don't want to be rude. And then I'm ignoring her because I haven't answered her text message. So, I don't know. Should I just text her back and say, "I'm in class – can't talk right now." Or should I ignore it, cause if I text her back, then I'm being rude to my professor. Whereas, if I text her back and she's angry, or she needs me to talk to, for solace or something, then where do I go. Where if you call me, I can always ignore the phone call, but still then, she's not getting that communication that she needs. And I'm not getting the education that I'm in class for, or maybe I just don't want to help you, so what do I do?

Kacy discusses the challenge of finding an "etiquette" of technology use. For many of her peers, the use of text messaging in social situations is accepted, but for Kacy, the demand to be available to provide her friend with "that communication she needs" is frustrating and

overwhelming. For her, there is no easy solution to balancing the needs and expectations of her friend with her own desire for distance.

In contrast, Jessie manages her concerns about feeling too connected by taking some time off. Still, prolonged disconnection such as getting rid of her phone or Facebook account is not perceived as desirable. While “disconnecting” for a few hours is ok, the prospect of total disconnection or “going offline” is something that evoked nervous laughter in Jessie. When I pressed for more details she walked me through the experience of “going offline.” Going offline, in its contemporary usage, is defined as the process of removing one’s profiles, avatars and contact information from the Internet. Jessie explains what happens if she were to go offline in this sense.

The first thing that would happen is every... like, everyone that knows me personally, in person, will start demanding... like, “What happened to your Facebook?” “What happened to your Facebook?” “What happened...?” “What’s going on?” “Did something terrible happen?” No, I just don’t want to be on Facebook, anymore. It’s ruling my life. I want to... I want to become free from it. But then, they become baffled; “But how am I going to send you messages?” “How am I gonna share You Tube videos with you?” “How am I gonna [I don’t know] comment on all of your photos?” I don’t even post photos. “How am I going to do all these things? How am I going to keep up with you in my life?”

Immediately social problems arise with friends, family and other members of social networks.

Not only does Jessie imagine an immediate response in her social network but also discusses the ways in which the very nature of that social network might shift.

My time observing online seems to support Jessie’s assessment of the topic. At one point Becca, one of the participants I was observing, “dropped out,” meaning she stopped posting regularly to her Facebook account, and her Wall was flooded with concerned posts asking if she was ok, and requests like “post something...I miss you.” The depth of connectivity demonstrates the importance of being connected, not simply with technology, but also with other people,

through the use of technology (Castells 2005). That notion, that technology connects and ties people together in relationships with other people brings a new conceptualization to the notion of getting and staying “connected.” Thus the question of how to maintain relationships and connections becomes a central concern ... yet apparently the problems don’t end there, according to Jessie.

Then, communication gets difficult at work, 'cause everyone at work is on Facebook, and often times work is done through Facebook. I'm no longer able to keep track of what's going on around campus, because all events are pretty much orchestrated through Facebook, these days. Unless people walk up to me and say, "Hey, there's an event going on. Do you want to come?" I probably won't find out about it. And the same thing goes on the opposite end for my student organization, I can no longer advertise to my students, because they're all on Facebook.... the events that we're doing or anything like that. All that's gone. And then there's a generalized disconnect with the majority of the people that I know, mostly via the Internet and don't see on a regular day-to-day basis... Right! I am totally disconnected from every thing that goes on.

While Jessie and a few others expressed fantasies of being disconnected or out of touch, all of them acknowledged that such behavior would have dramatic social consequences both for the individual and for their friends and family. To be offline is to be disconnected, not only from communication technologies, but also from *other people*, as William notes above when he explains that if were offline he "...would not have a way to stay in contact with people, or for people to contact me." If as McLuhan argues, technology is the extension of senses beyond human capacity, then this disconnection is about being literally, out of touch and inaccessible.

COMPLIANCE: GETTING CONNECTED AND BEING NORMAL

This sense of being “out of touch” and disconnected is traumatic for participants because they are situated in a social world in which hyper-connection is increasingly understood as not only desirable, but more importantly, as normal. Participants exist in a space that is about techno-interaction and communication of their own presence. Individuals access another, and by

establishing their presence, individuals also become accessible to others; an accessibility that results in connectivity. The notion of presence and absence, connection and disconnection, goes beyond the simple notion of having an “Internet presence” or a profile online. Rather the idea of presence and absence begs the question, to whom are we present or absent? To what people do we have access and to whom are we ourselves, accessible?

In order to begin answering this question, we must understand the contemporary nature of social networks. Social networks exist in both the physical and the virtual level. For some, social interaction occurs primarily or exclusively in offline spaces. However, for an increasing number of young people, techno-interaction is not merely an option, but a requirement for the establishment and maintenance of social network connections. Techno-interaction is increasingly regarded as a “normal” part of social network building, and further compliance with this social norm is essential to maintaining such social networks. As new means of communication are made possible by technological development, new sets of social expectations also arise...as William explains. “It’s one of those things... like, you’ve got to be on it. People have got to be able to find you these days if you want to be connected.”

Thus many individuals discuss their introduction to tools such as Facebook and texting as a consequence of social demands for their presence in online spaces, and thus their accessibility to friends, peers, romantic partners and others. These demands are often to be present and accessible in social situations that are techno-mediated. Jessie explains further. Thus participants are expected to conform to social norms of techno-interaction because they will be judged on the social meanings attached to their presence or absence from the techno-social network. The pressure to incorporate some form of technological presence into the social relationships is

intense. Other participants also noted that they joined Facebook because of pressure from friends or because they felt like they needed to, as Sara notes,

I didn't join Facebook until my senior year [of high school] when I knew I was going to Private U and kind of wanted to start to, like, meet people...it's what you did to get ready for college. I friended my dorm roommate so we weren't like total strangers when we met. We had already gotten to know each other.

The social demands of compliance are intense, just as the rules of text messaging and even emailing require a degree of technological vigilance that sometimes people struggle with. Yet, such vigilance can be worth it for some participants. Abby explains that for her the keeping in touch aspect of texting and Facebook allow her to connect is most important.

I think that for certain people it has... you then have a better relationship with them, or, like, a more of a relationship that you would have had. So I know there's, like, girls on my team, and stuff that, I, like, have nothing in common with. Like we would, like, never really talk or anything. And I would never call them and be, like, "Hey, let's hang out," or whatever. But with texting, like, you can send a mass text and be, like, "Hey, party at my house," and it, like, goes to them. Whereas, if I didn't have texting – I'd never call them and invite them.

Abby acknowledges that for her, technologically mediated communication allows her to connect with people whom she otherwise wouldn't interact with outside formal environments of her sports team. It also acts as a quick and efficient way to use those connections to organize social events. For college students in general the need for such technological devices is not just a matter of "fitting in" in the way that name brand clothing or accessories can be. This may be because such technologies not only allow people to "fit in" but also provide access to information about what is going on with other people that the student interacts with, such as offline events.

In fact, during the time I spent observing participants on Facebook I noted that making announcements had become such a common event that the site designers added an event planner

function that allowed individuals to email event details to their friend lists via the website. Event organization became very common as the following excerpt from my field notes demonstrates.

Today I got 5 event invitations. Two party invites, an announcement of a meeting on LGBT issues, a request to join a Wal-Mart boycott, and an invitation to a baby shower. It looks like these invites were just sent to everyone on the list. I have the option of accepting, declining or saying maybe to each invite and can also post and read related comments. I can see who else is attending and not attending and in some cases why.

One participant, Jadon, noted that without Facebook and texting, it would be impossible for him to mobilize the student organizations he is involved with or “get the word out” about events. Increasingly, even offline interactions such as social events or organization activities relied on technology as a means to facilitate social interaction, even in face-to-face settings. As Jadon notes, “its what you do...get people together online and get them together offline...texting or announcements...it what everyone does.” Yet it is not only the idea that such connection is normal, that is appealing to participants, but also the idea that it is unobtrusive.

For Lynn, part of the appeal of technology is its relative unobtrusiveness into the social world. This unobtrusiveness is due to both cultural and structural factors. It allows her to be present and available to her peers, but without the intensity that would be required if she maintained that presence through another method.

It’s the normal form of communication, for the most part. Rather than calling someone to ask them if they want to go do something... it’s... you text them to make sure that they can do it. Or... I generally text because I don’t know if I’m interrupting something; I really feel bad if it’s like, “Oh, I was just in the middle of a conversation with somebody that I really haven’t talked to in a long time. Oh, good, my friend M called, that’s awesome. Thanks for interrupting, jerk.” So I kind of text and say oh, you can get to it whenever you feel convenient. But it’s normal around campus, to have your phone.

The ability to be present without being obtrusive is important for Lynn, because she relies heavily on her social circle for support, and help with decision making, as is the case for many of

her peers (Bellotti 2008). Lynn goes on to explain that she needs to feel connected but doesn't want to come across as too needy, because that has the potential to damage relationships. Yet, this notion of unobtrusiveness seems to contradict the demanding nature of such interactions that is expressed by Ruth and others. In some ways, this is unsurprising, when we consider the ambiguity that respondents expressed regarding the concept of potential presence. While most respondents acknowledged the important of connectivity and potential presence, their view of it was widely divergent. Some viewed this constant availability (Chayko 2008) and potential presence as desirable, some as oppressive and still more as a necessary but deeply ambiguous cultural experience. Something that they alternately loved and hated, was understood by peers as normal and necessary, or simply as required as Jesse explains,

I'm not a huge fan of Facebook, but I'll use it. I was actually threatened via physical violence to join Facebook by a friend of mine. She legitimately made the account for me and when I didn't use it she punched me every day that I didn't use it, she would punch me. So now I use it every day.

Ultimately, the normalcy of cell phone or smartphone use is a result of the social pressures that my participants feel to own and use such devices. Lynn notes that it keeps her connected and is unobtrusive, both important to her, but that these characteristics come from the technology's status as "normal." The widespread use of cell phones and smartphones have resulted in perceptions of their universality that has led to the development of social practices that incorporate them, make them even more socially relevant. For Lynn, texting is the "normal" method of communication and as such has given rise to expectations of courtesy and civility, including not "interrupting something" with a phone call. This perception of normality and the demand for presence within relationships has led to fundamental changes in how interpersonal relationships are conducted.

CONCLUSIONS

Throughout this discussion, I have offered examples of the way individuals grapple with issues of connectivity and hyper connectivity. The desire for connection between individuals and between individuals and groups is central to understanding the experience of participants.

Connection is experienced through meaning making and the expectations of social interaction that surround presence and absence.

A few participants chose to reject some or all of this pressure to get connected and stay connected. Yet, all acknowledged their existence and the tension that exists between those who live in the techno-social world and those who resist it, those who belong fully to network society and those who inhabit the fringes. For some, like Kacy, it is possible to reject the social pressures for conformity, and to simply accept the social consequences. Which in her case, means limited access to events and a small intimate social circle. For others, such as Jessie, a deep ambivalence exists; as ze fantasizes about disconnecting for a day to read a book ze also knows that ze is unwilling to fully accept the losses a permanent disconnection would result in. For many, such as Abby, disconnection is not an option, and not desirable, as they consider themselves deeply embedded in the techno-social world and feel that they thrive there.

This embeddedness means embracing a set of social expectations that include consistent “presence” within the techno-social world. This means establishing and maintaining not simply an “online identity” but a consistent self-presentation of accessibility. The ideal is to be plugged in and logged on, not simply regularly, but *all the time*. This level of hyper-connectivity is impossible in practice and for most participants not entirely desirable. However, near constant availability for interaction is the ideal that my participants *perceive* to be the norm among their peers, even as they themselves may be an exception. Many explained that among their peers for

relationships to be valid, for intimacy to be achieved, it is essential that one's virtual presence be maintained. As a result of this perception, behavior is undergoing transformation. A clear demonstration of the Thomas theorem, as young people accept the reality of hyper-connection the consequences of that reality emerge.

My research suggests that it is not isolation but integration that has emerged as a consequence of technological innovation. While it is true that young adults may be losing traditional social skills they may be replacing them with an incredibly complex set of interactional tools that are increasingly shaping and reshaping the meaning of relationships. This reflexive process, in which the meaning of technology shapes the interactions between peers, and interactions shape and reshape meaning has only just begun, and the long-term impacts of technological integration into social behavior are still unclear. Nevertheless, this work has identified some key areas in which technology may require that we rethink our own understanding of the meaning of technology and even the meaning of being connected to another human being.

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