

# Melissa Cheater

Adapting to Networked Society: reviewing social networks, strong  
& weak ties, and mediated communication in light of MySpace,  
Facebook & Friendster

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Online social networks are technology's response to a network-based society, providing tools for creating and maintaining connections. Two years ago, characters of the pop cult sensation, *The O.C.*, joked with each other about joining Friendster to solve dating problems (Schwartz). In an episode of *Scrubs*, the awkward Dr. Reed shows her social ineptitude by turning down an offer of coffee in favour of "hitting the internet hard for a friend hunt" (Weinberg). Even with online networking being the topic of banter in popular media, many people still have yet to notice its sudden emergence. While individual social networking sites appear and disappear frequently, the overall trend is becoming increasingly established as part of how we interact with each other. Some sites appeal to no particular sect of society, and others (like MySpace) begin by providing niche services. Originally used by the lonely (like Seth on *The O.C.*) or the awkward (*Scrubs*' Elliot Reed), online networking is quickly becoming established as a mainstream technology (Gross & Acquisti).

The current landscape of online networking is dominated by several players. Friendster, one of the forerunners, still holds a strong hold in the field with a claimed 27 million members ([www.friendster.com](http://www.friendster.com)). The Facebook ([www.facebook.com](http://www.facebook.com)) caters specifically to university and college students, and currently has an estimated 7 million accounts (Duffy). Several social network analysts identify LinkedIn ([www.linkedin](http://www.linkedin)), a professionally oriented service, and Google's Orkut ([www.orkut.com](http://www.orkut.com)), as significant network services. Fox Interactive Media's recently purchased MySpace ([www.myspace.com](http://www.myspace.com)) hosts over 66 million accounts and is one of the fastest growing sites on the internet, at home and on a global scale as well ("MySpace... Taking over the world").

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The intention of this paper is to review social network theory, particularly in relation to identity, privacy, and the sharing of information. The characteristics of computer-mediated communication (CMC) will also be briefly visited. The impacts of online social network (OSN) services will be then considered in light of this foundational review. Neither community nor communication are static structures, and this paper aims to cover the most recent shifts to both, and to discuss both the benefits and the liabilities that come with increased use of online community tools.

*Social Network Theory*

A social network is “a map of the relationships between individuals, indicating the ways in which they are connected ... ranging from casual acquaintance to close familial bonds” (Wikipedia). Anywhere you look, and any way you look, you will see social networks. Social network analysts “seek to describe networks of relations as fully as possible,” identifying patterns within networks, and “trac[ing] the flow of information (and other resources)” through the networks – all with the goal of identifying the effects networks and networked relationships.

Specific networks can either be considered as connections related to a particular individual (“Ego”) or as a group of people defined through a particular structure or institution (“whole” network approach). An ego-centred approach will reveal the range and breadth of an individual’s connectedness, and the diversity of information and resources that are available to them. Whole network analysis shows which members of the network are more or less connected, which members act as central figures, and those who act as bridges between groups. (Garton, Haythornthwaite, & Wellman) Both

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MySpace and Facebook feature a profile (see Appendices A & B for an example) for each member, displaying their network of connections (ego approach). Facebook is also structured as a series of whole networks, containing separate environments for each university. Facebook, therefore, is able to identify central and peripheral members within each university network. The goal of any network analysis is to look beyond individual attributes and find larger patterns: what is being exchanged that allows the network to sustain itself, and what benefits are received from being active in the network.

Wellman argues that we are living in a time where networks are the primary form of social organization, and that the shift from neighbourhoods to networks has transformed the traditional structure of community (Wellman 2005). Although he fails to specify this, Wellman is actually discussing a shift to ego-centred networks. Our communities used to be defined by those that were geographically close to us. We have moved inside our homes and no longer see the same people everyday, becoming members of networks rather than groups. With personalized and mobile communication services, Wellman proposes that we are now in a person-to-person oriented society. We see our worlds not as a community of neighbours brought together by location, but rather as a buddy list of contacts connected by an individual. Social network services not only are the technical realization of this, but also open the network beyond direct connections (our buddies), to include our second and third degree connections as well (our buddies' buddies, and their buddies).

Each social network is characterized by its richness of cues, the visibility of participants, and the timing of exchanges (synchronous or asynchronous). A purely face-to-face network can be considered to have high richness of cues, as well as high visibility

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of participants, and synchronous exchanges. A highly mediated network would have very low cue levels (text content only), anonymous participants, and asynchronous messaging. Most networks lie somewhere in the middle of this range, and employ a variety of both online and offline methods of interaction to maintain their connections – such as a combination of face-to-face and several mediated methods (phone, email, SMS/text messaging, etc). As a side note: reduced cues have been associated with “uninhibited exchanges, increased participation across gender and status, increased participation of peripheral workers, decreased status effects and lengthier decision processes” (Garton, Haythornthwaite, & Wellman). An extremely rich cue environment could then be suggested to inhibit exchange, decrease participation across gender and status, decrease participation of peripheral members, and lead to shorter decision making based on the dominance of central views.

Within a network, members are connected by ties, formed when a pair of actors shares a focus: “the more constraining and/or the greater number of foci they share, the more likely it is that they will form a tie” (Donath & boyd 77). Each tie is defined by content, direction and strength, and can be based on one or more relationships (Garton, Haythornthwaite, & Wellman). When considering a social network, it is important to ask whether the content, such as information, resources, or support, is significant and beneficial to the recipient. We also need to consider whether the relationship is directed from one individual to the other, or undirected (flowing both ways). Ties are considered either strong, weak, or absent. Theory suggests that “it is unlikely that anyone could sustain more than a few dozen strong ties...” (Granovetter 1973; 1361,1375). Cited in Donath & boyd, Wellman has “observed that a typical personal network include[s] 3-6

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close and intimate ties, 5-15 less close but still significant ties, and about 1000 more distant acquaintances” (Donath & boyd 80). Granovetter suggests that “... the strength of a tie is a ... combination of the amount of time [work], the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie” (Granovetter 1973; 1361).

Donath and boyd assert that “the expenditure of energy to maintain a connection is a signal of its importance and of the benefits it bestows” (80). The most straightforward interpretation of this statement implies that the more work performed on a connection, the more important and beneficial it can be assumed to be. This is misleading. Granovetter and the referring body of follow up research suggest that strong and weak ties provide very different functions for an individual. Strong ties “have greater motivation to be of assistance and are typically more easily available” (Granovetter 1983; 209), and are the best source for social support (Donath & boyd 79). Strong ties are high maintenance, and take more work than weaker ties (Donath & boyd 79, Granovetter 1983; 210). Weak ties are “generally infrequently maintained, non-intimate connections” (Garton, Haythornthwaite & Wellman), often acting as bridges between subgroupings within the network (Granovetter 1983; 202): “... each tie not only gives egos direct access to their alters but also indirect access to all those network members to whom their alters are connected” (Garton, Haythornthwaite & Wellman). Weak, bridging ties therefore create paths to information and resources. While strongly tied individuals are more likely to share resources with each other (Garton, Haythornthwaite & Wellman), weak ties open doors to information beyond what is available in the immediate social circle of the individual (Granovetter 1983; 209): “...

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individuals with few weak ties will be deprived of information from distant parts of the social system and will be confined to the provincial views of their close friends” (Granovetter 1983; 202). Strongly tied individuals are very likely to have several similarities, including similar networks, creating an insular environment. Weak ties are the exits from the clusters created by strong tie groupings. (Granovetter 1973; 1362) It is important to note that while strong ties requires a higher level of attention and effort, weak ties also have a cost to the user, regardless of whether it is significantly lower. Returning to Donath and boyd’s assertion that increasingly beneficial ties require increased work, the lower cost of weak ties does not necessarily equal lower benefit to the individual. Strong and weak ties both place different levels of demand on network members, both are required in a healthy network as they meet different needs of the user. It is not possible to equate a tie’s significance simply to the amount of effort required to maintain it.

*Mediated Communities, Mediated Communication*

Wellman’s proposal that we have shifted from neighbourhoods to networks has a second implication. We have discussed the shift from place-based community to person-based community. Not only are people building and maintaining networks of connections based on the individual rather than the locale, they are using mediated methods to do so: “online relationships are filling empty spots in people’s lives now that they no longer wander to the local pub or café to take up with their neighbors[sic]” (Wellman 2005). Communication technologies enable interaction to transcend space and time, allowing asynchronous communication over distance. Users no longer have to be

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near each other to maintain a relationship, and they no longer even have to be available at the same time. These are two of the most significant shifts that have risen from computer-mediated communication.

Individuals very rarely belong to only one network. Normally, people claim membership to several networks, “each based on different types of relationships and, perhaps, communication media” (Garton, Haythornthwaite, & Wellman). “Identity is faceted; we have different interests, beliefs, traits, etc and share different ones with different people” (Donath & boyd 74). When multiple networks employ the same media or setting, the result is often an overlap of an individual’s self-representation and the information he or she has disclosed (boyd). For example, a single youth may participate in sports as well as academics, or any two other areas. In a high school of substantial size, the youth may be faced with juggling two different sets of interests and acquaintances within the student body. Online, as social network sites get larger, members are starting to adjust their profiles to accommodate viewing by several different networks. Time and space are used in the physical world to “keep incompatible contexts of our lives separate,” but now with messages that are publicly displayed and archived, alternative measures will have to be employed to take over this function.

Joint to CMC’s ability to overcome distance, is the ability to overcome other obstacles to connection as well. Hiller discusses the powerful functions that CMC provides for migrants. “New ties, old ties, and lost ties” studies the use of online communication technology by members of the Newfoundland diaspora who have relocated to Alberta. The study strongly demonstrates that online relationships help sustain earlier and/or continuing connections, allowing the migrant’s network to travel



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with him or her. Online communication also assists the migrant found new relationships in the new location (Hiller 744). Hiller also finds that users do not employ a single communication technology exclusively but rather use multiple formats, “the use of one format often enhance[ing] the use of other formats” (737). Traditionally, each format serves a particular function (chat, information, etc.). Online social network websites are considerably unique in that they provide access to several forms of communication (bulletin boards, instant messaging, private and public asynchronous messaging, and blogging), all through a single multi-purpose network. Without OSN websites, individuals would have to use a different access point for each desired format. Online technologies should not be seen as being used in the place of offline communication methods but simply as additional options available to the community. Participants in Hiller’s study revealed that even though online methods were lower in cost, the telephone still played a significant role in maintaining networks (Hiller 743)

When building or maintaining networks through computer-mediated communication, identities face being perceived differently than in non-mediated contexts. In the absence of face or voice, the richness of cues by which to gauge individuals as well as their intended meaning is greatly diminished. Further, while there *are* signals to work with online, many are considered “prone to deception” and subject to unstructured interpretation. CMC users “frequently build stereotypical impressions of their communication partners” by over-emphasizing what few cues are accessible (Walther in Hiller 744). To balance this weakness, users develop strategies of verifying the identities of those with whom they interact. Hiller’s observation of the online Newfoundland diaspora found that new participants were almost completely ignored until they

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confirmed their authenticity by citing their home community. Language patterns are also expected to remain consistent with the place of origin's speech community. (Hiller 744-745)

The patterns discovered in Hiller's study confirm Wellman's proposal that CMC is already deeply integrated into the culture's communication strategies. When we see users intentionally accommodate and adjust complex social processes such as the verification of identity, we are seeing computer-mediated communication come alive through human use and being applied to meet human needs. Mediated communication, such as writing or telephone, are nothing new to us and it seems that CMC is quickly becoming accepted as mainstream as well.

*Online Social Networks*

As mentioned earlier, online social network (OSN) websites are a form of communication technology that do not conform to the mould set by other online services. Donath and boyd define such websites as "on-line environments in which people create a self-descriptive profile and then make links to other people they know on the site, creating a network of personal connections" (72). These websites are built around the connections of user to the other individuals within the site's membership, and these connections are usually superficially binary in that users are either connected or they are not. The website provides a variety of different communication methods that the user can employ to interact with and maintain his or her social network. Social networking services are usually built on an initial focus, such as dating, professional networking, or a special interest. The MySpace network began as a forum for musicians to promote

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themselves, and expanded to allow first supporters of musicians, and then friends, and kept expanding until it became a mainstream phenomenon. Most OSN sites define members with real names and include photographs – MySpace is potentially pseudonymous but many users chose to disclose their real name as well as other identifying information regardless (Donath & boyd 72). Similar to MSN messenger, MySpace defines users by external email addresses (which MySpace does not make public to the network) and allows users to have changing display names and display images, users are able to adjust their “face” so to speak whenever they want.

The “public display of connection,” or the disclosure of members’ entire social network is one of most significant functions of OSN websites:

“By making all of one’s connections visible to all the others, social networking sites remove the privacy barriers that people keep between different aspects of their lives.” (Donath & boyd 78)

The ability to nuance your online visibility is an important need that large scale social networks will need to accommodate if they want to see their services expand to mainstream use (Donath & boyd). As it stands now, however, the display of connections on social network websites are typically “mutual, unnuanced, and decontextualized” and likely to cause significant clashes between sub-networks (Donath & boyd 72). Anecdotal evidence suggests that such clashes are already a significant inconvenience to users.

OSNs are usually populated by clusters: when one member of a group joins, the remaining members of the cluster follow suit. The initial profiles (see Appendices A & B for an example) of members are often suited to their face within the cluster that motivated them to join the website. As the software diffuses through society, more and more of an individual’s contacts become members and the original profile presentation may no

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longer be appropriate to this expanded network. Donath and boyd document an example of this where a teacher had to adjust her Friendster profile when students from her school began appearing on the site, which she had originally used as a non-professional representation of herself (non-professional is not used here in a negative sense).

Without the barriers of space and time, other forms of identity control must be introduced. Without the ability to restrict student visibility of her profile, the teacher would have had to modify her self-representation, removing several signals of membership belonging to her social group (i.e. comments regarding attending the Burning Man!, and risqué photographs). Without the ability to nuance her visibility, she would have had to choose between satisfying either professional or social expectations. On a system such as MySpace, where very few visibility controls are available, users may have to resort to creating multiple accounts to maintain barriers between networks.

Online interaction is marked by isolated interactions where users are unable to form their own judgment of an individual's identity. Social website profiles (see Appendices A & B for examples), however, are somewhat permanent and allow users to repeatedly interact with each other, creating more developed understandings of each other. Members also invest a great deal of time and attachment to the profiles they create, constantly updating and modifying – in the case of some services, spending hours using various scripts to customize the appearance of the standard template provided. Everything from background image and font, to table borders and cursor icons, is adjusted as a method of self-expression.

The semi-permanent and fully-public nature of these profiles enforces authenticity. Conflicts that appear in the presentation are likely to be pointed out by the

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monitoring network of other members, and the cost of deception is the loss of the effort spent creating the profile. (Donath & boyd 73) Many OSN websites have very low registration requirements and often make no attempts at identity verification (Facebook is a notable exception, requiring a valid university email address). Consequently the cost of creating a new account is relatively low, and therefore so is the potential cost of being caught in a deception. By investing time and work into developing a highly customized profile (see Appendices A & B for example), the user therefore raises the value and the integrity of his identity within the network. The number of connections displayed, and the number of testimonials received, also act to add to the user's credibility.

The public display of connections is one of the strongest ways to validate your identity in an online environment: "social status, political beliefs, musical taste, etc, may be inferred from the company one keeps" (Donath & boyd 72,73). To add another user to your network, there is normally a mechanism where an individual is able to approve, deny, or ignore your request for connection (MSN messenger, MySpace, and Facebook all include this feature). Through this process, each connection displayed on your profile has consequently viewed and accepted your identity. The display of connections also serves to make a user accountable to his entire network; any unsatisfied party is given the means of reporting poor behaviour or deception to the rest of your network.

In the face-to-face environment, dropping names is a method of communicating status or inclusion – and is done selectively. Connections also serve as a form of social currency and can be revealed only in situations where something else can be gained in return. Online social networks make this information readily available and no longer distributed at the discretion of the user. Is the display of one's network therefore a loss of

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social currency? Gross and Acquisti suggest that online networks are binary: users are either connected, or not; “friend or not” as mentioned earlier (73). It is the suggestion of this paper, that the binary nature of connections is superficial. OSN websites provide a variety of means for users to indicate a closer connection to particular individuals, and complementary means for the network to verify this closer relationship. MySpace, for example, allows users to select eight specific “friends” to display on the opening page of their profile (see Appendices A & B for example). When two users mutually include each other in their “Top 8,” this reflects an undirected tie, and verifies the connection more strongly than if one user includes the another, but does not receive reciprocal inclusion (this features is unique to the MySpace network). Receiving testimonials (or MySpace comments, or Facebook “wall posts”), is another active way for users to emphasize your connection. A user who includes you in their top eight, displays photos of you, references your name, and actively posts comments on your profile, signals a stronger (not necessarily strong) connection to you than a user that performs none of these actions. While having a connection (or not) is a binary characteristic, users have developed strategies for strengthening a connection or leaving it unattended and unacknowledged.

The public display of one’s network, even to those who are not included in it, does mean that individuals no longer retain gateway privileges between connections and are no longer able to use the right of introduction to gain returns. It also means that everyone else’s connections are reversely available to you. In such an open system, social conventions can be expected to emerge that return some measure of control to users, similar to the development of strategies for nuancing strength of connections.

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Observers of social technologies have repeatedly seen services repurposed by users to achieve various goals. As a brief example, on MySpace, many users set their profiles as private by lowering their age to under 16 years old. MySpace has provided no way for adult users to hide their personal information and connections from view, but by entering a falsely younger age users are able to regain control over their network and its visibility.

However, Donath and boyd remind us of the value of the information that is being made available online – either directly through a user’s own disclosure, or indirectly by the disclosures of those connected to them. This is true even in the absence of online network services, network information is extremely valuable. An individual was able to use information gathered covertly from a trusting friend to integrate himself into an elite community without any suspicion. While the individual knew relatively little about each member of the community, he was still able to perform believably as a valid member. Donath and boyd’s anecdote is not an isolated case: impersonating a trustworthy party to gain information, “phishing,” is an established danger of online activity.

“To mine information about relationships and common interests in a group or community, a phisher need only look at any one of a growing number of social network sites, such as Friendster (friendster.com), MySpace (myspace.com), Facebook (facebook.com), Orkut(orkut.com), and LinkedIn (linkedin.com). All these sites identify “circles of friends” which allow a phisher to harvest large amounts of reliable social network information.” (Jagatic, Johnson, Jakobsson, Menczer 2)

Participants in online communities willingly post personal and social information that make their networks susceptible to strangers acting as acquaintances (Donath & boyd 77).

The display of network connections can also be beneficial to users, even balanced against the loss of privacy. Being members of the same social network website is lightly

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constraining, similar to living in the same neighbourhood. Members are only slightly likely to interact with each other simply on the grounds of being registered with the same service. Visibly appearing in the same people's networks, however, acts to make the connection stronger and interaction much more likely and endowed with an air of social pre-approval. (Donath & boyd 77) The traceability of connection through the network, along with computer-mediated means of communication, lower the "social overhead" involved in initiating contact with parties that are less well known. Further, Garton, Haythornthwaite and Wellman suggest that "an electronic tie combined with an organizational tie is sufficient to allow the flow of information between people who have never have met face-to-face." The display of connection creates a transparent network of relations where the need for introductions and references are no longer directly needed – because each user is visibly trailed by her or her connections while moving through the network. Gross and Acquisti propose that users must be receiving benefits in exchange for the public display of information and connections, and that these benefits serve to counter the costs paid in loss of privacy (78)

*Discussion*

The literature on online social networks is starting reveal widespread agreement that CMC in general, and regarding OSN in particular, support networks swollen with increased numbers of weak ties (Gross & Acquisti 73, Donath & boyd 80, Granovetter 1983 210):

“...the number of strong ties an individual can maintain may not be greatly increased by communication technology (although such technologies might decrease the importance of physical proximity), but that the number of weak ties one can form and maintain may be able to increase substantially, because the type



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of communication that can be done more cheaply and easily with new technology is well suited to these ties. If this is true, it implies that the technologies that expand one's social network will primarily result in available information and opportunities – the benefits of a large, heterogeneous network.” (Donath & boyd 80)

The maintenance of individual connections takes very little connection when the tools of an OSN site are put into action. However, the work of each tie can add up and overall network can require a high amount of maintenance. While we are not working according to Donath and boyd's proposal that more work equals more significance, applying this concept here would indicate that the whole network has a great deal of significance to the user, possibly more than the individual ties themselves. Referring back to Granovetter's "Strength of Weak Ties":

“From the individual's point of view, then, weak ties are an important resource in making possible mobility opportunity. Seen from a more macroscopic vantage, weak ties play a role in effecting social cohesion” (1373).

Increased overall network size and increased weak ties have several significant impacts on the individual as well as the community at large. Where strong tie relationships are often between similar individuals, weakly tied individuals have less in common (Granovetter 1983, 204)s. Each weak tie therefore serves to increase the heterogeneity of the network. Weak ties also create pathways to information, as discussed in the review of social network theory. Each additional weak tie therefore increases the resources available to the individual, and the amount of novel and diverse information contained within the network. Weak ties are the most efficient vehicle for social or cultural shifting throughout a society – cultural diffusion is made possible by the bridging links between cohesive groups that allow ideas to travel between otherwise tightly knit clusters. If diffusion was radically efficient, the impact of bridging ties would be the homogenization

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of culture but instead ideas are taken up by subcultures, some eventually finding a home in larger societal contexts. Even new concepts are establishing themselves in the mainstream, newer ideas are emerging continually on the peripherals of society and beginning the journey of cultural diffusion all over again (Granovetter 1983, 215).

The emphasis of social networking sites seems to be on both whole and ego network growth, and we are seeing people use the sites to rapidly acquire large numbers of new connections (Donath & boyd 80). The pertinent question is whether social network technologies are successful in enabling us to maintain larger numbers of ties. While weak ties *are* less costly (Donath & boyd 80), in terms of work, compared to more intimate relationships, there is still a cost associated with each tie added to the network even if it is a reduced cost. What are the costs and benefits to whom the web is calling Friendster and MySpace “whores:” individuals engaging in widespread, promiscuous connection. This is a subject meriting further inquiry and ethnographic research. Regardless of the balance between cost and benefit, online social networks are “both vaster and looser than their offline counterparts” (Gross & Acquisti 79).

*OSN Functions*

Without ethnographic study of the networks operating through OSN websites, it is not possible to fully elaborate on the functions provided by each. The following is a brief discussion of the tools that are common among popular networking sites. In general, the sites sometimes function as an awareness or management tool, “a way to be reminded of friends and acquaintances,” and sometimes the sites are opportunities to make new connections (Donath & boyd 80).

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The public display of connections (Donath & boyd) is significant as an innovation that is otherwise not available via other computer-mediated communication tools. While not unique to OSN's, the member profile (see Appendices A & B for example) is the main feature of the sites and is where most of the information and content resides. Previous formats, such as bulletin board communities and blog networks, have included sometimes extensive member profiles but none as detailed and elaborate as those on OSN's. Bulletin boards, blog entries or whatever the service itself is stands as the main focus of non-OSN websites. With online networking services, the profile is the dominant feature. danah boyd effectively describes the appeal of personal profiles, and possibly the motivation for creating such developed performances of identity: "... blogs require having something to say while profiles let you write yourself into being via collage" (2006). A person's name and image, posted as an accompaniment to each contribution and participation in network activities, and is linked back to the member's profile. The profile also acts as a gateway to each of the communication functions offered by the site.

The profile included as Appendix A is very typical of the profiles found on the MySpace network. The user has customized the template, including an externally hosted background image that does not appear in the printed version. She includes a clear close-up photo of her face and has filled in each section of the profile with detail (General Interests, Music, Movies, Television, Books, About Me, etc). A section below her display name, photo, and basic details includes links to various methods of contacting the user. Not shown on the printout, is a link at the bottom of the page that can be used to leave a publicly visible comment on her profile.

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Appendix B is an example of a profile from the Facebook website. The user, also coincidentally female, includes a photo including her face, an automated listing of her friends within the network, and voluntarily provided information regarding her school, sex, birth date, hometown, email addresses, cell phone number, and favourite music, TV, books, and quotes. The profile also indexes photo albums that the user has uploaded and tagged, groups that she is a member of, and her 10 most recent “wall posts” left by other users. She has listed herself under actual first and last name. This is typical of Gross and Acquisti’s study of Facebook profiles at Carnegie Mellon University, which found that 90.8% of profiles contained an image, 87.8% reveal birthday, 39.9% list a phone number and 50.8% state their current residence. It is noted that Friendster has a higher instance of joke images than Facebook which is touted as a safe environment tied to offline structures and gated by requiring a valid university email address. (Gross & Acquisti 74) MySpace and Friendster make no claims of direct affiliation with the offline world and have a lower emphasis on “official” representation.

Aside from the display of connections and detailed personal profiles, several other practices have established themselves among social network users. Possibly the least visible activity of social network sites, but potentially most popular, is “lurking.” The wealth of constantly updated and detailed information included on profiles, and the constant flow of public person-to-person communication provides constant media to be consumed by members as they click around the network – observing and reacting to what is posted for them to peruse. Even when users are not occupied in direct participation in network activities, they are still “doing” just by being logged into the site – “hanging out” and “laughing, exploring and being entertained” (boyd 2006). In contrast to the indirect

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gathering of information through “lurk” behaviours, members are also able to directly broadcast content through posting bulletin messages. On MySpace, users are able to compose messages and have them displayed in the mail centre of all of their contacts – the more “friends” that you have, the more people that will have your bulletin delivered to them. Friendster’s “shout out” function performs similarly – displaying broadcast messages from your contacts in the shout outs section of the users control centre.

MySpace, Friendster and Facebook all include birthday alert tools, reminding users when a connection has an upcoming birthday. MySpace and Facebook both allow users to create custom “groups” of users; on MySpace group memberships can be either fully open, closed, or invitation only. These allow clusters to exist structurally within the overall network. “Group” pages list the users who are included in the membership, and provide a discussion/bulletin board tool for members of the group to publicly communicate. Facebook groups also include a section displaying “wall posts” submitted by members. Each user’s profile page includes a list of each of the groups that the user is a member of.

The combination of all these features, and others that are unique to particular websites, is a sort of watercooler effect (boyd 2006). Originally, there were far fewer possible activities included in these sites but the new players, as well as the old players that are still in the game, have heeded the user and expanded the number of ways users are able to interact with each other. MySpace is very flexible, allowing media and programming language to be included in submissions and in profiles – what functions are not provided by the website itself, the users are often able to code in manually through the many open windows in the site’s structure.

*Conclusions and Future Research*

danah boyd recently published an informal discussion of why MySpace has become such a widespread, heavily populated network. She suggests that “social technologies succeed when they fit into the social lives and practices of those who engaged with the technology” (2006), and credits MySpace with effectively accommodating the desires and preferences of its tens of millions of users. Each online social network website provides a wide variety of community tools, tailored to the spin each site puts on itself. Facebook accommodates the camera happy university crowd with seemingly unlimited photo album capacity, and allows users to search not only for other students at their institution but also search for users in their classes who would be willing to discuss specific assignments or course-related content. The Friendster of now is much different than the original network that is often credited with being the first successfully large scale OSN.

What this paper has hopefully revealed is an introduction to social network theory, the shift towards computer-mediated communication and the consequent impacts on communities and communication, as well as an overview of how online social network services fit into the current communication environment. No longer are network websites something for primetime television to joke about. They have effectively found a home in a society that has become Ego-centred, focused on the individual and his or her network of connections. Several websites have listened effectively to users and developed tools to support the activities of network members, and have been rewarded with rapidly expanding membership and recognition as a significant part of how

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individuals communicate with each other. Further research on the costs and benefits to transparent online networking, and the motivations behind trends in user behaviours (such as the detailed disclosure of personal information) is the next step for academics interested in this area. As noted, several sites are now so widespread that members are starting to experience clashes between their previously separated offline sub-groups. When the Internet was presented as a universal network where similar overlaps could occur, society moved in the direction of warning against over-disclosure when interacting with others online. Social networking sites are marked by supporting ever increasing disclosure and personal expression, which unless accommodated somehow, will exacerbate clashing of personalities. Is a universal social network possible? Will OSN services be able to provide ways of allowing users to fully express their multi-faceted identities through a single profile and a single network of members, or will users begin expressing their various personas through multiple profiles and accounts on a single network, or by employing multiple networks to separate different areas of their lives. These are all questions that future research should address.

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This informal, self-published essay was originally intended as a blog responding to questions of why MySpace differs from Friendster, and why it is foreseeable that MySpace will not face the rapid demise of a fad such as Friendster experienced. The Friendster experience was marked by a commitment to structuring the site to promote its original purpose (online dating), and strong clashes between administration and users. Friendster often deleted profiles of individuals re-purposing the technology in anyway that undermined its functionality as a dating service, whereas MySpace has continually added functions and used user innovations as indications of how the site should evolve and expand. boyd places the value of MySpace in identity development and expression, particularly for teens and 20-somethings.

Several other differences between Friendster and MySpace are also noted: such as visibility of content (all MySpace user profiles are openly visible to anyone with a MySpace account).

boyd, d.m. (2004). "Friendster and Publicly Articulated Social Networking" *CHI 2004*: 1279-1282.

A short paper focusing on the OSN service, Friendster, after reviewing the history of OSN in general starting with sixdegrees.com. Boyd discusses users re-purposing technology for their own strategies and the conflict between administration and users over the removal of "fakester" accounts. Good clear breakdown of the elements of the website that can be used to describe myspace. Discusses membership patterns such as cluster-driven registration and recruitment through voluntary member-snowballing of their own social groups. The description of profile information encouraged and displayed raises questions of datamining (particularly because of the structured format of information on profiles), but is not addressed in the paper. Friendster relationships are binary, friend or not friend. Privacy options and controls are discussed. Honesty through peer visibility and individual awareness of presenting multiple identities in every day offline life are discussed. Relating to myspace, friendster users navigate through friend's displayed networks rather than through the social directory. Friendster allows users to set up degrees of disclosure for each degree of relation, whereas myspace provides no privacy options for adult users.

Donath, J. and d. boyd (2004). "Public Displays of Connection." *BT Technology Journal* 22(4): 71-82.

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Defines online social networks and describes the service in general with reference to several websites/providers (Friendster, Orkut, LinkedIn) to identify overall patterns and impacts. Discusses the online display of connections as a salient feature across all OSN websites, and the effects this display has on the displayer and the displayed (especially in regards to overriding the bridging role of weak ties/introductions). Trust is established through peer verification of profile and through availability of contact information for an individual's network and signaling theory; Feld's work regarding pseudonyms and the cost of creating them is also introduced. The value of information is discussed in relation to the sixdegrees.com scandal where a stranger was able to believably present himself as a member of a closed network through presenting personal information of members that he had gained unethically. Wellman's work regarding average quantities of intimate and casual connections is discussed and it is hypothesized that OSNs will allow the maintenance of weak ties (and the sharing of information and opportunity) as well as reduce the importance of offline proximity between individuals.

Garton, L., Haythornthwaite C., & Wellman, B. (1997). "Studying Online Social Networks" *Journal of Computer Mediated Communication* 3(1). 20 January 2006. <http://jcmc.indiana.edu/vol3/issue1/garton.html>.

This article by Garton, Haythornthwaite & Wellman (1997) gives an overview of (online) social networks, including several key definitions. It discusses the relevance of SN research in understanding behavior and attitudes of network members, and the characteristics of connections between members of a particular network. Literature on computer mediated communication versus face-to-face communication and the impacts of each on the other is reviewed and contrasted. The ego and whole network perspectives are discussed and the research values of each is explained. Research methods for social network analysts are reviewed, and several introductory questions are given.

Granovetter, M.S. (1973). "The Strength of Weak Ties." *The American Journal of Sociology* 78(6):1360-1380.

Granovetter's original paper on the strength of weak ties explores the characteristics of strong and weak (and absent) connections between social pairs. What gives a tie strength, and what can be used to measure tie strength is explored. Overlaps in social networks are defined as more common when individuals share ties (two individuals strongly connected to A are also likely to be at least weakly if not strongly connected to each other). Individuals sharing strong ties are also expected to share other character traits, beyond social connections. Weak ties are given the privilege of acting as bridges, allowing information and resources to diffuse between clusters. Strong ties are charged with insulating information and preventing it from reaching the wider/macro-level network. There is also a discussion of the path of innovation

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through social groups, which could be applied to the adoption of OSN services such as myspace or facebook. “The fewer indirect contacts one has the more encapsulated he will be in terms of knowledge of the world beyond his own friendship circle; thus, bridging weak ties (and the consequent indirect contacts) are important in both ways” (1371). “... weak ties, often denounced as generative of alienation (Wirth 1938) are here seen as indispensable to individuals’ opportunities and to their integration into communities; strong ties, breeding local cohesion, lead to overall fragmentation” (1378).

Granovetter, M. (1983) “The strength of weak ties: a network theory revisited” *Sociological Theory* 1: 201-233.

Granovetter’s 1983 review of his original 1973 writing reviews literature that has applied and tested his SWT theory over the ten years past. The overall points that weak ties act as bridges, conducting the flow of information and resources between group clusters and society-at-large; as well as that individuals sharing strong ties are likely to share similarities as well as ties. “Weak ties provide people with access to information and resources ... but strong ties have greater motivation to be of assistance and are more easily available” (209). There is detailed discussion of class and employment related explorations of SWT but this will not apply to the paper at hand. The discussion of the role of weak ties in the macro-level homogenization of subcultures, and cultural diffusion, applies particularly to the myspace community and its origins.

Gross, R. and Acquisti, A. (2005) “Information Revelation and Privacy in Online Social Networks.” (Powerpoint presentation). *Heinz Seminars*.

Gross and Acquisti’s presentation position Online Social Networks between classified ads and blogs, in terms of communication media. They present a brief history of online social networks and the various service providers that have risen and fallen in the last ten years. Online versus offline social networks are compared, with attention to social network theory and possible privacy implications. Facebook.com is analyzed specifically.

Gross, R. and Acquisti, A. (2005). “Information Revelation and Privacy in Online Social Networks.” *WPES’05*. 71-80.

This article uses facebook.com to consider several features of online social networking services. OSN sites are acknowledged as having been adopted at the mass level, and are characterized as using personal profiles as their key feature: “a representation of theirsel(ves) (and often of their own social networks) for others to peruse...” (71). The role of technology in maintaining wide networks of weak ties is discussed; it is concluded that online social networks are both “vaster and looser than their offline counterparts” (79). Gross and Acquisti also review the lack of security measures, and the ease of joining at these sites. It is reviewed that

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users tend not to change default settings of services, and the facebook is observed as having default settings allowing for liberal disclosure of information. There is some demographic breakdown of the member community of facebook.com. It is also concluded that "... users may be pragmatically publishing personal information because the benefits they expect from public disclosure surpass its perceived costs." (78)

Hiller, H.H. and T.M. Franz (2004). "New ties, old ties and lost ties: the use of the internet in diaspora." *new media & society* 6(6):731-752.

Discusses use of CMC (bulletin boards mostly) by members of the Newfoundland diaspora who have relocated to Alberta. "Virtual community has the potential of not only linking people but also bonding them and creating emotional ties" (732). Refers to writing by Wellman and Walther to discuss online community versus offline, the similarities, differences and cross-overs (ie. Online communication repairing or maintaining offline relationships). CMC allows relocated individuals to maintain relationships in the place of origin, as well as to make connections to other relocated members of their diaspora. Raises the discussion that various CMC tools serve different functions; myspace fuses several of these functions in a multi-purpose service, all through one set of profiles and members. Discusses the purpose of online networking as sharing information (relates to bridging ties in Milgram (1973)). Signals of identity and online trust/verification processes and in-group feelings are discussed and further reading is referred to Walther 1997.

Wellman, B (2005). "Community: from neighborhood to network." *Communications of the ACM* 48(10):53-55.

Wellman's short article discusses the shifts in community, through Internet and CMC. Community is now defined socially (not spatially) and is through person rather than the location. CMC is cited as being supportive of fostering diverse, specialized, bridging relationships – but also confining the individual to the portal (the home, the internet connection), an argument that may fade with the rise of SMS and wireless communication. At some points Wellman sounds very negative towards CMC: "[CMC] social circles tend to be sparsely knit (most participants are not directly linked), with limited control over participants' behavior and limited commitment to their well-being"; and otherwise optimistic about the role of new communications technology in a social environment that will shift away from old forms of community regardless: "Online relationships are filling empty spots in people's lives now that they no longer wander to the local pub or café to take up with their neighbours."