Personal Relationships: On and Off the Internet[1]

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From Computer-Mediated Small Groups to the Internet

That the internet is a communication medium for personal relationships is obvious. That the nature of the internet affects the nature of personal relationships has often been proclaimed – recall McLuhan's "the medium is the message" – but less often proven. How might the internet have an impact?

Early debates about computer mediated relationships began before the Internet. Research was dominated by lab experiments focusing on (a) how different types of computer mediated communication among dyads fit specific *tasks* and (b) how *group norms* determine the appropriateness of using different media in particular situations (see the review in Haythornthwaite & Wellman, 1998). Researchers examined whether the limited "social presence" of computer media (as compared to face-to-face contact) affected the media people choose to use, their perception of the messages they received, and their perception of the people who sent messages to them (see Kling, 1996; Sproull & Kiesler, 1991). For example, Daft and Lengel (1986) argued that people should choose rich media (e.g., face-to-face contact) over less rich media (e.g., impersonal written documents) when communicating equivocal or difficult messages. Researchers also found that users considered the lower social presence of email to be less appropriate for intellectually difficult or socially sensitive communications (Fish, Kraut, Root & Rice, 1992), and that the type of information exchanged affected the types of media used (Markus, Bikson, El-Shinnawy & Soe, 1992). This laboratory-based research often treated people as if they did not have positions in social systems and often assumed that they had free choice about which media to use. Reading this literature is to enter a world that pays scant attention to matters such as power, gender, socioeconomic status, norms, differential resources, or complex bundles of interactions and alliances (see also the critique in Walther, 1997)

Although the internet has captured popular attention as a communication and information medium, a substantial body of research has only developed recently that

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places understanding of computer mediated communication in broader social contexts. Unlike the earlier lab experiments on dyads and small groups, internet research of personal relations has been principally based on surveys, interviews, and observations of how people use computer mediated communication in the context of their everyday lives. In the past decade, research has moved from social accounting – asking how many people use the internet to communicate – to delving more into how the internet intersects with their social practices.

This chapter discusses the role of the internet in personal relationships. It starts with a brief description of the socially relevant characteristics of internet technology and a summary of the debate between utopian and dystopian accounts of internet use on personal relationships. Both of these accounts are inadequate because they take a technologically deterministic approach that ignores the causal role of the individual's need to maintain offline social relationships. Research that examines the internet's role in facilitating communication between family and friends, forming new social ties and neighboring relations shows that the internet is neither destroying nor radically altering society for the better. Rather, research results point to the need for a more holistic account of internet use that places internet use in the broader context of all personal relationships. They suggest that the interpersonal patterns associated with internet use are the continuation of a shift in the nature of personal networks that began well before the advent of the internet. This shift towards "networked individualism" involves the transition from spatially proximate and densely-knit communities to which people belong to more spatially dispersed and sparsely knit personal networks in which people maneuver.

The Social Affordances of the Internet

What are the social affordances of the internet, to use Bradner, Kellogg, and Erickson's (1999) term for how its technical characteristics affect possibilities, opportunities, and constraints for personal relationships?

(1) As internet communication is largely distance-independent in use and cost, it may support more interactions with a greater number of spatially dispersed network members.

(2) The asynchronous nature of the internet, in which senders and receivers of messages do not have to be online simultaneously, also supports interactions at great distances and among people with different temporal rhythms.

(3) The rapidity of internet interactions as compared to intermittent face-to-face meetings and phone calls may foster a high velocity of interpersonal exchange, sometimes ill-considered.

(4) The reduced social presence of the internet may limit its ability to support emotional, nuanced, and complex interactions.

(5) The text-only nature of almost all internet messages can reduce perceived hierarchies as gender, social class, ethnicity, age, life-style, etc. are less visible.

(6) The absence of direct visual or audio feedback in internet exchanges may encourage more extreme forms of communication, sometimes called flaming. People may input messages to screen that they would never say to another person palpably present in person or on the telephone.

(7) The ability of email to be forwarded to others supports transitive, indirect contact, as when messages get sent to friends of friends. This aids the exchange of information that cuts across group boundaries. Such crosscutting ties link and integrate social groups, increasing societal connectivity.

(8) The ability of internet messages to be sent to many people simultaneously allows people to remain in contact with multiple social circles.

(9) The internet's velocity, transitivity, and multiple message characteristics indirectly connect the wired world in six steps or less. Yet, there is significant decoupling in social networks. Hence, information diffuses rapidly through computer-supported social networks, but neither universally nor uniformly.

Utopianism and Dystopianism

Early accounts of the internet's role in personal relationships tended to be assertions and anecdotes. Utopian writers argued that the internet contained an enormous potential that would revolutionize society for the better. They praised the internet's ability to bring together disparate people from around the world into what Marshall McLuhan called the "global village": The internet would allow relationships to flourish in an environment of equality and respect. This world would be so immersive that people would be able to escape the mundane routine of everyday life, becoming at one with collective intelligence (i.e., de Kerckhove, 1997). As John Perry Barlow, a leader of the Electric Frontier Foundation (and songwriter for the Grateful Dead), wrote in 1995:

> With the development of the Internet, and with the increasing pervasiveness of communication between networked computers, we are in the middle of the most transforming technological event since the capture of fire. I used to think that it was just the biggest thing since Gutenberg, but now I think you have to go back farther (p. 36)… In order to feel the greatest sense of communication, to realize the most

experience, . . . I want to be able to completely interact with the consciousness that's trying to communicate with mine. Rapidly. . .We are now creating a space in which the people of the planet can have that kind of communication relationship (p. 40)

At the same time as these utopian writers were praising the internet, another group of dystopian writers were taking the opposite position. Dystopian writers argued that the internet destroys community, leaving individuals isolated and alienated. This camp found life online to be problematic, arguing that online relationships would never measure up to face-to-face relationships of real life. Online life would only take time away from the more emotionally satisfying relationships that could be found offline. In doing so, it would erode the fabric of community life, leaving individuals isolated and alienated (i.e., Kroker & Weinstein, 1994; Stoll, 1995). They worried that ephemeral online identities would trump their offline counterparts. Along these same lines of reasoning, Sherry Turkle (1995) argued that the ability to create multiple personalities in this online world would be so emotionally engaging that it would fracture identity, leading to multiple personality disorders. Anecdotes of gender deception were told and retold (Dery, 1997; Van Gelder, 1985; selections from Bell & Kennedy, 2000) They continue, with a 2004 *New Yorker* cartoon portraying a little old lady sitting at her PC and typing "Oh baby … oh baby … oh baby …" (Duffy, 2004).

Many of these utopian and dystopian accounts were written by a small number of academics and hi-tech corporate folks who were early users when the pre 90s internet was only open to them. By focusing only on internet use common to their lifestyles and personal interests, they failed to consider how most of the population actually *does* use the internet. In doing so, they lost perspective of the internet's true potential for society at large, relying on hyped conjecture rather than informed theorizing. This failure to place internet use into a broader pattern of common social tendencies means that utopian and dystopian writers share an overly simplistic view of internet use. Both assume that the internet actually *does* have the power to pull people away from their everyday lives and immerse them in a world that is radically different from the one in which they previously lived. This assumption – often referred to as technological determinism – attributes a large amount of causal power to the technology itself, ignoring the complex array of social factors that determine how the internet is actually used by the general population. Although the internet does have social affordances – technologically produced social opportunities and constraints – we shall show that its technology does not determine its interpersonal use.

This lack of context is most evident in arguments made by utopian writers. By arguing that the internet has caused the breakdown of physical constraints, allowing people to connect all over the world, utopian writers fail to acknowledge that this has

already been happening for decades. By way of mass transportation and the telephone, people have been maintaining a significant number of their relationships with people who are not located within the neighborhood locale (Wellman, 1979; Wellman & Gulia 1999). While it is true that the internet enables people to communicate around the world at a relatively low cost, the point being made here is that these geographic networks already existed before the internet was invented. For this reason, it was not internet technology that caused the break down of physical barriers, but rather the widespread desire for long-distance communication that helped lead to widespread adoption of the internet. Contrary to technologically deterministic assumptions, internet use has been the effect and not the cause of distant communication with spatially dispersed relations.

Both utopian and dystopian writers also fail to consider social context when they assume that the internet offers an experience which is so immersive that it is divorced from the kinds of interactions that routinely occur in everyday life. They rarely acknowledged that many relationships did not rely exclusively on "real" in-person contact before the advent of the internet. Instead, a large portion of people's personal relationships were geographically dispersed, relying on a mixture of telephone and only intermittent face-to-face contact (Fischer, 1992; Wellman & Tindall, 1993). Moreover, there is evidence that a large majority of the social interactions that occur online are between people who also know each other offline (Quan-Haase & Wellman, 2002). By ignoring the reality of present day relationships, they falsely assume that the internet is actually responsible for this shift, and that it would continue to amplify these social tendencies to the point where individuals no longer socialized in-person at all. While it may be true that some of these writers were never intending to give an account of how the internet is really used, much of the hype they created has spilled over into the media stories and common perceptions about the internet's impact on society.

Fortunately, a body of scholarly research about internet use has been accumulating. While these studies do much to shed light on the ways that the internet is actually being used by the general population, they share common assumptions with both utopian and dystopian thinkers. Many of these studies frame their research questions as addressing the *effects* of internet use. By way of example, one of the most comprehensive and informative summaries of this kind of research is titled *The Social Consequences of Internet Use* (Katz & Rice, 2002). These "consequences" are often conceptualized in terms of interaction with friends and family, formation of new online friendships and neighboring relations. By making internet use appear causally prior to certain outcomes, this research often does not include other social factors that play a fundamental role in shaping internet use.

Although the theoretical justification for these studies may attribute more causal power to the internet than necessary, these empirical studies do much to enrich our understanding of internet use. These projects often drew on large samples of people,

asking questions about internet habits, mental health, and social interaction with friends and family. Findings from these studies will be used to examine the following issues:

1) Does internet use detract from time spent with friends and family?
2) To what extent are people engaged in online relationships?
3) Does the internet affect neighborhood community?

These three issues will help address utopian and dystopian arguments, by providing some evidence about the extent to which people engage in online relationships and if this new connectivity is associated with a change in their lives offline.

After using the current body of research to address these three questions, we will then interpret these empirical observations in a way that contextualizes their existence in the somewhat new and emerging theoretical position of networked individualism.

Contact with Friends and Family – Online and Off

In 1998, the dystopian perspective gained some empirical support when a group of researchers at Carnegie Mellon University published a paper, "Internet Paradox: A Social Technology That Reduces Social Involvement and Psychological Well-Being?" (Kraut et al., 1998). Using systematic evidence, Kraut and colleagues argued that despite the internet's function as a social tool, new internet users experienced lower levels of face-to-face communication with close friends and family. They also found that their internet newbies displayed symptoms of depression, stress, and loneliness after going online. The results of this study captured wide-spread media coverage, confirming in the minds of many that the internet is detrimental to social relationships and mental well-being.

These same respondents were asked a similar set of questions on three follow-ups after the initial observation, results of which were reported in the paper, "Internet Paradox Revisited" (Kraut et al., 2002). These results showed that the negative effects of internet use had dissipated three years later. There were generally positive effects of internet use on social relationships and psychological well-being, especially among people who were highly extroverted. Earlier findings of negative social and psychological outcomes were explained as an effect of inexperience when people first go online. These findings also suggest that internet use itself does not necessarily cause strictly positive or negative outcomes, but rather that internet use is very much tied to pre-existing dispositions, such as extroversion.

Research that records daily activities by use of time diaries finds little evidence of the internet harming social relationships or detracting from time spent socializing in-person. Robinson, Kestnbaum, Neustadtl, and Alvarez (2002) used time diary results

drawn from a sample of 948 Americans, finding few differences in offline communication patterns (in-person and by telephone) between internet and non-internet users. Anderson and Tracey (2001) also used longitudinal time-use diary data drawn from 2,600 individuals living in 1,000 U.K. households, along with qualitative interviews, to examine internet use in daily life. They found little change in time use once respondents gained internet connections. However, they did find that major lifestyle changes, such as changing jobs, very often triggered both the adoption of the internet and changes in daily activities. This implies that relationships between internet adoption and changes in lifestyle are caused by more fundamental events over the life course. Contrary to the musings of both utopian and dystopian pundits, the internet does not have the power to significantly alter people's daily activities.

One exception to these findings is a study by Nie and Hillygus (2002), that uses time diaries to track everyday activities at regular six hour intervals. The sample used 6000 American respondents, who were representative of the American population, except that they surfed the web using the Microsoft Web-TV set-top box. Although the demographic composition of Nie's sample is similar to the demographic composition of the general US population, his respondents were atypical by virtue of the fact that they were early adopters of a new technology and were using a device that was more media oriented than a typical internet terminal. Nie argues that time spent online is largely asocial because it detracts from time spent with others in-person. Nevertheless, Nie's findings fly in the face of other time diary studies that also draw on large representative samples. Moreover, the shift in leisure use from TV watching to internet communication is undoubtedly a shift towards more social behavior.

With the exception of Nie, these time diary results are generally consistent with other large-scale surveys that measure social activity which occurs both online and offline. These surveys also find little connection between internet activity and regular social engagements. Findings from a representative sample of 1,800 Americans in 2000 found no difference in levels of telephone use between users and non-users of the internet (Katz & Rice, 2002). Another survey by the same researchers compared the levels of involvement in religious organizations, leisure organizations, and community organizations, of internet and non-internet users. They found no association between levels of involvement in these activities and internet use (Katz & Aspden, 1997). Another large-scale sample of 3,533 Americans collected by the Pew Internet & American Life Project indicated that internet users were significantly more likely to visit with friends and family, even when controlling for demographic factors (Katz & Rice, 2002). Quan-Haase and Wellman (2002) also examined this issue using the results of a survey that was posted on the National Geographic website during the fall of 1998. Their analysis showed that the amount of reported contact through email was not related to decreased amounts of in-person contact or telephone contact. Findings from these studies all indicated that internet use does not detract from amounts of contact with people offline. Given the

consistency of these findings we conclude that people have not radically altered their lives because of the internet.

As time spent online does not detract from time spent with friends and family, presumably the time spent online is taking away from time that could be spent on other activities. A number of studies have examined this issue, often comparing measures of time spend online with measures of time spent using tradition media, for example TV watching. A special issue of the journal IT & Society includes articles on 11 such studies (see the introduction by Robinson, 2002, for a summary of the results). As with many studies in social science, differing sources of data, methodology, and measurements, often lead to discrepancies in results. However, in general these papers showed moderate evidence that internet use was associated with a decrease in the amount of time spent watching TV (Nie & Hillygus, 2002; Pronovost, 2002; Robinson et al., 2002) and sleeping (Fu, Wang, & Qiu, 2002; Nie & Hillygus, 2002; Robinson et al., 2002).

A few longitudinal studies have examined what activities are displaced once people go online. Longitudinal studies are especially apt to answer this question, because they allow researchers to see how fluctuations in internet use are associated with changes in time spent on other daily activities. Findings from a large Swedish study of approximately 1,000 respondents between 1997 and 2001 found that going online leads to a decrease in hours spent watching TV (Franzen, 2000; Franzen, 2003). Similar, but qualified results were found in a random-sample U.S. panel survey of 1,222 persons in 2001 and 963 of those same people in 2002 (Shklovski, forthcoming). Rather than lumping all kinds of internet activity into a single measure of internet use, this survey distinguished among a number of different kinds of online activities, such as "communicating with friends," "getting news online," or "playing games." Using the internet to meet new people was associated with declines in watching TV, while using the internet for entertainment or commerce did not. This more refined measure shows that particular kinds of online activities are associated with particular kinds of offline activities. Those who use the internet for social purposes will be less likely to watch TV, while those using the internet for entertainment purposes will continue to seek entertainment through TV watching. This indicates that the needs of people must be understood to make sense of how the internet is used in everyday life. Again, this is in contrast to utopian or dystopian perspectives that assume the internet itself has the power to alter lifestyles.

While the evidence has generally shown that internet use is not associated with less time spent on social activities, knowing that internet use does not detract from time spent offline with close and family says little about the effects of internet use on time spent with these social ties. A recent report by the Pew Internet and American Life Project reports that 93% of those with internet access send email (Fallows, 2004). As much of this email could be sent to close friends and family, it is quite possible that this added contact may strengthen relationships and lead to more contact offline. Then again, this

contact may simply add on to offline contact, but not increase the frequency or amount of time spent with close friends and family offline.

Longitudinal studies show a positive association between internet use and offline interaction with close friends, but not with family. This finding comes from a recent meta-analysis of 16 data sets that contain measures of internet use and offline social interaction with friends and family (Shklovski, Kiesler, & Kraut, forthcoming). These studies were all conducted between 1995 and 2003, some of them using cross-sectional sampling design and others using longitudinal design. While measures differed somewhat between studies, they all shared common conceptions of internet use and offline interaction, making comparisons possible. Rather than comparing each measure directly, the total effects of associations between internet use and offline interaction with friends and family for each study were standardized by using a Fisher's Z transformation. Results varied significantly, depending on the survey design. Cross-sectional surveys generally showed a negative association between internet use and interaction with friends. In contrast, longitudinal surveys found a positive association between internet use and interaction with friends. Longitudinal studies found little association between internet use and interaction with family.

To explain these findings, Shklovski et al. theorize that email is used both to strengthen friendships and schedule more in-person meetings. It strengthens friendships because email may act as an extra source of stimulus, serving as a reminder of the sender and thereby reaffirming the existence of the relationship. Email may also be used more instrumentally as a way of scheduling meetings. Its non-intrusive and asynchronous nature affords the possibility of communicating in a way that is sensitive to the schedules of both parties. The sender can send an email at any time and the receiver can read and respond to the email at a time that is convenient. This is in contrast to meetings that are arranged by telephone, where the caller very often interrupts the activity of the person on the other end of the line.

While friendships are more fluid and often require active tie maintenance, family relationships more often involve routine interactions. This would be especially true for household members by virtue of their shared living space. These relationships would tend to benefit less from email exchange, as much interaction could occur during everyday routine. Family relationships are often more stable, requiring less active maintenance. As email may be suited for affirming the existence of a relationship, increasing its strength and arranging offline events, it would be less useful in family relationships which are mostly involuntary and reliant on routine interaction.

Forming Relationships Online

Although research shows that the internet is often used to contact existing relationships, there has been interest in the potential of the internet to create new relationships. Much of the hype surrounding the internet has been about the possibility of people becoming immersed in relationships with people who they have never seen or touched in "real" life. Some scholars writing about the internet portray users so taken with online relationships that their ties with offline friends and family recede into the background (e.g., Chayko, 2002; Kendall, 2002; Rheingold, 2002; Turkle, 1995). Although the evidence suggests that internet use is not associated with declines in contact with friends or family, scholars have yet to explore systematically the issue of the internet's role in the formation of new relationships.

The current body of internet research indicates that the internet has not caused a widespread flourishing of new relationships that are disembodied, existing only in the realm of an immersive online world. In reality, only a relatively small proportion of internet users have ever met someone new online. Two large-scale national surveys done in 1995 and 2000 indicate that only about 10 percent of internet users have ever met someone new online (Katz & Aspden, 1997; Katz & Rice, 2002). It is probably safe to assume that at least some of these relationships were short lived, fizzling over time. Many of the relationships that do continue to exist for a longer duration tend to migrate offline. Evidence for this has been found in two studies of relationships formed through online newsgroups showing that the desire to meet internet friends in person is common among those who make new friends online (Parks & Floyd, 1996; McKenna, Green, & Gleason, 2002). This is not to deny that an online forum might be important to making new friends, especially when physical or psychological barriers make in person meetings difficult (McKenna et al., 2002). For example, this research indicated that people who felt physically isolated or dissatisfied with their own self image were more prone to use an online forum for making friends. Nevertheless, once the friendship was established, there was a common desire to meet in-person, implying that people wanted a broader range of interactions than online communication can easily supply.

These findings can be summarized as follows. First, a relatively small minority of internet users actually use the internet to communicate with people that they do not already know from their everyday lives. Second, of the small minority who do form relationships online, those relationships often become incorporated into offline life. In other words, it is not the case that the internet has immersed people into a new world of social relationships with others who they never see in the flesh. While the internet does create a new venue through which people may form new relationships, at present, this venue represents only one small aspect of the internet's role in personal relationships for a majority of its users.

Neighboring and the Internet

Typically, neighboring relationships tend to comprise only a small proportion of personal relationships. Early studies in the Toronto area of East York show that most social interaction occurs with people who live outside of their neighborhoods but within their metropolitan area (Wellman, 1979; Wellman, Carrington & Hall, 1988). However, a recent study in a Toronto suburb has shown that internet use can be associated with an increase in contact between neighbors. This suburb was dubbed "Netville" by Hampton and Wellman (2002, 2003) due to the high-speed internet service that was offered to all of the homes. However, 35 percent of the 109 homes did not receive the service, creating a convenient comparison group. This internet service differed from dial-up internet connections, as it could be on 24/7, without tying up the household telephone line and at no additional cost. It was also 10 times faster than most of the present day "broadband" connections.

Of all the internet based services offered to those living in Netville, the neighborhood discussion list was used most heavily. On this discussion list, neighborhood members could broadcast email messages to their neighbors about a variety of topics, often soliciting services such as child care or lawn maintenance. These email messages increased overall levels of neighborhood contact, increasing the number of neighborhood ties, the amount of regular contact between neighbors and the number of household visits to neighboring homes. "Wired" residents knew the names of 25 neighbors, while the "non-wired" residents only knew the names of 8. This increase in online contact resulted in more informal offline, in-person contact, where wired residences talked to an average of 6 neighbors on a regular basis, while the non-wired residents talked to an average of only 3. Moreover, the wired residents made 50% more visits to their neighbors' homes, in comparison to the non-wired residents (for more detail, see Hampton & Wellman, 2003).

While the high-speed internet connection and community oriented message board helped residents increase their contact with local neighborhoods, it also helped them maintain relationships with friends and family who were more geographically distant. By virtue of being in a new neighborhood, Netville residents had left friends and family behind when they moved. Only the wired residents used the internet to maintain levels of contact with these friends and family that were similar to levels of contact before the move. Maintaining personal relationships that are both local and non-local is a social phenomenon that Hampton and Wellman (DATE?) refer to as "glocalization."

A study of two Israeli suburbs by also found similar results, although not to the same extent. While membership in neighbor based mailing lists did not increase the total amount of neighborhood interaction, it did increase the number of people known in the community. As with the studies of online relationship formation, many people who first

met on these mailing lists were likely to move their relationships offline and meet in-person (Mesch & Levanon, 2003).

These findings indicate that internet based email systems do have the potential to enhance neighborhood relationships. There may be two reasons why this is the case. First, of all the internet software offered to those in Netville, it was the email based system that was used most often. Similarly, it was use of an email based system in the Israeli study that led to an increased awareness of other neighbors. It is likely the familiarity of email software that helped lead to its wide-spread adoption in these communities. Second, these emailing lists were used because they offered the potential to fulfill instrumental purposes that would exist in any neighborhood. It was not the intrinsic appeal of an online world that lured these people to talk to their neighbors. It was the fact that these email lists supplement needs that were lacking in offline life. Again it is apparent that online activity is best understood when considering needs that exist offline in the realm of everyday life.

Up to this point, we have drawn on a number of empirical studies to argue that the internet is not detracting from social relationships or radically altering the way people live their lives. The findings from these studies can be summarized as follows:

1) Internet use is not associated with decreases in time spent on social activities. Internet use is associated with relatively high levels of offline contact with friends, but not family.
2) Only a small percentage of internet users meet new people online. Relationships formed online rarely stay there.
3) Internet use has the potential to enhance neighborhood relationships.

The remainder of this chapter will use a theoretical position that explains these empirical findings by pointing to changes in the patterns of social relationships that have been occurring since the industrial revolution. This discussion uses Barry Wellman's theory of networked individualism, or what might be better named "individualized networking," in conjunction with the writings of Robert K. Merton and Rose Laub Coser. While more research is needed to verify the connection between networked individualism and the current body of empirical findings, the following discussion serves two purposes. First, it shows how accounting for social tendencies within modern life can help make sense of the current body of empirical findings. Second, it gives a theoretical direction to future projects that seek to explain how internet use fits within broader patterns of everyday life.

Networked Individualism

Wellman argues that since the industrial revolution, the rise of mass transit and telecommunication systems have allowed a shift in the nature of social relationships, especially in metropolitan centers where these kinds of systems tend to be more readily accessible. He argues that this shift, which he calls "networked individualism," has at least three important characteristics:

1. Relationships are both local and long distance.
2. Personal networks are sparsely knit but include densely knit groups.
3. Relationships are more easily formed and abandoned.

These three attributes will be discussed in turn.

First, unlike the geographically limited small town communities of pre-industrial society, relationships in modern societies can be maintained over greater distance. Wellman first argued this point in his 1979 article "The Community Question," where he found evidence that a majority of the relationships maintained in an urban area of Toronto were with people who lived just outside of the neighborhood boundary. Contrary to common notions of community as being fixed to a particular locale, these urbanites maintained their own personal communities by traveling to make in-person visits and phoning to maintain contact between these visits. While it is true that neighborhood contact still exists, it only comprises a relatively small portion of a person's total social network.

Second, this and other studies indicated that relationships in contemporary societies are not with one particular group of densely-knit individuals. Instead, many relationships are with multiple small groups or individuals. Many of these people will not know each other, or will only know of each other to a small extent. In this sense, every individual has her own personal community, because it is rare for two people to have exactly the same set of relationships. Even among married couples, husbands and wives will tend to know different sets of people at their work places and elsewhere.

Third, many relationships are transitory. The high divorce rate in industrialized countries indicates that even relationships which people have vowed to maintain over the course of their lives often fall by the wayside. The transitory nature of relationships is even more evident among relationships that are not so strong. People will often form many different sets of relationships throughout their lives, especially with career changes that have become common place in the current service based economic system of first world countries. This issue will be elaborated in greater detail below, when discussing Georg Simmel's (1903) theory of modern life.

We would like to further develop this theory of networked individualism by adding two more attributes:

4. While homophily still exists, many relationships are with people from different social backgrounds.
5. Some social ties are strong, but many more are weak.

Georg Simmel (1903), Rose Laub Coser (1975), and Mark Granovetter (1973) all discuss these two important attributes of modern life. Simmel and Coser argue that interacting with people from different social backgrounds has become fundamental to life in contemporary societies. This is especially true for those who live in urban areas and those of high socio-economic status. Having smooth interactions with people from these different backgrounds has become so important that people have developed an elaborate set of roles. Networked individuals use this knowledge when interacting with people from different social backgrounds. As many of their contacts do not know each other, they are in fact switching between different social networks, accessing new ideas or information that are common to those groups. Second, many of these relationships tend to be weak, in the sense that they tend to lack high amounts of emotional intimacy and tend to be more temporary in nature. This has the advantage of allowing networked individuals to maintain relatively large social networks that allow them access to new ideas and information (Granovetter, 1973).

Having discussed the nature of networked individualism and developed it further, we revisit each of its five attributes and connect them to a general discussion about internet use. In doing so, we will use this theory to interpret the empirical research that has been summarized above and use theoretical conjecture when the research fails to address particular points of interest. Throughout this discussion, we will focus on email use, as it is the most common of internet activities among American users, and the focus of many of the studies discussed above.

Maintaining local and long distant relationships. The connection between the widespread adoption of the internet and the rise of geographically dispersed relationships is fairly straightforward. As many scholars made clear, internet communication need not be limited by physical constraint. It is possible to communicate to anyone who has access to a computer and internet connection, anywhere in the world. Yet, people do not always use the internet to communicate with others on the other side of the world. As the above empirical research indicates, much of the communication that takes place on the internet is with people who are known offline. This is not surprising when considering that a majority of social relationships are with people who are close enough to have in-person contact, but just distant enough that they are not seen unless special trips are made. The ability to quickly send messages to people who are at least somewhat distant is likely why people use CMC (Computer Mediated Communication) with their friends and family. This supports Shklovski et al.'s (forthcoming) argument that internet users may experience increased amounts of offline contact because they are using email to arrange in-person meetings and strengthen relationships with people known offline. Moreover, the importance of internet in maintaining relationships that are physically distant was also

found in the Netville project described above. In this project it was found that the internet was used to maintain both local and non-local relationships.

Sparsely and densely-knit networks: The sorts of communication afforded by CMC can be useful in maintaining a network that is sparsely knit. As CMC is often carried out as one-on-one exchange, it is particularly conducive to maintaining relationships with people who do not know each other. Unlike in-person communication that sometimes leads to contact between different network members by virtue of inhabiting a common space, the direct and autonomous nature of CMC allows for the maintenance of multiple relationships with people who need not even be aware of each other's existence. At the same time, email affords the ability to broadcast single messages to large groups of people. This often makes the co-ordination of group events and interactions much easier.

While many relationships are often formed with people who have mutual friends, the internet also affords the formation of relationships between those who do not share common social relationships. Although people in societies that are traditionally composed of tightly bounded groups might disapprove of forming relationships with others who share no common social connection, this behavior might be more acceptable in societies composed of loosely-knit networks. Even if people do disapprove of forming relationships online, it is more difficult for them to enforce these sanctions as it is in tightly bounded groups where social disapproval often leads to complete withdrawal of all social relationships. Not surprisingly, the formation of online relationships and the ability to communicate individually makes internet use particularly conducive to the loosely-bounded networks of networked individuals.

Making and breaking relationships. The transitory nature of many relationships implies that social relationships are not only being lost, they are also being formed. High turnover creates a demand for the internet as a means both to form new relationships and build upon existing relationships. For example, Hampton and Wellman (2002) found that people moving to a suburb used the internet to maintain ties with former neighbors. As the research discussed above indicates, it appears that the internet is being used for both purposes, although more often for the latter. Although online forums are not particularly common ways to meet new people, they nevertheless aid those who might have trouble forming relationships by typical means offline. For the rest of the population, internet use provides a way to maintain new relationships by "keeping in touch" and arranging times to meet in-person. The Netville project also indicates that the internet can be used to form new relationships among neighbors. Moreover, we theorize that CMC might also be particularly useful in ending relationships, as it may be emotionally easier to ignore email messages than to ignore people in face-to-face situations.

Switching between relationships. Email is a "lean" medium, in that it does not allow for visual or auditory cues that convey emotion. For example, unlike in person

conversations, email does not allow for the communication of emotion through facial expression or tone of voice. This is not to say that email does not allow for the exchange of any emotion, but rather that it there are few cues available for self-expression. Because email is a lean medium, it provides an easy avenue for communication with people from diverse social backgrounds. As argued above, communicating with people from different backgrounds often requires the ability to orient one's behavior toward an appropriate role. While email may require orientation, such as appropriate language use, it does not include the many social cues that are communicated through body language and appearance. This is not to say that people who are heavy internet communicators do not have the ability to take on appropriate roles, but rather communication by email minimizes the effort required to take on such roles. This makes it less time consuming and cognitively less draining to maintain social ties by way of short text based online interactions. Of course, as the above research suggests, networked individuals also would like to see their network members' in-person from time to time, but email helps minimize the effort needed to maintain these diverse social ties.

Strong and weak ties. There are at least two ways that CMC affords the maintenance of strong and weak tie relationships. First, CMC allows people to arrange in-person meetings, sometimes more conveniently than by telephone. The most prevalent form of CMC, email is asynchronous, meaning that both parties do not need to be engaged in the communication process at the same time. An email can be sent off at a time that is convenient and without fear of disrupting the activity of the receiver. This is useful in strong tie relationships as it allows for asynchronous co-ordination of everyday activities, such as shopping. For example, instead of interrupting a spouse at work, a short email can be sent asking him or her to pick up some milk on the way home from work. The asynchronous nature of email also affords the opportunity to contact weak ties in a way that is not intrusive or disruptive. Moreover, it allows them to send detailed messages asynchronously in a way that could not be done simply by leaving telephone messages.

CMC's second advantage to maintaining weak tie relationships is the way that it allows people to "keep in touch." Both email and instant messaging allow individuals the opportunity to send short messages quickly to those that they do not see on a regular basis. This makes CMC especially useful, as weak ties are not often seen frequently in person. These messages may not contain immediately useful information, but they do serve to promote the feeling that the relationship still exists. This increases the likelihood that people will meet with each other in-person at future dates. The very act of sending a short message is a reminder that they are still part of someone's social world.

Conclusions

Early writings about the internet's role in society often made assertions that were either extremely optimistic or pessimistic. Both these groups of utopian and dystopian writers share a common assumption that the internet has the power to totally consume people, leading them to form completely new kinds of relationships. In doing so, these writers took a technologically deterministic approach that failed to consider the importance of relationships as they already existed. A growing body of scholarly research has begun to address this issue by providing evidence about the relationship between internet use and contact with friends and family, the extent to which the internet is used to form new relationships, and the internet's role in neighboring relations. Findings from these studies indicate that internet use is not associated with declines in time spent with friends and family. Instead, internet use is associated with increased amounts of contact with friends. These studies also indicate that only a small minority of internet users actually meet new people online. When this does happen, these online relationships tend to migrate offline. Finally, the internet may be used to increase contact among neighbors, although this will often happen when there is a specific need to connect. All in all, the results from these studies indicate that the internet is neither destroying nor radically enhancing society. Rather, the internet adding to the overall volume of communication, helping to maintain the kinds of relationships that have existed for decades.

To help explain the workings of "everyday life" we have discussed and developed Wellman's theory of networked individualism. This theoretical position takes into consideration broad changes in social relationships that have occurred since the wide spread adoption of mass transit and communication. It accounts for some of these empirical findings by making explicit five attributes of modern relationships, arguing that they tend to be: physically distant, sparsely-knit, transitory, socially diverse, and weak in strength. Internet use allows people to maintain networks that are physically distant, as it allows quick and cheap distant communication. The ability to communicate one-on-one makes it particularly useful for those who wish to maintain relationships in sparsely-knit networks. The high turn-over of transitory networks makes email particularly convenient when maintaining new relationships and for dropping relationships when they go sour. Email's lack of social cues minimizes the effort required to adopt suitable roles, which is important to maintaining socially diverse relationships. Finally, email affords the ability to maintain larger networks of weak tie relations, acting as a means to arrange in-person meetings and renew the existence of these relationships.

Although the existing body of scholarly research fits with the ideal type of the networked individual, much research is needed to verify this connection and address some outstanding issues. Similarly, while the findings of Kraut et al. (2002) indicate that internet use is not associated with depression among experienced users, more research is needed to address the psychological effects of networked individualism. Does the constant access to new and diverse people that the internet helps to facilitate really lead to

an over stimulation and disaffection, as suggested by Simmel (1903)? Or, is this internet aided lifestyle associated with cognitive flexibility, openness to new cultures, and perhaps social tolerance? Does the maintenance of weak ties through the use of email networks allow people to maintain larger networks, which in-turn grant them access to new ideas, information, and other resources? Research questions come as abundantly to us as spam on email.

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