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### **Our Digital Social Life**

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Well over a decade ago, Nancy Baym (2002) argued that the Internet as a fundamentally social technology is worthy of scrutiny for its role in interpersonal life "online". Since then, the internet has moved on and moved into social interaction and relational maintenance through smartphones and social media applications, becoming part of the very fabric of social life in much of the world. As mediated modes of communication became accessible to more people and in more situations, the ability to engage each other online has shifted from an interesting but relatively unusual activity to an expected mode of living. It no longer makes sense to speak of interaction online as a particular activity separate from other forms of social interaction. The use of technologies for communication is now a basic assumption of social practice (Bayer, Campbell & Ling, 2016). Lievrouw (2009, p. 313) has called it "the growing ordinariness or 'banalization' of new media." In basic terms human social needs have remained the same. People feel the need for belonging and connectedness (Baumiester & Leary, 1995), they love, worry, argue, and rely on each other in times of need. How we go about these in practice, however, has changed if only because there are so many more ways to achieve social ends.

Ours is the age of sharing in social, economic and rhetorical arenas made possible through the functionality of networked technologies (John, 2016). Interaction with friends or strangers is just a click away, often passively consumed rather than actively engaged in (Burchell, 2015; Shklovski et al, 2015). For some, the perpetual possibility for interaction creates demands for attention and pressures for making the self available to others, where disconnection and moments without social interaction become anomalous (Burchell, 2015). Possibilities for social contact may seem endless but the labor necessary for maintaining relationships has not diminished. Rather, what used to be mundane and expected - phone calls, visits and even postcards - now qualify as effortful communication that can signal particular relational investment and care, having been supplanted by myriad other actions (Thorso Sorensen & Shklovski, 2011; Shklovski, Kraut & Cummings, 2008).

The proliferation of technologies that can facilitate a variety of communication practices has lead to an explosion of research on their implications for sociability. Concerns with whether particular forms of social engagement might be better or worse than others, a considerable source of interest and anxiety just a decade ago (Shklovski, Kiesler & Kraut, 2006), are now few and far between. Instead, research has shifted to consider issues such as information overload (LaRose et al, 2013), context collapse and the attendant problem of unintended information disclosure (Binder, Howes & Sutcliffe, 2009; Brake, 2014; Laampinen et al, 2011), new forms of social embededness (Shklovski et al, 2015; Bayer, Campbell, Ling, 2015), and the ability to leverage social relationships in new ways (Vitak & Ellison, 2013) among others.

This chapter traces the research from early considerations of computer-mediatedcommunication (CMC) to current concerns and excitement around social network sites and pervasive connectedness, exploring the changing dynamics of social interaction and relational practice. As digital societies leverage networked connectedness where people become increasingly reachable it is important to consider how social interaction and relational practice have become inflected.

### Early considerations of CMC

Researchers have been investigating the role of information and communication technologies in social practice for nearly half a century (de Sola Pool, 1977; Fischer, 1994; Kiesler et al., 1984). With the advent of the Internet scholars debated ever more vigorously whether computer-mediated communication could enable maintenance of social relationships and if so, whether such mediated interactions were substituting impoverished modes of relating for much richer in-person engagements (McKenna & Bargh, 2000; Katz & Aspden, 1995; Kraut et al, 2002; Nie, Hillygus & Erbring, 2002). Premised on the idea that affordances of any media would have consistent and predictable effects, much of the early research focused on group and workplace communication and compared the efficiency and effectiveness of various mediated communication channels with in-person interaction.

Social interaction as a basic action is rooted in moments of communication that are reciprocal (Sigman, 1995). Inherent in this reciprocity is an effort to avoid misunderstanding through practical checks and balances of reaction to each subsequent action. This lead to the idea that richer and more immediate modes of communication would inherently allow for less misunderstanding and smoother interaction. Scholars argued that the richness of the communication channel accounted for the differences in the amount of information that could be transmitted, leading to impoverished results in mediated contexts (Daft & Lengel, 1984; Lea and Spears, 1995). Walther proposed that mediated communication technologies provided affordances that allowed users to craft the image they expected to present in order to enhance social outcomes (Walther, 1995; 2007, Walther, Anderson & Park, 1994). Determining whether the richness or narrowness of the communication channel is important to the success of communication, however, depends on how communication is conceptualized in the first place (Wellman & Gulia, 1999). Peters (2000) writes that

communication through any means is a kind of "making do," never perfect but offering opportunities for transmission of information, for communion and emotional engagement, and, ultimately, for possibilities of failure through technical problems, miscommunication or misunderstanding. Success in social interaction is not guaranteed regardless of modality.

The debate about the role of the Internet in informal social interactions and relational practice followed a similar logic. In the late 90's two studies framed the debate about the social impact of the Internet, focusing on how Internet use affected people's social interaction and social involvement with others. Where Katz & Aspden (1997) argued that Internet use augmented traditional communication, Kraut et al. (1998) countered that Internet use could displace time spent with friends and family. This concern with whether the Internet replaced or augmented social practice drove a significant amount of research. Nie and colleagues conducted large-scale surveys, arguing that Internet use reduced the frequency of face-to-face interaction, which was seen as more important (Nie & Hillygus, 2002; Nie, 2001). In contrast, McKenna and Bargh argued that the Internet improved people's ability to form and maintain social relationships because it allowed individuals to better control self-presentation and to overcome problems such as shyness (McKenna & Bargh, 2000). Turkle wrote that mediated communication technologies were beneficial for developing a better sense of self because they offered opportunities to experiment with different identities and selfrepresentations (Turkle, 1995). In an attempt to resolve the debate Shklovski, Kiesler & Kraut (2006, p. 262) conducted a meta-analysis of survey research between 1995 and 2003, concluding that "even though the Internet may have changed many habits, the effects of those changes on fundamental relationships and psychological well-being seem to be small or at least slow in emerging." They called for a more differentiated view of the Internet as a "malleable and diverse technology", noting that its effects may differ given the many ways it

can be used.

The notion that the use of the Internet and other new media is not monolithic and that studying it as such is misleading because of it's individual customizability, was not new (Lievrouw, 2001). Many researchers studied particular effects of the use of email (Stafford, Kline & Dimmick, 1999), instant messaging (Boneva et al, 2006), online games (McKenna & Bargh, 2000; Parks & Roberts, 1998) and Usenet groups (Parks & Floyd, 1996; Baym, 2000) reporting largely positive outcomes and meaningful interactions. Later research on the role of mediated communication showed that personal relationships tend to be multi-modal, maintained through the use of a number of modalities rather than relying on one particular method of interaction (Baym, Zhang, & Lin, 2004; Ledbetter, 2008). In fact, the range of modalities used to maintain any relationship is associated with the strength of that relationship and its' perceived importance (Haythornthwaite, 2005).

It is no longer a point of debate that digital forms of communication are important for relational maintenance (Dimmick, Feaster, & Ramirez, 2011), but different communication practices can achieve different goals. For example, Shklovski, Kraut & Cummings (2008) showed that while email is less effective at promoting relational growth, it can be important for perpetuating relational continuity. After all, any form of social interaction is a particular kind of experience. It is impossible to classify whether one mode of communication is "better" or "worse" than the other ontologically – they are simply different. The use of mediated communication did change how different modalities might be interpreted. For example, with the broad adoption of email the frequency of letter writing has dropped significantly and took on a different relational meaning (Baron, 1998). Yet, as Harper (2010, p.21) puts it: "Letters are not an analogue of face to face communication [or email for that

matter]; they create a new experience of human bonding." The proliferation of communication technologies has enabled myriad new forms of human bonding, complicating our understanding of the practices involved in accomplishing social interaction.

### **SNS & Pervasive connectedness**

Early considerations of interpersonal impact of the Internet focused on dyadic or group forms of communication (Rheingold, 1993; Baym, 2000). There was some attention to the fact that the Internet blurred "the boundary between interpersonal and mass media" (Baym, 2002, p. 38) and that the ability to broadcast limited how well people could predict their audience (Carnevale and Probst, 1997). Yet, discussions of interpersonal processes invariably invoked relations that were clearly bounded. However, as blogs (Brake, 2012) and then social network sites (SNS) became popular, researchers had to contend with an increasing mixing of broadcasting and interpersonal communication across different media. Early research on social network sites identified these sites as "public displays of connection" (Donath & boyd, 2004) that people could use to validate identity information of their connections and as social resumes that served as evidence of their own social abilities (boyd & Ellison, 2007). Later studies explored the presentation of self online through identity performance (Tufekci, 2008), impression management (Barash, Ducheneaut, Isaacs, & Bellotti, 2010) and exhibits of the self (Hogan, 2010). The vast majority of this research has focused on Facebook in particular (Rains & Brunner, 2015; Stoycheff, Liu, Wibowo & Nanni, 2017).

People use SNS for many different purposes (Joinson, 2008; Lampe, Ellison, & Steinfield, 2006) and might choose to limit or even terminate their use of these technologies for a range of reasons (boyd, 2007; Vitak & Ellison, 2013). Current research suggests that people derive social, emotional and psychological benefits from the use of SNS and that these sites can also

have substantial practical and political significance (Burke, Kraut, & Marlow, 2011; Ellison, Steinfield, & Lampe, 2011; Hampton, Sessions Goulet, Rainie, & Purcell, 2011; Valenzuela et al., 2014). At the same time, there is evidence that some ways of using SNS can lead to worse moods (Verdyun et al. 2015) and overall decreases in subjective well-being (Shakya & Christakis, 2017). Similar to early concerns about Internet-based communication replacing face-to-face interactions, researchers have also considered whether sociability via SNS would affect other methods of communication (Brandtzæg & Nov, 2011). The verdict tends to be that SNSs augment the array of modalities that people use for daily social activities (Barkhuus & Tashiro, 2010; Brandtzæg & Nov, 2011). These sites offer elaborate systems for perpetuating relational continuity (Sigman, 1991) through explicit articulations of connections and through a range of communicative functions (Ellison et al., 2011; Young, 2011). SNS communicative functions are typically used for "lightweight" relational maintenance (Lampe, Ellison, & Steinfield, 2008; Subrahmanyam, Reich, Waechter, & Espinoza, 2008), although there is also evidence that people use the site differently for interactions with strong and weak connections (Ellison et al., 2011).

Studies of interpersonal communication on social network sites comprise a significant proportion of research on these technologies (Stoycheff et al. 2017). Many scholars have also investigated whether SNS use facilitates growth of social capital<sup>1</sup> (Ellison, et al, 2007), what type of social capital is affected most (Ellison et al., 2011; Steinfield et al., 2008) and which types of uses are most effective in this process (Burke et al., 2010; Ellison & Vitak, 2015). This work took a primarily functional view on social processes, investigating how people "tap" their networks (Vitak & Ellison, 2012) or "cultivate" their social resources

<sup>&</sup>lt;sup>1</sup> The concept of "social capital" has been defined in many different ways by many social theorists. The particular definition that Ellison et al. use in their work conceptualizes social capital as the sum of resources available to an individual from other members of the networks to which said individual belongs (Ellison et al., 2007).

(Ellison, Vitak, Gray & Lampe, 2014). Relational maintenance practices evident on SNSs are complex and difficult to disentangle (Ellison et al. 2011), in part because of the problem of context collapse - the undifferentiated colocation of social connections from across disparate life spheres - can cause considerable social tension for social activity (Binder et al. 2009). Surprisingly, fewer studies have investigated the particulars of relational practice - the demands and obligations of maintaining relationships through social network sites (Burchell, 2015). Arguably, it is the labor of relational practice that makes activation of social capital possible. Where most Facebook research has been deeply concerned with whether and how SNS users might leverage their personal networks for personal advantage, it is enactments of relational work that likely comprises the vast majority of activities on these sites.

### Leveraging the network

Social relationships lend themselves to thinking of social practice in structural terms and in terms of networks. Social relationships function within a social system and people must reconcile not only their own and their partner's needs, intentions and demands, but also the pressures and expectations of the social system itself. A network perspective improves upon an individual or even a dyadic view of social practice, offering the opportunity to consider effects of interaction in a broader social context. The way people negotiate their position in society, social connections, themselves, identities and meanings is through interaction with relations that comprise their networks. Network scholars have studied social practice as networks at different levels of analysis from societies (Castells, 1996) to communities (Wellman et al. 2003) to individual-focused analyses of ego-networks (Feld, 1991). The talk of networks it the talk of structure.

Early social network research produced romantic notions of infinite connectedness, powered

by Milgram's "Small World Problem" (Travers & Milgram, 1969). It is tempting to conceive of networks as infinite and unbounded, but, as Strathern (1996) points out, what matters is the choice of where to "cut the network" when defining objects of analysis. Although theoretically social networks can extend endlessly, in practice the coherence of these connections varies because the effort to keep them sustained and durable, even if made simpler and easier by technology, nevertheless has limits. Network structure and the content that flows through it are co-determining, but social network analysis focuses primarily on structure as a basis for explaining social practice (Knox, Savage & Harvey, 2006). Yet neither groups nor networks are clearly bounded. There are always fuzzy peripheries in social structures that are difficult to document and quantify.

The idea of cutting the network is important for the notion of social capital, used extensively to discuss the potential benefits of SNSs. Networks can be interpreted as collections of assets, implicated in the flows of information, goods or support. Social interaction enables people to build communities, to commit themselves to each other, and to knit together the social fabric that can be captured as a network structure. Concrete experience of social networks can foster a sense of belonging, which relies on relationships of trust, tolerance and mutual aid (Baumesiter & Leary, 1995). According to Putnam, such cooperative and mutually supportive relations in communities and nations are facilitated by social capital (Putnam, 2000). Therefore, he argued, social capital is a valuable means of combatting many of the social disorders inherent in modern societies. Putnam distinguished between bonding social capital, reliant on intimate social ties that foster feelings of solidarity, and bridging social capital, reliant on weak and less known relations but important for information about the world and for encouraging a sense of belonging to a broader community.

The concepts of bonding and bridging social capital have featured heavily in SNS research (Ellison et al., 2007). Although Putnam emphasized the importance of social capital for communal outcomes, SNS research has tended to focus more on the benefits that individuals can derive from the web of their social relationships. In this view, activities oriented towards improving social capital would lead to increased personal access to information, to a greater variety of skills sets and to an enhanced ability to achieve goals (Burke et al., 2011; Vitak & Ellison, 2013). Here, social capital is an important resource for individuals to further their own prospects. Such an individualistic conception relies on the idea that social capital is something to be accrued, where individuals can have more or less of it depending on whether they choose to use SNSs and how they might use these technologies. This tends to result in an over-simplification of what constitutes social capital, with more relationships being equated to increases in social capital, often getting boiled down to a two-step description of a problem of leveraging personal networks that can be solved with technology: that (1) our social relationships are some of the most important assets that we own; and (2) that we are inefficient at leveraging these assets.

An alternative conception of social capital sees it as a process rather than a quantity to be obtained. Bourdieu posited that in social groups held together by mutual self-interest 'the profits which accrue from membership in a group are the basis of the solidarity which makes them possible,' emphasizing the importance of inequality and power, as membership in groups is about exclusivity rather than open-ended association (Bourdieu, 1986). Bourdieu's notion of social capital was fundamentally processual, where social capital is enacted in moments of exchange as norms and expectations frame resource-negotiations and define whether and how resources may be given, used or reinvested (Lambert, 2016). In other words, leveraging the network is not without costs, but comes with obligations and demands

and conforms to the impositions of existing social stratification in society. Social networks are not bottomless repositories of resources to be leveraged. If leveraged too often without upkeep, networks can fatigue and resources can deteriorate (Norris & Kaniasty, 1996).

Where and how networks are cut (Strathern, 1996) to denote boundaries of membership is an important consideration for social capital. How and why information or some other type of support is exchanged depends on the state of the particular relation as well as on the impact that this action may have on other relations. How much of the network must these considerations encompass? How far can a request travel and still remain legitimate? What is necessary for a relation to become a resource?

# **Enacting relational work**

Relationships are both predictable and paradoxical. They are valued assets as much as they are performances, they are a state as much as a process and, by and large, relationships are expected to be predictably consistent, constantly negotiated and redefined in interaction (Khrakhordin, 2005; Blieszner & Adams, 1992). Enactments of social capital on SNS are likely less about extraction of value as they are about expressions of intimacy and vulnerability (Lambert, 2016). Exchanges of social capital are probably less frequent than the proliferation of research might lead us to believe. Most of the time people engage in interaction that is boring, mundane and even entirely contentless (Duck, 1977). In an in-depth analysis of the content of instant messaging conversations, Boneva and colleagues demonstrated that the majority of conversations did not contain much beyond greetings and idle small talk (Boneva et al., 2006). It is unlikely that interactions on social network sites are much more weighty in content. Evidence suggests that the vast majority of social interaction on SNS is light-weight and mostly focused on entertainment, consisting of perusing the

content one's relations have produced and occasionally reacting to it (Papacharissi & Mendelson, 2011; Shklovski et al., 2015).

Much research on Facebook has purposefully distinguished between active engagement, such as posting content or directly engaging with people (Burke et al, 2011), and entertainment from observing the content posted by others (Papacharissi & Mendelson, 2010). Shklovski et al. (2015) propose that instead of focusing only on active posting of content or commentary, it is important to consider the relational function of such interactive and non-interactive practices on Facebook. Even if reading friends' content is entertaining and lends itself well to procrastination, being up to date on the goings on of one's social ties is important given the way social network technologies have been integrated into relational practice (Burchell, 2015). The semi-public nature of Facebook requires that individuals always consider the relational meaning of each visible action not only for the particular relationship, which is enacted directly, but also for all other social ties that may or may not observe this interaction (Shklovski et al, 2015). This is made more complicated given the fact that most Facebook users tend to under-estimate the size of the audience for the content they produce on the site (Bernstein, Bakshy, Burke, Karrer, 2013). As a result people have developed a range of mechanisms for managing this sort of relational quandary. These are social steganography to ensure that true meaning is known only to the intended audience (boyd & Marwick, 2011), self-censorship (Shklovski et al, 2015; Das & Tang, 2013), or carefully managed visibility of interactions (Bazarova et al. 2015). The forethought and care such interactions require is a form of never-ending and constantly demanding relational labor.

Despite the delight with the possibilities new technologies offer for social interaction people also at times harbor resentment for the demands these possibilities place on them. No matter how easy it is to click a button, to express support or to answer a question, each of these actions takes time. Managing communication practices is an increasingly demanding process because the volume of actual and possible communication continues to grow (Burchell, 2015). Time then, is an essential expression of care in this digital environment and time is key to being able to maintain relationships and to respond to requests for support. It is the relational work embedded in interactions between people that can create the perception of social assets being "leveraged." Social interactions, no matter how minor and inconsequential, still require time investments and, as Nowotny writes, "technologies alone can never manufacture time, any more than clocks" (c.f. Burchell, 2015, p. 48).

# **Reconnecting and disconnecting**

Social network sites may not manufacture time, but they occasionally allow people to reach into the past. As sites for enactment and maintenance of existing active relationships, SNS allow people to retain connection through life changes and residential mobility. SNS also provide ways for people to locate those with whom they had previously lost touch. Although opinions on the function of the "people you may know" feature of many SNS vary (Hill, 2017), the ability to locate old classmates or friends is something many appreciate out of curiosity or because of the pleasure of revisiting the past together (Quinn, 2013). SNS can not only potentially mitigate or prevent loss of current connections, they also encourage reconnection with lapsed ties, something that could be construed as a way to broaden networks (Levin, Walter, & Murnighan, 2010).

What does reconnection with long lost contacts result in? Do these people become friends again and can they also be included into accounting as social resources? My own research in Russia and Kazakhstan found reconnection to be one of the most popular reasons for the use of SNS in the region (Shklovski, 2012). I found that reconnection had more to do with reactivating and re-living memories associated with particular social ties. For many this was an emotional experience but reconnected relationships rarely remained active for long despite being connected on SNS. Rather people commented how their obligations for holiday and birthday greetings simply extended the reconnected ties on these platforms. The obligatory congratulations and well wishes on holidays and birthdays are what Dindia and colleagues (2004) called "hygienic factors" that can keep relationships from disappearing completely.

Well before the advent of SNS, Stafford observed that long distance relationships often fell apart when people were able to meet in person after a long separation (Stafford, 2004). For most people in my study, SNS use remained a form of remembering and then re-archiving old relationships that were important but were no longer immediately relevant to daily life. The experience of reconnecting in most cases satisfied the need for remembrances and fed the curiosity borne of simple interest in seeing where someone from the past had ended up in their life. Among my respondents, reconnected ties rarely translated into deep and long lasting relationships, but became a different although potentially more accessible social archive of the past.

At the same time, reconnected ties represented memories and for some such memories were not those that they wanted to revisit. Ties from the past could become a liability where emotional costs of revisiting that past were high. Relationships that have lapsed, are encumbered with memories of a different time. Yet even if people do not reconnect to their past, the relationships they actively engage with on SNS right now are likely to remain connected regardless of the routes lives take in the future. What does it mean for a person's future, if their current ties remain more connected to them than was possible before? What happens if such social memory is made more durable than ever?

### Social memory and forgetting

Social technologies generally and SNS in particular emphasize elaborate cataloguing of friendships and acquaintances, business partners and family ties - in order to organize them, to make them accessible and to lower the cognitive load of remembering the relevant details about everyone. The insistence of SNS on promoting self-disclosure leads to a neat cataloguing of our own actions, needs, wants and likes, thus making these available to our ties in the event they had forgotten some relevant detail necessary for further interaction. The social feed can be a memory-aid for social relationships, a way to simplify social management and access. SNS create a seductive promise of being able to manage myriad relationships through lightweight relational work at just the right moments in time. What are the effects of such cataloguing on sociality?

If we consider SNS as both a container and an archive for our social relationships, then what happens to those of our relationships that stubbornly refuse to participate? What about those that do not want to have a digital identity of this sort, those that are not allowed to join for whatever reason, or those that simply cannot? Our social ties themselves create the reality of their presence inside the SNS and they (along with their connections) collaboratively create the image that can be accessed as a reminder. Non-use of technology can have many reasons (Selwyn, 2003; Satchell & Dourish, 2009). The difference is in how these reasons are accommodated by the immediate social relationships. Where those that engage in what Satchell and Dourish (2009) term 'active resistance' are typically supported by their immediate social network in this act, those that a disenfranchised of particular social arrangements will likely experience significant problems. For example, Baumer and

colleagues have demonstrated that leaving Facebook could have significant consequences such as losing social contact and potentially productivity from the loss of access to social information resources (Baumer et al. 2013). In his study of scientific memory practices Bowker notes that that which is not allowed to become part of the archive is eventually forgotten (Bowker, 2005). This exclusion is the source of power of the archive – and it is an imperative, commanding power. In a regime where every social action is automatically remembered, where curation has been flipped to determine what might need to be forgotten instead of determining what to remember, absence can be difficult to keep in mind.

The ability to remember is an important problem that computing has been trying to solve for decades. When Google introduced its Gmail service in 2004, it advocated the idea that deleting is unnecessary (Dalsgaard, Eriksson & Hansen, 2005). To combat the limitations of human memory prone to forgetfulness (Bell & Gemmell, 2009), current technical infrastructures and systems preserve without effort data that people produce everyday in what can be described as the default of saving. Development of data management software tends to concentrate on improving tools to avoid accidental information loss as a particularly pernicious problem (Kalnikaite & Whittakker, 2011). Not only can these tools store and help us share important documents, photos or other media, they are even more crucial for helping us fulfill our social obligations of birthday greetings and anniversary congratulations.

Although there is plenty of discussion about the long memory of the Internet, there is also a lot of concern about the attendant lack of longevity of digital objects. The kinds of digital objects that people may want to preserve, such as photographs, diaries, or other keepsakes and artifacts, may in fact be difficult to preserve for two reasons. First, given the speed of technological development old formats can quickly become difficult to access if these

formats are no longer supported by newer technologies (Lievrouw 2000; Hoorens, 2008). Second, as Lievrouw (2000, p. 12) warns: "digital media degrade much more quickly than do relatively stable formats like print, analog audio recording ... or art media." Ironically, the rhetoric about whether or not to delete or preserve digital traces tends to overlook what appears to be a paradox of digital memories. The digital traces that people leave behind, collected by platforms and sensors, shared via social media or posted on a webpage, can be very difficult to remove or forget when those that create such content loose control of its distribution and storage (Woodruff, 2014). The digital objects and traces that people create and would like to preserve, however, may not actually get preserved as well as expected (Lievrouw, 2000).

# **Intentional emphemerality**

Ephemerality in communication has been the expected default prior to the broad adoption of online media. In-person interactions and phone calls can potentially be recorded (whether with or without our knowledge) but the basic expectation is that the record of these interactions remains for only as long as the faults of human memory can sustain for those who are directly involved. Bannon (2006) argues that forgetting is not merely a failure of memory that ought to be corrected but an active process that is a central feature of life. He points to the idea that the inability to forget can be as problematic as the inability to remember through examples coming from studies of neurological disturbances of the function of forgetting (Bannon, 2006). What does it mean then that the vast majority of social technologies people use everyday make it difficult to forget the details of interactions that occur digitally?

Recent and increasing popularity of applications, such as Snapchat, Telegram, Frankly and

many others, that offer erasure of shared media after a short period of time by default, suggests that there is an important function to ephemerality in interaction. The relative newness of these technologies means that there has been limited research on how and why they are used. Most research so far has focused on Snapchat - an application that allows users to exchange annotated photos that are erased after a period of time pre-set by the sender (up to 10 seconds) from both sender and receiver devices - as the most commonly used application in Europe and North America. Snapchat is a zero-history application which offers a list of contacts but no history of interaction with these contacts is available. There is considerable agreement that Snapchat use tends to focus on small and meticulously selected sets of relations (Kotfila, 2014; Piwek& Joinson, 2016). Playful and intimate messages are sent to a trusted audience (Bayer, Ellison, Schoenebeck & Falk, 2015) in an attempt to share 'in the moment' (Billings, Qiao, Conlin & Nie, 2017). How are these interactions different when the digital objects produced and exchanged are expected to be deleted by default?

When my students and I first began studying Snapchat, we were surprised by the fact that people we spoke to almost uniformly rejected the idea that Snapchat had anything to do with photography. The fact that the pictures exchanged via Snapchat "don't really exist" (Shklovski & Bruun Hervik, 2015) made the whole interaction worthwhile. Bayer and colleagues also found that although their participants agreed they were sending messages in the form of a picture they were resolute that these messages were not photos (Bayer et al., 2015). Snapchat is used alongside other media such as Facebook, SMS and media messaging, but seems to perform different functions (Qual-Haase, 2014; Bayer et al, 2015). The content exchanged via Snapchat is often playful and at times a little risqué (Piwek & Joinson, 2016; Quan-Haase, 2014) but definitely deemed not worth saving (Bayer et al, 2015; Shklovski & Bruun Hervik, 2015; Shein, 2013).

Most everyday conversations are neither meaningful nor deep. Rather the random chitchat is necessary because of its existence for the pleasure of company and this is an important form of relational maintenance (Canary & Stafford, 1994). The digital objects composed of such chitchat (e.g. chat transcripts, Facebook comments or text messages) may not retain much meaning or value if re-encountered later. Our own research suggests that people are quite mindful of cluttering up each other's media devices, acknowledging that deleting takes extra time and effort. After all, not every interaction needs to produce memorable content. At the same time, there is vulnerability involved in sending funny, ugly or potentially incomprehensible missives to trusted relations and this is an important part of closeness and relational growth. The ability to send such content via an ephemeral medium removes the tinge of guilt associated with being silly and allows greater margins for play and for misinterpretation.

Ephemerality in social media conflicts with the way collection of digital content and its endless multiplication have become the basic building blocks of social technologies. People communicate about things "small" and "not important" but the default of saving in most digital media can make the "small" and "not important" potentially dangerous, resulting in privacy violations or embarrassments in future interactions (Laampinen et al., 2011). After all, play isn't play if the details of its performance can be remembered and shared out of context.

Play is an important way people explore the boundaries of their social worlds. Nippert-Eng terms this boundary play: "the visible, imaginative manipulation of shared cultural-cognitive categories for the purpose of amusement" (Nippert-Eng, 2005, p. 302). She argues that when

conceptualizing play as exploration, people play with boundaries in the gray areas of definitions, rules and protocols, whether these are related to interactions with physical artifacts or social relations. The default of ephemerality that Snapchat and its ilk is well suited to enable boundary play – a kind of "feeling out" of relationships and their boundaries and edges – a test of confidences.

Snapchat allows for easy explicit targeting of communication, the ephemerality enabling a kind of relational play impossible in the formalization imposed on content through the default of saving. The expectation of erasure allows experimentation, offering protection for the future self from the playful actions and transgressions of the past - something that the default of saving constantly threatens. Ephemerality enables relational work that play invites, but such relational work cannot be conducted at scale. Relational boundary play presumes a trusted audience, which explains the repeated finding that Snapchat involves a small number of select relations (Utz, Muscanell & Khaled, 2015; Piwek & Johnson, 2016; Shklovski & Bruun Hervik, 2016). Ephemeral communication simply does not make sense to audiences that are typical of Facebook, which is much more useful for leveraging networks rather than engaging in tricky and intimate relational work.

No technology can guarantee erasure. The ephemeral functions of Snapchat and its ilk can be easily circumvented with screenshots and third-party software (Kotfila, 2014). Here the technical defaults matter and the emphasis on the idea that "this picture doesn't really exist" (Shklovski & Bruun Hervik, 2015) suggests that the default of ephemerality of content presumes a relational expectation of forgetting and assigns meaning to acts of deliberate remembrance. Saving a Snapchat communiqué is an intentional act, in the same way as deleting a Facebook post can only be intentional. These acts communicate succinctly that the sender and the recipient disagree about the value of the content. When the image is saved on Snapchat the intentions of the sender are denied but, in saving an image that was intended to be ephemeral, the receiver declares that what wasn't deemed worth saving actually is. The opposite message is communicated when content on Facebook is intentionally deleted and what is deemed worth saving is explicitly discarded. Both actions can have relational consequences if discovered.

The rise of ephemeral social media suggests that perhaps there is no need to remember everything even if we might regret forgetting later. Interpersonal communication involves more than one person's intentions and meanings. For relations and individuals to explore each other and to grow they must be allowed to push boundaries, make mistakes and be foolish in a way that gives space and opportunity for forgetting. Snapchat use seems to be about intentional data loss that allows carelessness in a digital world where every action could be saved and catalogued, requiring far too much forethought and care.

### **Looking Forward**

Social interactions of any kind need places and tools to be enacted. Spending time with a friend is an enactment of friendship but it must happen somewhere. The internet and the social technologies it powers offer myriad options for relational enactment. These 'personal communication systems' (Boase, 2008) have grown in complexity and concerns of the research conducted just a decade ago now seem somewhat naive and limited. As computer mediated communication moved from a curiosity to an integral part of how people manage their daily lives, being "connected" through social media shifted from an affectation to a requirement. Burchell (2015) calls this "need for networked connection" a necessity for participation in the contemporary digital society. This necessity brings with it demands and

pressures strong enough that "digital detox" and "disconnection" retreats are becoming a common practice.

Scholars may no longer debate the importance of online social practice, but they continue to argue about the effects that extensive adoption and use of social media might have on individuals, their relationships and the society at large. Peters (2000) writes that in the early 20<sup>th</sup> century in scholarly debates "communication was a term without specifications of scale." The extent of reach became an important distinction in the 1930s when interest in the effects of new technologies such as radio emerged. Information and communication technologies, as they have evolved, first created an opportunity for the distinction between mass and interpersonal communication and then eventually removed the possibility of it. What used to be distinctly dyadic and interpersonal communication can now slip into scaled mass communication, sometimes unexpectedly as statements become viral memes or get broadcast beyond the intended audience. The outcomes of such communication can be vast and unpredictable. Communication on Facebook in general can hardly be conceived as "small scale" or interpersonal in the same way - the direct visibility of dyadic interactions to broader networks creates a kind of medium scale of communication, located somewhere between the traditional notions of mass and interpersonal. The reach of our interaction efforts is ironically more than we may expect, as we under-estimate our Facebook audiences (Bernstein et al., 2013) and less than we may hope, as we fail to gain the attention we would like (Marwick & boyd, 2010).

As people become more reachable, and, by extension more digitally archivable, what does this mean for the future, for the ability to move beyond the past and to be allowed to grow apart and to become different? The maxim of connectivity presumes that social connections will remain despite upheaval, minor changes or major life events. Moving to a new location no longer means losing touch with friends and family. Yet relationships fade for a reason, sometimes good and sometimes bad, but for a reason none-the-less and many people experience growth and find value in creating new relationships. What if loosing contact becomes a conscious choice, a requirement of cutting the connection on Facebook? As people go through life, some parts of their past might be ones that they want to loose, the memories that they want to forget and the people who are involved with that past, are the ones with whom they would not want to remain in touch. However, such sentiment may not be shared by all parties equally. Social ties are encumbered by past memories in a particular period of a past life. In that sense they are a way to compare ourselves to possible other outcomes but mostly perhaps to note that all survived sufficiently. Yet the reality of current selves may be abruptly questioned and even sabotaged by those who cannot help but see these selves from a point some place in the past.

Social lives, relations and interactions are extensively catalogued and archived, but the people that produce these data often retain little control over whether and how it may be preserved. In response some seek spaces where interaction can remain ephemeral, free from the burden of generating content that is worth saving. Being social is a necessity and a commitment. Yet the dictum of social connection, sharing and communion is often accepted as an unquestionably positive concept. Peters argues that this is problematic, suggesting that instead communication ought to be considered as: "the project of reconciling self and other. The mistake is to think that communications will solve the problems of communication, that better wiring will eliminate the ghosts" (Peters, 2000, p. 9). More ways of communicating is not necessarily better because reaching an understanding remains difficult. Transmission of information, after all, is not the same as reaching an emotional resonance. To be social is

equivalent to the act of interaction, constitutive of the social world - consequential in an ongoing process of meaning making that is simultaneously individual and collaborative (Sigman, 1991). It may be convenient to conceptualize interaction as a purely functional process of transmitting information and grooming social connections, yet such conceptualizations will always remain deficient if they do not recognize the labor involved and perhaps include a bit of play and wonder.

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