



2012

Into the World of Privatized Publicity: Online Privacy on Social Network Sites

Yongjun Shin

Bridgewater State University, yongjun.shin@bridgew.edu

Virtual Commons Citation

Shin, Yongjun (2012). Into the World of Privatized Publicity: Online Privacy on Social Network Sites. In *Communication Studies Faculty Publications*. Paper 27.

Available at: http://vc.bridgew.edu/commstud_fac/27

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.

Into the world of privatized publicity: online privacy on social network sites¹⁾

Yongjun Shin

Bridgewater State University

Dong-Hee Shin*

Seoul National University

Abstract

Social network sites enable and drive users to express themselves, attract attention, and gain recognition from other people by disclosing private and sensational information about themselves to their networks as well as to the public. As a result, social network sites have affected the perception and concept of privacy. In this vein, this paper aims to discuss how to address the social transformation regarding privacy on SNS space through a systematic literature study. To this end, it reviews the current research on online privacy, particularly focusing on the logic of the users' disclosure of personal information and changing notion of privacy. Then, we provide a new concept of *privatized publicity*, which has simultaneously reinforced not only individual self-promotion but also other-oriented symbolic interactions. The conceptualization is expected to provide social media ethnographers with theoretical and methodological guidance to more thoroughly investigate the behaviors of social media users in terms of symbolic interaction. Finally, we discuss policy implications for developing SNSs.

Keywords: social network service, isolation, belonging, recognition, privacy

1. Introduction

Social network sites (SNSs), such as Facebook, MySpace, Friendster, Twitter, Linked-In, and Pinterest, are attracting large numbers of people at a very rapid pace. In particular, Facebook, created by Mark Zuckerberg and his friends from Harvard University dorms, has become the largest social network in the world ever since its creation in 2004. According to the Facebook factsheet, as of March 2012, there were more than 900 million active members who have revisited the network site in the last 30 days. On SNSs, users are uploading and sharing a variety of information, ideas, news, and visual images. The Millennials, the so-called "digital natives" or "generation Y" born after 1980, are likely to continue to openly and

blatantly share information online, according to a recent study by the Pew Research Center's Internet & American Life Project (Anderson & Rainie, 2010).

On the one hand, online communication via SNSs contributes to generating many social benefits, especially social capital (Nie, 2001; Wellman, Haase, Witte & Hampton, 2001; Boyd, 2006; Ellison, Steinfield & Lampe, 2007). In theory, if the digital divide and language barriers are to be overcome, SNSs might be able to connect the world population, organize unlimited group activities, and allow users in different countries to interact. On the other hand, indiscreet use of social networking tools, particularly by teenagers, is worrisome, and many people are especially concerned about privacy (Marist Poll, 2010). According to a recent survey by Marist College Institute for

* Corresponding author: dshin1030@gmail.com

1) This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2010-B00171; NRF-2011-330-B00225). This research was supported by the MKE (The Ministry of Knowledge Economy), Korea, under the ITRC (Information Technology Research Center) support program (NIPA-2012-(H0301-12-3001)) supervised by the NIPA(National IT Industry Promotion Agency).

Public Opinion (Marist Poll, 2010), half of the social network users in the U. S. are worried about their privacy, with survey participants over age 60 being the most concerned about privacy; moreover, women worry more than men.

However, we are presented with a paradoxical tendency: while adults are concerned about privacy invasion, younger generations tend to worry less about their privacy and continue to share information online openly and frequently (Barnes, 2006; Marwick, Murgia-Diaz & Palfrey, 2010; Taraszow, Aristodemou, Shitta, Laouris & Arsoy, 2010). Online spaces, particularly SNSs, enable and drive users to express themselves, draw attention, and gain recognition from other people by disclosing more private and more sensational information (Samuelson, 2006; Stone, 2010; Lewin, 2010). In particular, teenagers tend to easily reject or tweak the concept of privacy in order to maintain their networks and to obtain recognition from their peers; in some case, with only limited realization of the public nature of SNSs. As a result, SNSs have changed the perception and concept of privacy (Kirpatrick, 2010; Raynes – Goldie, 2010; Dowd, 2011) and have partially disrupted the boundary between private and public realms. Also, users tend to be more adept in distributing personal information on SNSs, while they seem to be incautious and careless by voluntarily disregarding privacy.

In this vein, this paper aims to discuss how to address the social transformation regarding privacy on SNS space through a systematic literature study. To this end, it reviews the current research on online privacy, particularly focusing on the logic of the users' disclosure of personal information and changing notion of privacy. Then, we provide a new concept of *privatized publicity*, which has simultaneously reinforced not only individual self-promotion but also other-oriented symbolic interactions. The conceptualization is expected to provide social media ethnographers with theoretical and methodological guidance to more thoroughly investigate the behaviors of social media users in terms of symbolic interaction. Finally, we discuss policy implications for developing SNSs.

1.1 Social network sites and concerns about privacy violation

SNSs are defined as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (Boyd & Ellison, 2007). While the term “social network sites” is generally interchangeable with the term “social networking sites,” Boyd and Ellison (2007) choose to use the term “social network site” because the primary practice on many social network sites, which is distinguishable from other types of computer-mediated communication (CMC), is to enable users to identify, reconnect, and solidify pre-existing personal ties and disclose them to the public, rather than to create new relationships between strangers, as insinuated by the phrase “social networking.” However, it is also noticeable that many SNS users have aimed to create new relationships with strangers through networking. Hence, the difference between social network and social networking via CMC becomes blurred.

While there have been many prototypical forms of SNSs, such as TheGlobe.com (1994), Geocities (1994), and Tripod.com (1995), according to Boyd and Ellison (2007), SixDegrees.com is considered to be the first social network site. SixDegrees.com commenced their service in 1997, offering users the opportunities to create their own profiles, list their friends, and connect with others. Although millions of users were attracted to SixDegrees.com, the service did not succeed in becoming a sustainable business model because most of the early adopters did not have sufficient online networks and also because SixDegrees.com did not offer many user activities (Boyd & Ellison, 2007).

Today, a large number of SNSs is emerging. The social medium and Internet marketing blog, Traffikd (<http://traffikd.com/social-media-websites/>), has collected almost 500 social media sites and SNSs in its list, including sites focused on networking, consumer reviews, cooking/food, culture/foreign language, dating,

games, health/medical, Internet marketing, politics, and religious, just to name a few. Additionally, the amount of information circulating on SNSs is enormous. According to the Facebook factsheet, as of March 2012, there are more than 125 billion friend connections on Facebook, and on average, users create 90 pieces of content every month. Also, more than 30 billion pieces of content such as web links, news stories, blog posts, notes, and photo albums are shared among users on a monthly basis. More than 70 languages are available on Facebook.

Despite the social benefits of SNSs, including social capital (Boyd & Ellison, 2007), technical skills (Ito et al., 2008), and educational benefits for low-income students (University of Minnesota, 2008), many researchers have also identified some negative effects of SNSs. Some studies have found a negative correlation between SNS use and academic performance (Boogart, 2006; Karpinski & Duberstein, 2009). Internet users can become addicted to constant online interactions through text messages, e-mail, and SNSs via cell-phones, smart phones, and personal computers (Moeller, 2010; Siew, 2010). Moreover, various cognitive psychologists and neuroscientists are concerned with the negative impacts of constant online interactions and an oversupply of information through various technologies. Such interactions can negatively affect brain activities such as concentration, in addition to increasing stress levels (Carr, 2010; Richtel, 2010a, 2010b).

While SNSs are not solely to blame for these negative effects on individuals and on the society, they certainly function to provide a venue for unending interactions, which impel individuals to disclose more private information regardless of the reasons. The privacy concerns have been brought to intensive attention after Facebook users discovered a security glitch allowing users to access private information on the accounts of their Facebook friends (Wortham, 2010). After protests from privacy advocates, users, and lawmakers, mainly on the fact that Facebook revealed user information to the public and to third-party advertisers, Facebook has changed its policies to provide users with more control over what

personal information can be viewed publicly (Kang, 2010b). Prior to this, the U.S. Federal Trade Commission had also planned to generate guidelines on Internet privacy to prevent social networks, search engines, and location tracking applications on cell-phones from abusing customer personal data (Kang, 2010a).

Indeed, the market for personal data is one of the most profitable businesses in the social media industry. Many social media companies gather personal information and use it for advertisement, which is their main source of revenue. Specific advertising is targeted to specific users, exposing social network site users only to the advertisements that are deemed relevant to them, also known as targeted advertisement. Sometimes, malicious acts, such as disseminations of spyware and bug exploitation, are used to track “digital footprints” through the archiving of user search terms, computer addresses, and web browser unique identifiers. In order to improve the protection of online privacy, venture capital firms have been investing in web-based monitoring and privacy protection products such as ReputationDefender (www.reputationdefender.com), Abine (<http://abine.com/>), SafetyWeb (www.safetyweb.com), and SocialShield (www.socialshield.com).

In response to the growing concern about online privacy, privacy advocacy groups and many social scientists have focused on investigating data mining technologies and online surveillance by vicious hackers, general users, corporations, and governments, by utilizing metaphors such as “digital panopticon” (Brignall III, 2002; Katz & Rice, 2002) and “Big Brother” (Derbyshire, 2008). For instance, researchers at Carnegie Mellon University have recently demonstrated that they could infer the social security numbers of five million Americans born between 1989 and 2003 by mining information that was available on social networks and other data from publicly accessible sources and then scrutinizing such data by referring to complex statistical correlations (Acquisti & Gross, 2009). In addition, a recent *Consumer Report* has found that 52 percent of social network users reveal information, such as full birth

dates, vacation dates, and other data, that could be used by cybercriminals (Consumer Reports National Research Center, 2010). Under these circumstances, scholars have begun pointing out that the conventional notion of privacy has become obsolete and should be reconsidered and re-conceptualized.

1.2 Theories of privacy

Privacy, in general, refers to the ‘right to be left alone’ (Warren & Brandeis, 1890). However, it is difficult to clearly understand and follow the concept of privacy (Posner, 1978; Parent, 1983; Schoeman, 1984; Clarke, 1999). For instance, from an economic perspective, privacy is understood as personal property (Posner, 1978); it is also considered as an interest in the maintenance of personal space free from interruption by other people and entities (Clarke, 1999).

According to Tavani (1996), traditional privacy theories have broadly been categorized into two types: non-intrusion and exclusion theories. The non-intrusion theory views privacy as “being left alone” or “being free” from unauthorized intrusion, while the exclusion theory regards it as “being alone” (Tavani, 1996). Therefore, the non-intrusion theory confuses privacy with liberty. On the other hand, the exclusion theory confuses it with solitude (Tavani, 1996). Both theories tend to focus on psychological harms to individuals, which are derived from physical intrusion into an individual’s space or interference with personal affairs (Tavani, 2000).

However, the concept of privacy in the U.S. has changed from having a psychological focus to a more information-focused concern (Moor, 1997). In other words, current theories of privacy tend to focus on issues regarding personal information and the access and flow of that information. Consequently, many theorists employ the term ‘informational privacy’ as a distinct category of privacy concern, to which theories such as “control” and “restricted access” belong (Fried, 1970; Rachels, 1975; Gavison, 1980; Allen, 1988; Tavani, 2000).

On the one hand, the control theory of privacy

asserts that an individual has privacy if and only if he or she has control over personal information (Fried, 1970; Rachels, 1975). This theory ends up separating privacy from both liberty and solitude, and contributes to the recognition of the role of choice, which those who have privacy possess in order to be able to grant and deny individual access to their personal information (Tavani, 2000). However, in reality, as Tavani points out, individuals are never able to obtain complete control over all information about them. For instance, while SNSs have recently tended to provide users with more choices to control their personal information, the companies still possess user information in their database, along with the power to control such information. Consequently, the theory of control confuses privacy with autonomy by focusing almost entirely on the aspect of control or choice (Tavani, 2000). Therefore, the control theory of privacy is not sufficient to explain the current situation of SNSs.

Alternatively, the restricted access of a privacy theory argues that privacy exists in the condition that access to information about oneself is limited or restricted in certain contexts (Allen, 1988; Gavison, 1980). While this restricted access theory does not confuse privacy with autonomy, liberty, or solitude, by emphasizing the importance of establishing contexts of privacy, the theory tends to undervalue the role of control or choice and to confuse privacy with secrecy (Tavani, 2000). Therefore, neither theories of privacy seem to offer a complete explanation of privacy; however, the theories provide a significant insight into the essential elements of privacy.

Moor’s control/restricted access theory overcomes the limits of the two previous theories by proposing individual privacy if and only if the individual is protected from intrusion and interference and if his/her personal information cannot be accessed by others (Moor, 1997). This definition deliberately remains vague so that it can be applied to many contexts (Moor, 1997), including a certain activity, a relationship, or a location (i.e., storage, access or control of information in a computer database). This theory of privacy enables two types of significant distinctions:

the distinction between the condition of privacy and the right to privacy and the distinction between the loss of privacy and violation of privacy (Tavani, 2000). These two types of distinctions are further classified into two situations: a naturally private situation and a normatively private situation. In a naturally private situation, individuals are protected by natural means such as physical boundaries; in a normative private situation, individuals are protected by ethical, legal, or conventional norms (Moor, 1997). Therefore, while in a naturally private situation, privacy can be lost but not violated because there is no norm to act against. An individual has normative privacy in a situation if and only if the individual is protected from intrusion, interference, and informational intrusion by others (Moor, 1997).

Moor's concentration on the situation enables us to consider the Internet as a medium, which can constitute multiple situations. Therefore, Internet activities, such as the mining of personal data, the use of Internet search engines to locate individuals or information about those individuals, the use of Internet cookies to collect a user's personal information and accumulate that information on the user's computer, the use of Internet forms to collect personal information, and the use of Internet server log files to collect personal data, can be considered as a series of legitimate situations (Moor, 1997). For example, the simple loss of individual privacy due to data mining of personal information on the Internet does not necessarily establish an invasion or violation of that individual's privacy in a normative sense because the boundaries of normative privacy can be different according to place, time, and group. However, Moor argues that privacy criteria or conditions should not be arbitrary or unjustified, but rather these conditions should be stated publicly so that the way in which the parameters of a private situation can be fitted to constitute a public situation are known (Moor, 1997).

1.3 Logic of personal information disclosure on SNSs and changing notion of privacy

Early research on the impacts of the Internet on youth has focused on the risk and concern about for-profit websites and networks, which deceive children into revealing personal information and sell such information for making profits (Montgomery & Pasnik, 1996; Cai & Gantz, 2000; Moscardelli & Liston-Heyes, 2004; Youn, 2005), while assuming that children are not able to be discreet in dealing with personal information (Henke, 1999). However, further studies have found that children are technologically savvy and also critical about online marketing strategies (Henke, 2002; Howe & Strauss, 2002; Palfrey & Gasser, 2008). Nowadays, many children tend to strategically reveal personal information as a mean to meet their needs as seen in their search for new identity and secret advice as well as in their interactions with peers (Vermaas & Van de Wijngaert, 2003; Livingstone, 2006, 2008; Bryce & Klang, 2009; Utz & Krämer, 2009).

Two primary reasons have emerged from the research on youth's disclosure of personal information on online space: relationship management and recognition building. Firstly, children and teens use SNSs and mobile communication technologies to maintain and enforce friendships and peer group relationships (Boneva & Quinn, 2006; Gross, 2004; Subrahmanyam & Greenfield, 2008; Reich, Subrahmanyam & Espinoza, 2012). Reich and her colleagues discovered that teenagers primarily use SNSs to connect with the people they know from offline settings. Therefore, children and teens are motivated to share personal issues and information to reinforce intimate relationships with their peers (Valkenburg & Peter, 2009). As a result, they are able to maintain weak ties and enhance social capital by sharing personal information on SNSs (Ellison et al., 2007; Livingstone, 2008; Christofides, Muise & Desmarais, 2009; Davis, 2012). Moreover, sharing personal information with those who have similar concerns and issues helps teenagers construct and manage their identity (Moinian, 2006; Grasmuck & Martin, 2008; Valkenburg & Peter, 2008; Knutzen & Kennedy, 2012).

From an in-depth perspective, as social beings, people often experience paradoxical desires to be alone, but simultaneously, people are afraid of isolation from other people as well as from the society. Since social nature leads people to fear separation and isolation and to strive to be positively evaluated and liked (Noelle-Neumann, 1984), people need ways of overcoming their fears of isolation. Today, the Internet serves as a crucial outlet for social interactions and relationships. While the effects of CMC on the establishment of virtual communities are still under debate, research has shown that various interactions in online communities result in strong emotional and social bonds, the sharing of information and ideas, and working toward shared goals (Rheingold, 1993; Baym, 2000; Haythornthwaite, Kazmer, Robins & Shoemaker, 2000; Kendall, 2002; Moon & Sproull, 2002). SNSs are the most current and popular CMC tools used to overcome this fear of isolation by enabling individuals to build quality relationships with their family members, friends, and acquaintances via information sharing.

Secondly, research also disclosed that young people use SNSs to increase recognition, reputation, or popularity within their networks (Ellison, Heino & Gibbs, 2006; Boyd, 2007b; Christofides et al., 2009; Gibbs, Ellison & Heino, 2006; McKinney, Kelly & Duran, 2012). A study discovered that young women use webcams to broadcast their personal affairs to the audience online by using the “microcelebrity” technique. SNSs and other communication technologies are utilized with such technique to enhance their popularity (Senft, 2008). For instance, a 16-year old teenage boy in Nebraska obtained recognition through YouTube, and his popular character Fred Figgelhorn was filmed by a Hollywood studio (Barnes, 2009). In addition to teenagers, a growing number of adults, in particular young adults, also tend to enjoy disclosing extremely personal information, usually considered to be too private and secretive, via SNSs. For instance, Blippy (<http://blippy.com/>), a personal finance SNS, enables its users to post information about their purchases of goods and services, as well as follow others’ updates. On the site, users publicize

their credit card and online purchases. While this kind of SNS intends to help people discover better goods and services, it also tends to motivate users to abandon their privacies by driving the users to show off (Stone, 2010).

Indeed, the desire for recognition is a pivotal psychological element that entices individuals to relegate online privacy. According to Maslow’s hierarchy of needs (Maslow, 1943, 1954), esteem needs, which instill approval and recognition, are the highest needs of all of the deficiency needs. Esteem needs include the normal human desires to be accepted, respected, and valued by others (Maslow, 1954). Therefore, people are tempted to act in ways that draw attention and obtain recognition. The emergence of SNSs triggers and reinforces an individual’s desire to obtain recognition by revealing intimate or sensational information. SNSs function as outlets through which individuals attempt to gain recognition from their peers and the public. Consequently, individuals’ attempts to realize their desires for recognition on SNSs might result in a great outburst of mass exhibitionism in society as a whole (Samuelson, 2006; Jurgenson, 2008).

However, as we pointed out above, SNS users tend to be selective and even strategic in revealing personal information to their networks. According to policy analyst Heather West, most teenagers are able to choose levels of privacy and levels of exposure to the public by restricting access to their online profiles. Historically, people considered privacy as informational and institutional concept in which they were concerned about how such institutions as governmental, financial, and business organizations use or misuse their personal information (Kamaraguru & Cranor, 2005). However, the emergence of SNS has changed the traditional notion of privacy; the notion of privacy pragmatism helps us understand SNS users’ behaviors of personal information disclosure to the public online (Raynes-Goldie, 2010).

According to Westin’s classification of privacy (Kamaraguru & Cranor, 2005), there are three categories: privacy fundamentalists; privacy pragmatists, and privacy unconcerned. According to a survey in 2003, privacy pragmatists, who are concerned about

their privacy but are willing to disclose personal information for gaining benefits, have risen to 64 percent of those who participated in the survey (Taylor, 2003). This change towards pragmatic private information disclosure was also verified by an ethnographic study with SNS users in Toronto (Raynes-Goldie, 2010) and a survey research with college student SNS users in the U.S. (Tufekci, 2008).

In sum, we have focused on the two main factors, relationship management and recognition building, which drive people to disclose personal information online, along with the changing notion of privacy based on the technological availability of SNSs. Moreover, we claim that this social transformation is closely related to a new social phenomenon because SNS users do not tend to separate the two distinct public and private realms (Mulgan, 1991; Boyd, 2007a; West, Lewis & Currie, 2009; Jurgenson, 2010, June 9; Nissenbaum, 2011).

2. SNS and the publicity

In general, the public refers to the realm in which individuals gather, share common concerns and interests, and articulate significant issues pertaining to the entire population. Historically, the public realm, which represented the status and authority of the lord in medieval times, was distinguished from the private realm after the emergence of the bourgeois society (Habermas, 1962, 1989). Until recently, the public has been considered to be that realm beyond private issues; therefore, public information is drawn from society because of the significance of the information, as well as its broader scope of influence.

However, the traditional notion of publicity is now in flux because Web 2.0, the participatory web, which has changed the mechanism through which information becomes public. That is, private information of ordinary people, seemingly meaningless or useless to others, tends to gain increased publicity due to the support and provocative characteristics of information and communication technologies (ICTs), rather than focusing on the social implications and

impact of the information. While this tendency can be understood as the democratization of publicity, it allows the boundary between private and public information to become blurred because publicity, which used to belong to celebrities and authorities, is now shared with ordinary people (Mulgan, 1991; Boyd, 2007a; West, Lewis & Currie, 2009; Jurgenson, 2010, June 9; Nissenbaum, 2011). A massive influx of private information penetrates the realm of publicity, particularly on the Internet; therefore, publicity becomes privatized. We define this social change as *privatized publicity*.

2.1 Privatized publicity and symbolic interaction on SNS

Indeed, privatized publicity also occurs in people's experience with and use of physical space due to the proliferation of ICTs in public places. For instance, self-absorbed behavior, such as speaking loudly on a cell-phone in public, allows individuals to ignore the public aspects of their behavior and to personalize public places (Wellman, 2001). Therefore, ICTs and social media services like SNSs are changing the concept and perceptions of privacy. For the time being, the concept and perception are likely to seem contradictory: while people are concerned that the Internet might threaten their privacies, in reality, a greater number of people are voluntarily and delightfully disregarding privacy by posting more personal and intimate information on cyberspace (Samuelson, 2006).

Concurrently, it is also interesting to witness that people become more adept in choosing the content of private information and the timing of disclosure, while they become less concerned about privacy and secrecy, as maintained by Mark Zuckerberg (Fletcher, 2010). This kind of sophisticated managed abandonment of privacy is primarily aimed at promoting self-publicity, which eventually leads to other-oriented communication in cyberspace. More specifically, people consciously or unconsciously act in anticipation of reactions from others. Such a selected course of action is posted on SNSs in the forms of

written stories and images to gain recognition and publicity.

Therefore, the proliferation of SNSs, as well as people's preoccupation with publicity on SNSs, has transformed not merely how time is spent, but also how to construct an identity in real life (Orestein, 2010). According to a research by Sherry Turkle (M.I.T Sociologist of Technology) on the relationship between the self and the use of social media and mobile phones, young people's self-images tend to be increasingly influenced by external sources rather than internal sources, similar to how profiles on SNSs are created and changed in response to public opinion. In short, while SNSs are intended to function as platforms for people to express themselves (authentic self), SNS users tend to attune their expressions to the consumption and perception of others (invented self). Such other-oriented communications are essentially construed as purposeful and voluntary behaviors based on needs and intentions, as addressed in symbolic interactionism and dramatism, rather than as an impromptu interaction (Orestein, 2010). In the era of SNSs, people's seemingly impulsive, unorganized, or undirected communications are fundamentally symbolic interactions which hold connotations beyond the denoted messages. Therefore, privatized publicity has reinforced individual self-promotion and other-oriented symbolic interaction, while motivating people to tweak privacy. This new social phenomenon should be further investigated in depth by ethnographic social media researchers.

2.2 Previous CMC research

Previous research on the impacts of online interaction on self-expression, cyber identity, and self-disclosure has been conducted with the assumption of anonymity in CMC. The Internet enables users to reinvent themselves and provides unprecedented ways to anonymously manage impressions and identities (Chester & Bretherton, 2007). For instance, introverted individuals are able to express themselves in extroverted ways because the Internet provides a more secure and controllable communication environment

than those of offline relationships (Hamburger & Ben-Artzi, 2000; Amichai-Hamburger, 2002, 2005). Some people may present themselves differently to online friends and acquaintances than to those offline because the condition of anonymity enables them to share important inner or concealed aspects of their identity (McKenna, 2007).

The anonymity of CMC is indeed explained along a continuum (Chester & Bretherton, 2007). At the end of this continuum, users can be identified and traced through the use of their real names or through other features such as their email addresses. At the other end of the continuum, users can be completely anonymous, without leaving any traceable information (Chester & Bretherton, 2007). Many text-based CMCs are placed somewhere between these extremes.

The most famous example is the story of Alex/Joan, which was documented by Van Gelder (1991). Alex, a middle-aged American psychiatrist, presented himself as a female, Joan Greene, to conduct professional online interactions with women. This managed anonymity, precisely *pseudonymity*, in which the user creates a screen name (Chester & Bretherton, 2007), ends up leading users to create new online identities which are different from their identities in the offline world.

From one point of view, some researchers have found that online identity constructions are related to user hopes for a desirable self-image (Reid, 1994; Curtis, 1997; Romano, 1999). Specifically, some users construct their cyber identities based on their idealized notions of self-presentation. For this, some users even conceal their personality characteristics online (Chester, 2004). The use of concealment in online impression management can be explained as a self-presentation strategy. Therefore, hiding certain aspects of one's identity may be an unconscious response to the dilemma of presenting a complex self in a restricted amount of words (Chester & Bretherton, 2007). The limited or selective disclosure of identity can also stem from the desire to protect against social anxiety, which increases when people seek to make a good impression but do not expect that they can (Schlenker, 2003).

In everyday life, people manage impressions to

obtain social and material benefits such as succeeding in a job interview, attracting someone to win a date, developing identity, or maintaining self-esteem (Leary, 1995; Chester & Bretherton, 2007). According to Turkle's qualitative research on multi-user domain (MUD) players (Turkle, 1995), interesting and strong themes in identity presentation are the desire to show uncultivated parts or dimensions of one's identity, which is restrained in face-to-face interactions, in addition to the desire to create relationships and the power of deception. Furthermore, some studies have shown that self-disclosure is significantly higher when people communicate using visually anonymous CMC than when they have face-to-face interactions (Joinson, 2001; Joinson & Paine, 2007). One of the reasons for this is that the limited conditions of CMC might facilitate people to choose more direct, intimate questioning and self-disclosure by skipping peripheral questions and minor disclosure in order to reduce uncertainty and increase predictability (Tidwell & Walther, 2002).

In short, previous research on online privacy has tended to focus on the effects of anonymity on individual control or manipulation of personal information. Therefore, it has implied that individuals in CMC are aware of the potential impacts of revealing personal information and are shrewd at retaining privacies. However, the emergence of SNSs has changed the previous assumption of online anonymity because they have created different modes of CMC. SNS users are no longer interested in hiding or controlling their offline identities and personal information, including real names and contact information, although the degree of disclosure varies across users. Many SNS users, particularly teenagers, actively reveal more personal and sensational information to manage their self-impressions and draw attention from members of their networks. A growing number of job seekers also try to manage their self-impressions using SNSs and other social media channels. Even schools and career counseling offices teach the use of social media as a job search tool (Manjoo, 2010).

As a result, while people are concerned about

privacy violation, they simultaneously disclose more personal information via SNSs. Current empirical studies have also revealed that SNS users' privacy concerns do not affect their online interactions (Acquisti & Gross, 2006; Dwyer, Hiltz & Passerini, 2007). Therefore, CMC research needs to develop a new research framework for investigating the changing CMC modes. While media psychology has proven the relationships between psychological factors and individuals' personal information sharing behaviors, we also need to understand how such psychological elements actually manifest in SNS users' information sharing behaviors. Symbolic interactionism offers media ethnographers conceptual frameworks to fully describe the interactions and understand the meanings in more depth.

2.3 Symbolic interactionism and SNS users' disclosure of private information

Symbolic interactionism focuses on languages and symbols in people's communication and their meanings, which are socially constructed within certain cultures or contexts. While George Herbert Mead is generally considered as the frontier of the interactionist scholarship (Mead, 1934), the term symbolic interactionism was invented by Mead's pupil Herbert Blumberg (Blumberg, 1969). In Mead's symbolic interactionism, there are three foundational elements: *society*, the *self*, and the *generalized other* (Mead, 1934). *Society* is composed of a network of social interactions in which people use symbols to assign meanings to their own and other's actions. A person's *self* is constructed by taking a role within a certain situation; a person needs to adjust his/her role while simultaneously responding to others and himself/herself. In this light, individual action is a construction built up by the individual through noting and interpreting features of the situations in which he acts (Blumberg, 1969). Therefore, a person creates and internalizes his/her own perception of the overall way of how others see him/her, defined as the *generalized other*. A person's generalized other is created through symbolic interactions with other people in life over years (Mead, 1934). Hence, significant others are

particularly influential to shape a person's generalized other.

As addressed above, SNS users tend to create their own self-image by selectively sharing personal information and symbols, rather than writing random postings. Several empirical studies have also dealt with SNS users' symbolic interactions (Siibak, 2009; Vasalou & Joinson, 2009; Gottschalk, 2010; Hogan, 2010; Manago & Greenfield, 2010; Marwick & Boyd, 2011). For instance, Hogan (2010) discovered that people make self-presentations via status updates, photos, and chatting on social media, drawing on Erving Goffman's dramaturgical approach. By conducting a survey in comprehensive schools in Estonia among 11 to 18 year old students, Siibak (2009) also revealed that young people strongly emphasize their profile images on SNSs. This study found visible gender differences in selecting particular profile images. In short, girls tend to create their visual self-value by focusing more on the aesthetic, emotional, self-reflecting and aesthetic-symbolical aspects of photos than their male counterparts (Siibak, 2009).

Although current studies have disclosed the fact that people use SNSs to create self-images by engaging in symbolic interaction, while focusing on the idea of the generalized others, they could not further address what different images or roles people end up creating through online symbolic interactions. As online symbolic interactions reflect offline interactions, we propose to diversify SNS users' generic roles in their online symbolic interactions by applying the types of role in small group communication, suggested by Benne and Sheats (1948). Even if the categories might not perfectly fit into possible roles on SNSs, they can serve as a baseline for further research. The listed types of role are extracted from Infante, Rancer, and Womack's *Building Communication Theory* (1997, pp. 295-296):

- *Aggressor* attacks self-concepts of others to assert dominance.
- *Blocker* is hostile by being negative and opposing things unreasonably.
- *Recognition-seeker* offends members by calling too

much attention to self.

- *Self-confessor* discloses personal problems into the discussion in hope of gaining insight.
- *Playboy* takes time in group to have fun.
- *Dominator* enjoys interrupting, manipulating, and controlling others.
- *Help-seeker* tries to get sympathy, acts insecure, confused, helpless, and sometimes pathetic.
- *Special interest pleader* argues for a pet idea, often based on prejudice of group's goals and needs.

With the above categories, we will be able to initiate an investigation to uncover what roles individual SNS users take and how they create, maintain, or change roles to adjust themselves to norms or values of their networks by selectively sharing personal information and choosing symbols. We expect that further empirical studies will improve the suggested categories by discovering other roles and customizing the categories within specific situations in online symbolic interactions. The research is expected to show the detailed process of how individual SNS users construct the generalized others through adjusting their own roles in their online symbolic interactions.

3. Discussions and policy implications

In sum, the implications of this study are twofold: 1) a research guidance for online symbolic interaction and, 2) a policy guideline for privacy-conscious social media development. As discussed, the emergence and proliferation of SNSs have changed the perception and conception of privacy online and possibly offline. The changing media environment requires new research frameworks for social media to probe into individuals' voluntary disclosure of private information. We have addressed two primary factors, relationship maintenance and recognition building, as the main driving forces for individuals' sharing of private information on SNSs through a theoretical discussion and anecdotal evidence. Growing numbers of empirical research have been examining how such psychological factors affect individual users' information-sharing behaviors

on SNSs.

In order to contextualize this social realm, we have conceptualized the emerging social phenomenon as *privatized publicity*, in which a massive influx of private information penetrates into the public realm thanks to the support and provocative characteristics of ICTs. While the outpouring of information on SNSs seems to be unfiltered or unorganized, people tend to sophisticatedly disclose private information to promote self-publicity. Eventually, such managed disclosure of private information is expected to lead people to other-oriented communication actions on SNSs by attuning their self-expressions to other people's perceptions and expectations. Hence, we need to further the investigation to deal with how aforementioned psychological factors manifest in the online interactions on SNS; we can address this with symbolic interactionism, which will enable media ethnographers to investigate the online interactions in depth.

In the age of privatized publicity, individuals perform contradictory behaviors on SNSs. While people are concerned about their invasions of privacy, the concern only marginally influences people's disclosures of private information (Acquisti & Gross, 2006; Dwyer et al., 2007). A growing number of individuals tend to reveal tremendous amounts of their personal information online. However, most SNS users do not seem to be aware of the public nature of personal information, which is posted on SNSs and shared by their networks and potentially by the public. For instance, many teenagers do not seem to recognize or care that online journals are supposed to be read by others, unlike a written journal, which can remain anonymous and private (Barnes, 2006). It is very worrisome that such information can be used and exploited by a variety of people for commercial, political, or even criminal purposes.

Indeed, web start-ups in Silicon Valley utilize SNS users' indulgent desires to reveal personal information and to exploit an atmosphere of online openness, despite risks hidden behind relentless information disclosure, by driving the trend of SNS development to focus on sharing private information

(Stone, 2010). This trend is highly likely to stimulate and reinforce SNS users, particularly teenage users, to reveal more personal and sensational information.

In this vein, even if we agree that privacy has more to do with maintaining choice or control of revealing and secreting personal information than it does with just needing to hide something, individual SNS users and potential users are entitled to be informed of the specific activities and goals of each SNS company. At this point, we need to re-address Moor's claim in terms of online privacy. Particularly, Moor's Publicity Principle should be noted because the principle serves as the foundation of an online privacy policy (Tavani, 2000).

According to the latter principle, a policy needs to clarify the requirements for all Internet users and businesses and to call for a rational debate on specific Internet activity in which online consumers are informed of the activity being employed by Internet businesses (Moor, 1997). At this time, businesses are responsible to inform consumers of online activity, whereas consumers are not responsible for discovering the online activity in which online businesses are engaged (Moor, 1997). This process can ultimately contribute to informed consumer choices and approvals of online business activities because individuals' right to make informed choices is undoubtedly a significant element in any policy which claims to be open and fair (Tavani, 2000).

In conclusion, based on Moor's control/restricted access theory as well as his Publicity Principle, we can propose a comprehensive and flexible process to resolve future privacy concerns which may stem from the use of Internet tools and techniques through open and rational debate, rather than merely using technical solutions to address privacy threats (Tavani, 2000). Applying Moor's theory and principle to the issue of privacy with regard to SNSs, the consumer sector can establish a rationale to address the issue through open, reciprocal, and fair debates between SNS companies and users. Through the processes, SNS firms are expected to not only produce more democratic privacy policies, but also to increase material gains and social capital between the companies and the users. Further-

more, after SNS companies inform users of potential online activities, constant dialogue between the two realms will strengthen the mutual relationship between them. SNS users are also expected to have a stronger interest in SNSs, as well as more active participation in the creation of various SNS security-based activities.

References

- Acquisti, A. & Gross, R. (2006). Imagined communities: Awareness, information sharing, and privacy on the Facebook. *Lecture Note in Computer Science*, 4258, 36-58.
- _____ (2009). Predicting social security numbers from public data. *Proceedings of the National Academy of Sciences*, 106(27), 10975-10980.
- Allen, A. (1988). *Uneasy Access: Privacy for Women in a Free Society*. Totowa, NJ: Rowman and Littlefield.
- Amichai-Hamburger, Y. (2002). Internet and personality. *Computers in Human Behavior*, 18(1), 1-10.
- _____ (2005). Personality and Internet. In Y. Amichai-Hamburger (Ed.), *The Social Net: Understanding Human Behavior in Cyberspace*, 27-55. New York: Oxford University Press.
- Anderson, J. Q. & Rainie, L. (2010). Millennials will make online sharing in networks a lifelong habit [Electronic Version]. *Pew Internet and American Life Project*. Retrieved from <http://pewinternet.org/Reports/2010/Future-of-Millennials.aspx>
- Barnes, S. B. (2006). A privacy paradox: Social networking in the United States. *First Monday*, 11. Retrieved from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/1394/1312>
- _____ (2009). Bigger screen for a high-pitched whine. *New York Times*. Retrieved from http://www.nytimes.com/2009/12/08/movies/08_fred.html?_r=2
- Baym, N. K. (2000). *Tune in, Log on: Soaps, Fandom, and Online Community*. Thousand Oaks, CA: Sage Publications.
- Benne, K. D. & Sheats, P. (1948). Functional roles of group members. *Journal of Social Issues*, 4, 41-49.
- Blumber, H. (1969). *Symbolic Interactionism: Perspective and Method*. Englewood Cliffs, NJ: Prentice-Hall.
- Boneva, B. & Quinn, A. (2006). Teenage communication in the instant messaging era. In R. Kraut, S. Kiesler, & I. Shklovsk (Eds.), *Computer, Phones, and the Internet: Domesticating Information Technology*, 201-218. Oxford, England: Oxford University Press.
- Boogart, M. R. V. (2006). *Uncovering the social impacts of Facebook on a college campus*. Unpublished master's thesis. Kansas State University. Manhattan, KS.
- Boyd, D. M. (2006). Friends, Friendsters, and MySpace top 8: Writing community into being on social network sites. *First Monday*, 11. Retrieved from http://firstmonday.org/issues/issue11_12/boyd/index.html
- _____ (2007a). Social network sites: public, private, or what? *Knowledge Tree*, 13. Retrieved from http://kt.flexiblelearning.net.au/tkt2007/?page_id=28
- _____ (2007b). Why youth (heart) social network sites: The role of networked publics. In D. Buckingham (Ed.), *Youth, Identity and Digital Media*, 119-142. Cambridge, MA: MIT Press.
- Boyd, D. M. & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer Mediated Communication*, 13, 11. Retrieved from <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html>
- Brignall III, T. (2002). The new panopticon: The Internet viewed as a structure of social control. *Theory & Science*. Retrieved from <http://theoryandscience.icaap.org/content/vol003.001/brignall.html>
- Bryce, K. & Klang, M. (2009). Young people, disclosure of personal information and online privacy: Control, choice and consequences. *Information Security Technical Report*, 14(3), 160-166.
- Cai, X. & Gantz, W. (2000). Online privacy issues associated with web sites for children. *Journal of Broadcasting & Electronic Media*, 44(2), 197-214.
- Carr, N. (2010). *The Shallows: What the Internet is Doing to our Brains*. New York: W. W. Norton & Company.
- Chester, A. (2004). *Presenting the self in cyberspace: Identity play online*. Unpublished doctoral dissertation. University of Melbourne, Melbourne, Australia.
- Chester, A. & Bretherton, D. (2007). Impression management and identity online. In A. N. Joinson, K. Y. A. McKenna, T. Postmes & U.-D. Reips (Eds.), *The Oxford Handbook of Internet Psychology*, 223-236. New York: Oxford University Press.
- Christofides, E., Muise, A. & Desmarais, S. (2009). Information disclosure and control on Facebook: Are they two sides of the same coin or two different processes? *CyberPsychology & Behavior*, 12(3), 341-345.
- Clarke, R. (1999). Internet privacy concerns confirm the case for intervention. *Communications of the ACM*, 42(2), 60-67.

- Consumer Reports National Research Center (2010). Social insecurity: What millions of online users don't know can hurt them. *Consumer Reports*. Retrieved from <http://www.consumerreports.org/cro/magazine-archive/2010/june/electronics-computers/social-insecurity/overview/index.htm>
- Curtis, P. (1997). Mudding: Social phenomena in text-based virtual reality. In S. Keisler (Ed.), *Culture of the Internet*, 121-142. Mahwah, NJ: Erlbaum.
- Davis, K. (2012). Friendship 2.0: Adolescents' experiences of belonging and self-disclosure online. *Journal of Adolescence*. Retrieved from <http://dx.doi.org/10.1016/j.jbbr.2011.03.031>
- Derbyshire, D. (2008). Inventor of the Internet warns against 'Big Brother' systems that track the sites you visit. *Mail Online*. Retrieved from <http://www.dailymail.co.uk/sciencetech/article-537010/Inventor-Internet-warns-Big-Brother-systems-track-sites-visit.html#>
- Dowd, M. (2011). Contextualised concerns: The online privacy attitudes of young adults. In S. Fischer-Hübner, P. Duquenoy, M. Hansen, R. Leenes, & G. Zhang (Eds.), *Privacy and Identity Management for Life*, 352, 78-89. Bostn: Springer.
- Dwyer, C., Hiltz, S. R. & Passerini, K. (2007). Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace. Paper presented at the *Thirteenth Americas Conference on Information Systems*, Keystone, CO.
- Ellison, N. B., Heino, R. & Gibbs, J. (2006). Managing impressions online: Self-presentation processes in the online dating environment. *Journal of Computer-Mediated Communication*, 11(2), 415-441.
- Ellison, N. B., Steinfield, C. & Lampe, C. (2007). The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.
- Fletcher, D. (2010). How Facebook is redefining privacy. Retrieved from <http://www.time.com/time/business/article/0,8599,1990582-1,00.html>
- Fried, C. (1970). *An Anatomy of Values*. Cambridge, MA: Harvard University Press.
- Gavison, R. (1980). Privacy and the limits of law. *The Yale Law Journal*, 89(3), 421-471.
- Gibbs, J., Ellison, N. B. & Heino, R. (2006). Self-presentation in online personals: The role of anticipated future interaction, self-disclosure, and perceived success in Internet dating. *Communication Research*, 33(2), 152-177.
- Gottschalk, S. (2010). The presentation of avatars in Second Life: Self and interaction in social virtual spaces. *Symbolic Interaction*, 33(1), 501-525.
- Gross, E. (2004). Adolescent Internet use: What we expect, what teens report. *Journal of Applied Developmental Psychology*, 25(6), 633-649.
- Habermas, J. (1962, 1989). *The Structural Transformation of Public Sphere* (T. Burger, Trans.). Cambridge, MA: MIT Press.
- Hamburger, Y. A. & Ben-Artzi, E. (2000). The relationship between extraversion and neuroticism and the different uses of the Internet. *Computers in Human Behavior*, 16(4), 441-449.
- Haythornthwaite, C., Kazmer, M. M., Robins, J. & Shoemaker, S. (2000). Community development among distance learners: Temporal and technological dimensions. *Journal of Computer-Mediated Communication*, 6. Retrieved from <http://jcmc.indiana.edu/vol6/issue1/haythornthwaite.html?ref=Sex%C5%9Ehop.Com>
- Henke, L. L. (1999). Children, advertising, and the Internet: An exploratory study. In D. Schumann & E. Thorson (Eds.), *Advertising and the World Wide Web*, 73-80. Mahwah, NJ: Lawrence Erlbaum Associates.
- _____ (2002). After the Internet: A third-year follow up and comparative analysis of children's perceptions and use of the Internet. Paper presented at the *Proceedings of the Academy of Marketing Studies*.
- Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society*, 30 (6), 337-386.
- Howe, N. & Strauss, W. (2002). *Millennials Rising*. New York: Random House, Inc.
- Infante, D. A., Rancer, A. S. & Womack, D. F. (1997). *Building Communication Theory* (3ed.). Prospect Heights, IL: Waveland Press, Inc.
- Ito, M., Horst, H. A., Bittanti, M., Boyd, D., Herr-Stephenson, B. & Lange, P. G. (2008). *Living and learning with new media: Summary of findings from the Digital Youth Project*. The John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning.
- Joinson, A. N. (2001). Self-disclosure in computer-mediated communication: The role of self-awareness and visual anonymity. *European Journal of Social Psychology*, 31, 177-192.
- Joinson, A. N. & Paine, C. B. (2007). Self-disclosure, privacy and the Internet. In A. N. Joinson, K. Y. A. McKenna, T. Postmes & U.-D. Reips (Eds.), *The Oxford*

- Handbook of Internet and Psychology*, 237-252. New York: Oxford University Press.
- Jurgenson, N. (2008). Facebook, Youtube, Twitter: Mass exhibitionism online. *Sociology Lens*. Retrieved from <http://thesocietypages.org/sociologylens/2008/11/21/facebook-youtube-twitter-mass-exhibitionism-online/>
- _____ (2010). Publicity implies privacy: Why teens are more private on Facebook. *Sociology Lens*. Retrieved from <http://thesocietypages.org/sociologylens/2010/06/09/publicity-implies-privacy-why-teens-are-more-private-on-face-book/>
- Kamaraguru, P. & Cranor, L. F. (2005). *Privacy Indexes: A Survey of Westin's Studies*. Pittsburgh, PA: Carnegie Mellon University.
- Kang, C. (2010a). FTC says it is creating Internet privacy framework amid growing concerns. *Washington Post*. Retrieved from http://voices.washingtonpost.com/posttech/2010/04/ftc_says_it_is_creating_intern.html
- _____ (2010b). Facebook CEO announces revamped privacy settings. *Washington Post*. Retrieved from <http://www.washingtonpost.com/wp-dyn/content/article/2010/05/26/AR2010052605145.html>
- Karpinski, A. C. & Duberstein, A. (2009). A description of Facebook use and academic performance among undergraduate and graduate students. Paper presented at the *Annual Meeting of the American Educational Research Association*. San Diego, CA.
- Katz, J. E. & Rice, R. E. (2002). *Social Consequences of Internet Use: Access, Involvement, and Interaction*. Cambridge, MA: The MIT Press.
- Kendall, L. (2002). *Hanging Out in the Virtual Pub*. CA: University of California Press.
- Kirpatrick, D. (2010). *The Facebook Effect: The Inside Story of the Company that is Connecting the World*. New York: Simon & Schuster.
- Knutzen, K. B. & Kennedy, D. M. (2012). Designing the self: The transformation of the relational self-concept through social encounters in a virtual immersive environment. *Interactive Learning Environments*, 1-22.
- Leary, M. R. (1995). *Self-Presentation: Impression Management and Interpersonal Behavior*. Madison, WI: Brown and Benchmark.
- Lewin, T. (2010). Teenage insults, scrawled on web, not on walls. *New York Times*. Retrieved from <http://www.nytimes.com/2010/05/06/us/06formspring.html>
- Livingstone, S. (2006). Children's privacy online: Experimenting with boundaries within and beyond the family. In R. Kraut, M. Brynin, & S. Kiesler (Eds.), *Computers, Phones, and the Internet: Domesticating Information Technology*, 128-144. Oxford, England: Oxford University Press.
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society*, 10(3), 393-411.
- Manjoo, F. (2010). Social networking your way to a new job. *New York Times*. Retrieved from http://www.nytimes.com/2010/08/26/education/26SOCIAL.html?_r=1&hpw
- Marist Poll. (2010). Half of social networkers online concerned about privacy. Retrieved from <http://maristpoll.marist.edu/714-half-of-social-networkers-online-concerned-about-privacy/>
- Marwick, A. E. & Boyd, D. M. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13(1), 114-133.
- Marwick, A. E., Murgia-Diaz, D. & Palfrey, J. G. (2010). *Youth, Privacy and Reputation*. Berkman Center Research Publication, 2010-5. Retrieved from <http://ssrn.com/abstract=1588163>
- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.
- _____ (1954). *Motivation and Personality*. New York: Harper.
- McKenna, K. Y. A. (2007). Through the Internet looking glass: Expressing and validating the true self. In A. N. Joinson, K. Y. A. McKenna, T. Postmes & U.-D. Reips (Eds.), *The Oxford Handbook of Internet Psychology*, 205-221. New York: Oxford University Press.
- McKinney, B. C., Kelly, L. & Duran, R. L. (2012). Narcissism or openness?: College students' use of Facebook and Twitter. *Communication Research Reports*, 29. Retrieved from <http://dx.doi.org/10.1080/08824096.2012.666919>
- Mead, G. H. (1934). *Mind, Self & Society: From the Standpoint of a Social Behaviorist*. Chicago: University of Chicago Press.
- Moeller, S. (2010). Students addicted to social media: New UM study. *UM Newsdesk*. Retrieved from <http://www.newsdesk.umd.edu/sociss/release.cfm?ArticleID=2144>
- Moinian, F. (2006). The construction of identity on the Internet: Oops! I've left my diary open to the whole world! *Childhood*, 13(1), 49-68.
- Montgomery, K. & Pasnik, S. (1996). *Web of Deception:*

- Threats to Children from Online Marketing*. Washington, DC: Center for Media Education.
- Moon, J. Y. & Sproull, L. (2002). Essence of distributed work: The case of the Linux kernel. In P. J. Hinds & S. Kiesler (Eds.), *Distributed Work*, 381-404. Cambridge, MA: MIT Press.
- Moor, J. H. (1997). Towards a theory of privacy in the information age. *Computers and Society*, 27(3), 27-32.
- Moscardelli, D. M. & Liston-Heyes, C. (2004). Teens surfing the net: How do they learn to protect their privacy? *Journal of Business and Economics Research*, 2(9), 43-56.
- Mulgan, G. J. (1991). *Communication and Control: Networks and the New Economies of Communication*. New York: The Guilford Press.
- Nie, N. H. (2001). Sociability, interpersonal relations, and the Internet: Reconciling conflicting findings. *American Behavioral Scientist*, 45(3), 420-435.
- Nissenbaum, H. (2011). A contextual approach to privacy online. *Daedalus*, 140(4), 32-48.
- Noelle-Neumann, E. (1984). *The Spiral of Silence: Public Opinion, our Social Skin*. Chicago: University of Chicago Press.
- Orestein, P. (2010). I Tweet, therefore I am. *New York Times*. Retrieved from http://www.nytimes.com/2010/08/01/magazine/01wwln-lede-t.html?_r=1&hpw
- Palfrey, J. G. & Gasser, U. (2008). *Born Digital: Understanding the First Generation of Digital Natives*. New York: Basic Books.
- Parent, W. A. (1983). Privacy, morality and the law. *Philosophy and Public Affairs*, 12(4), 269-288.
- Posner, R. A. (1978). An economic theory of privacy. *Regulation*, May-June, 19-26.
- Rachels, J. (1975). Why privacy is important. *Philosophy and Public Affairs*, 4(4), 323-333.
- Raynes-Goldie, K. (2010). Aliases, creeping, and wall cleaning: Understanding privacy in the age of Facebook. *First Monday*, 15. Retrieved from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/Article/2775/2432>
- Reich, S., Subrahmanyam, K. & Espinoza, G. (2012). Friending, IMing, and hanging out face-to-face: Overlap in adolescents' online and offline social networks. *Developmental Psychology*, 48(2), 356-368.
- Reid, E. (1994). *Cultural formations in text-based virtual realities*. Unpublished master's thesis, University of Melbourne, Melbourne, Australia.
- Rheingold, H. (1993). *The Virtual Community: Home-*
- steading on the Electronic Frontier*. Reading, MA: Addison-Wesley.
- Richtel, M. (2010a). Hooked on gadgets, and paying a mental price. *New York Times*. Retrieved from <http://www.nytimes.com/2010/06/07/technology/07brain.html?scp=1&sq=Hooked%20on%20Gadgets,%20and%20Paying%20a%20Mental%20Price&st=cse>
- _____ (2010b). Digital devices deprive brain of needed downtime. *New York Times*. Retrieved from http://www.nytimes.com/2010/08/25/technology/25brain.html?_r=1
- Romano, S. (1999). On becoming a woman: Pedagogies of the self. In G. E. Hawisher & C. Selfe (Eds.), *Passions, Pedagogies and the 21st Century Technologies*, 249-267. Logan, UT: Utah State University Press.
- Salimkhan, G., Manago, A. & Greenfield, P. (2010). The construction of the virtual self on MySpace. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 4. Retrieved from <http://cyberpsychology.eu/view.php?cisloclanku=2010050203&article=1>
- Samuelson, R. J. (2006). A web of exhibitionists. *Washington Post*, p. A25.
- Schlenker, B. R. (2003). Self-presentation. In M. R. Leary & J. P. Tangay (Eds.), *Handbook of Self and Identity*, 492-518. New York: Guilford Press.
- Schoeman, F. (1984). Privacy and intimate information. In F. Schoeman (Ed.), *Philosophical Dimensions of Privacy*, 403-417. Cambridge, UK: Cambridge University Press.
- Senft, T. (2008). *Celebrity and Authenticity in the Age of Social Networks*. New York: Peter Lang.
- Siew, W. (2010). U.S. students suffering from Internet addiction: Study. *Reuters*. Retrieved from <http://www.reuters.com/article/idUSTRE63M4QN20100423>
- Siibak, A. (2009). Constructing the self through the photo selection-visual impression management on social networking websites. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 3. Retrieved from <http://cyberpsychology.eu/view.php?cislo.clanku=2009061501&article=1>
- Stone, B. (2010). For web's new wave, sharing details is the point. *New York Times*. Retrieved from <http://dealbook.blogs.nytimes.com/2010/04/23/for-webs-new-wave-sharing-details-is-the-point/?scp=1&sq=For%20web's%20new%20wave,%20sharing%20details%20is%20the%20point&st=cse>
- Subrahmanyam, K. & Greenfield, P. (2008). Online communication and adolescent relationships. *Children and Electronic Media*, 18(1), 119-146.

- Taraszew, T., Aristodemou, E., Shitta, G., Laouris, Y. & Arsoy, A. (2010). Disclosure of personal and contact information by young people in social networking sites: An analysis using Facebook profiles as an example. *International Journal of Media and Cultural Politics*, 6(1), 81-101.
- Tavani, H. T. (1996). Computer matching and personal privacy: Can they be compatible? In C. Huff (Ed.), *Proceedings of the Symposium on Computers and the Quality of Life*, 97-101. New York: ACM Press.
- _____ (2000). Privacy and the Internet. *B.C. Intell. Prop. & Tech. F. 041901*. Retrieved from http://www.bc.edu/bc_org/avp/law/st_org/iptf/commentary/content/2000041901.html
- Taylor, H. (2003). Most people are 'privacy pragmatists' who, while concerned about privacy, will sometimes trade it off for other benefits. Retrieved from http://www.harrisinteractive.com/harris_poll/index.asp?PID=365
- Tidwell, L. C. & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, 28, 317-348.
- Tufekci, Z. (2008). Can you see me now? Audience and disclosure regulation in online social network sites. *Bulletin of Science, Technology & Society*, 28(1), 20-36.
- Turkle, S. (1995). *Life on the Screen: Identity in the Age of the Internet*. London: Weidenfeld and Nicolson.
- _____ (2011). *Along Together: Why We Expect More from Technology and Less from Each Other*. New York: Basic Books.
- University of Minnesota (2008). Educational benefits of social networking sites uncovered. *Science Daily*. Retrieved from <http://www.sciencedaily.com/releases/2008/06/080620133907.htm>
- Utz, S. & Krämer, N. (2009). The privacy paradox on social network sites revisited: The role of individual characteristics and group norm. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 3. Retrieved from <http://cyberpsychology.eu/view.php?cisloclanku=2009111001&article=1>
- Valkenburg, P. & Peter, J. (2008). Adolescents' identity experiments on the Internet: Consequences for social competence and self-concept unity. *Communication Research*, 35(2), 208-231.
- Valkenburg, P. & Peter, J. (2009). The effects of instant messaging on the quality of adolescents' existing friendships: A longitudinal study. *Journal of Communication*, 59(1), 79-97.
- Van Gelder, L. (1991). The strange case of the electronic lover. In C. Dunlop & R. Kling (Eds.), *Computerization and controversy: Value conflicts and social choices*, 364-375. New York: Boston Academic Press.
- Vasalou, A. & Joinson, A. N. (2009). Me, myself and I: The role of interactional context on self-presentation through avatars. *Computers in Human Behavior*, 25(2), 510-520.
- Vermaas, K. & Van de Wijngaert, L. (2003). The disclosure of personal information on the Internet: User motivation, reliability and price as explaining factors. *Trust in the Network Economy*, 2, 365-374.
- Warren, S. & Brandeis, L. D. (1890). The right to privacy. *Harvard Law Review*, 4, 193-220.
- Wellman, B. (2001). Physical place and cyber place: The rise of personalized networking. *International Journal of Urban and Regional Research*, 25(2), 227-252.
- Wellman, B., Haase, A. Q., Witte, J. & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital?: Social networks, participation, and community commitment. *American Behavioral Scientist*, 45(3), 436-455.
- West, A., Lewis, J. & Currie, P. (2009). Students' Facebook 'friends': Public and private spheres. *Journal of Youth Studies*, 12(6), 615-627.
- West, H. (2009). Is online privacy a generational issue? *GeekDad, Wired.com*. Retrieved from <http://www.wired.com/geekdad/2009/10/is-online-privacy-a-generational-issue/>
- Wortham, J. (2010). Facebook glitch brings new privacy worries. *New York Times*. Retrieved from http://www.nytimes.com/2010/05/06/technology/Internet/06facebook.html?_r=1&scp=1&sq=Facebook%20glitch%20brings%20new%20privacy%20worries&st=cse
- Youn, S. (2005). Teenagers' perceptions of online privacy and coping behaviors: A risk-benefit appraisal approach. *CyberPsychology & Behavior*, 11(6), 763-765.
- Zhao, S., Grasmuck, S. & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior*, 24(5), 1816-1836.