CHAPTER 2

Unpacking the Paradoxes of Privacy in CMC Relationships: The Challenges of Blogging and Relational Communication on the Internet

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In a recent posting, a parent uploaded and tagged a picture of their 18 year old son as a little boy dressed in a tutu. Once tagged, the photo became accessible to the son's entire Facebook friend network with a corresponding newsfeed of the action. The mortified son quickly responded to the posting by untagging and disassociating the image from his identity. He also made it clear to his parents that there needed to be a mutually agreed upon posting criterion with his parents so this kind of privacy invasion did not occur again. As this example illustrates, privacy management is a challenging enterprise with social media such as Facebook. While the creation of personal-journal diary blogs, social networking, and Twitter sites provide users multiple opportunities to engage in computer-mediated communication (CMC), privacy, communication, and technology are interwoven in critical ways.

boyd and Ellison (2008) define a social network site (SNS) through three criteria (1) construction of a profile in a system that can be bounded or restricted if desired, (2) inclusion of others with whom they share some type of connection, and finally (3) viewership and surfing capabilities among the list of contacts if desired. Concerning this definition of a SNS, Beer (2008) contends that it potentially hides differences within the applications and notes that "we should be moving toward *more* differentiated classifications of the new online cultures not away from them" (emphasis original, p. 519). A critical aspect of these networks is to uncover the online cultural values concerning privacy. An alternative to highlighting the similarities and differences in these SNSs is to consider variations in disclosure and privacy management practices.

There are many variations in the way people, both young and old, tend to manage protection of their private information when using social network sites in general. For some, privacy boundaries are very closed (creating thick, impermeable boundary walls), restricting access. For others, their privacy boundaries are very open (allowing high permeability), granting significant access. There are also those who slide between these two extremes depending on their needs, adjusting access as necessary (Petronio, 2002). Young adults have characteristically engaged in more privacy protection behaviors than older adults who use SNSs (Madden, Fox, Smith, & Vitak, 2007). However, older adults have learned from the younger generation and are now engaging in comparable levels of concern about SNS profile access (Lenhart, 2009). For example, as of 2007, 60% of adults allowed anyone to access their SNS, while only 40% of teenagers allowed total open access of their SNS profile to others (Madden, Fox, Smith, & Vitak, 2007). In 2009, only 36% of adults permitted no restrictions on access to their SNS profile (Lenhart, 2009).

Access issues have grown in importance for all SNS users (Lenhart & Madden, 2005). However, reports about the use of privacy features on social networking sites, specifically among Facebook.com users, tend to contradict these findings (Facebook, 2009). According to Facebook company research, few users appear to customize their privacy settings to make their sites more secure. Instead, by leaving the original open settings in place, they overlook the fact that they have not been protecting the information they have put on their sites. In fact, the company estimates that less than 20% of individuals utilize these options or change the defaults, which are set to more in network openness than privacy protection (Facebook, 2009; Stone, 2009a). While the Facebook research rests on actual privacy changes made by users, self-report research contradicts these findings suggesting that people believe they are increasing their level of privacy protection on the social networking sites as companies adapt their privacy policies to allow more innetwork sharing of information (Christofides, Musie, & Desmarais, 2009). As Facebook increases in popularity among all Internet users, it is likely that more individuals will experience unexpected privacy violation and intrusions by parents, employers, and unknown others. As a consequence, users are apt to change the way they protect their privacy and do more to guard private information in ways that move beyond simply adapting disclosure practices (Allen, 2009; Gavin, 2009; Schonfeld, 2008; Stone, 2009a, 2009b; Stross, 2007).

Twitter is a unique social media, insomuch as 90% of users allow their microblog Twitter page to be completely public while other SNSs have a higher proportion of individuals who restrict or render their privacy boundary around this information as entirely impermeable (Graham, 2008). Yet, simply focusing on the form of social media does not give enough information to determine the calculus people use to make decisions about the way they regulate their privacy in these circumstances. There are underlying issues that help explain the nature of privacy management and the structure that is used to grant or deny access. Communication Privacy Management (CPM) theory (Petronio, 2002) is a useful framework from which variations in CMC disclosure and privacy practices on SNSs can be conceptualized and explored (Child, Pearson, & Petronio, 2009).

Much of the research from a CPM perspective explores privacy within face-to-face interpersonal relationships, with increasing research spanning more diverse contexts such as CMC interactions (Metzger, 2007). Walther (2009) contends that more research in CMC should test assumptions tied to competing theories and examine more fully the mechanisms outlined within our theories. In a recent study, Child et al. (2009) illustrate the feasibility and capacity of applying CPM theory to CMC interactions occurring on SNSs (primarily focusing the diary-based blogging format of an SNS) and develop a theory-based blogging privacy management measure. This chapter considers the viability of using CPM theory to investigate the privacy-regulating decisions people make and understand the way they manage information flow.

Communication Privacy Management

CPM is an evidence-based theory about how people manage private information, both theirs and others' who have granted access to their information (Petronio, 2002). In addition, CPM gives apparatus to understand, not only when privacy is managed in a coordinated, effective way, but also when and how mistakes are made with privacy management (Petronio, 2002). As an evidence-based theory, CPM asserts that individuals have both access and privacy needs forming a dialectical tension that drives choices for privacy management. CPM theory incorporates metaphorical privacy boundaries to illustrate individual versus collective information ownership (Petronio, 1991, 2002). Relational or personal needs are met by giving access or revealing private information, thereby creating a collective privacy boundary with others. On the other hand, concealing information from others, thereby retaining a personal privacy boundary, works to protect an individual's privacy.

CPM stipulates five principles about the privacy management that give a route to better understand both the times when access to the information is granted and when access is denied (Petronio, 2002). The *first principle* states that individuals equate private information with personal ownership. That is, from a behavioral standpoint, people feel they own their private information in the same way that they own other possessions (Child et al., 2009). For example, when individuals disclose or share information on an SNS, they continue to retain their ownership rights over the information. The *second principle* predicts that because people believe they own their information, they also believe that they have the right to control the flow of the information to others. Accordingly, even though individuals may contribute private information to an SNS, they still believe that they retain rights and responsibilities to regulate how much of that information is subsequently shared with others.

Principle three predicts that people develop and use privacy rules to control the flow of information to others (Durham, 2008; Petronio, 2002). For example, individuals who have higher or lower self-monitoring skills develop different rules

governing CMC interactions and privacy management practices (Bello, 2005; Child & Agyeman-Budu, 2010; Flynn, Reagans, Amanatullah, & Ames, 2006). The development of privacy rules is predicated on criteria such as cultural expectations. The use of privacy rules can be gender specific. These rules are driven by motivations and frequently take into account a risk-benefit ratio. Finally, privacy rule development and implementation are often impacted by critical incidents or situations that can serve as a catalyst to change existing rules (Petronio, 2002; Petronio & Durham, 2008).

Principle four predicts that once private information is disclosed or others are granted access, the information moves from individual ownership to collective ownership. Collective boundaries imply a joint responsibility and obligation by the original owner and co-owners together to regulate the flow of this information in a mutually agreed upon fashion (Petronio, 2006; Petronio & Gaff, in press; Petronio, Jones, & Morr, 2003; Petronio & Reierson, 2009). This coordination of agreed upon privacy rules may stem from negotiations that the original owner and co-owners enact or through socialization where co-owners learn accepted privacy rules, like children in families (Petronio, 1994). CPM stipulates that typically, people coordinate three different types of privacy rules to manage a collectively held privacy boundary. Thus, the original owner and co-owners coordinate the management of information through the use of privacy boundary permeability rules, privacy boundary ownership rules, and privacy boundary linkage rules (Child et al., 2009; Petronio, 2002; Petronio & Reierson, 2009). These different types of rules are coordinated to control the extent to which third-party dissemination of information may occur from information disclosed within the collective boundary.

Child et al. (2009) describe how each of the three distinct types of privacy rules employed to manage collective boundaries apply to CMC and SNS usage and develop a measure to assess the privacy rules people employ. The measure taps into the extent to which individuals consider the three types of collective boundary management rules when interacting on diary-based SNS sites. From this instrument, it is possible to assess boundary permeability rules that identify which individuals are more public or private about the depth and breadth of their disclosures on SNSs. In addition, the measure evaluates boundary ownership rules assessing the extent to which individuals minimize or expand on others' capabilities to disseminate information within the SNS collective boundary further. In other words, individuals who are concerned about others having access to their private information may utilize more coded language or stipulate restrictions on how the information is to be safeguarded. Finally, boundary linkage rules isolate the characteristics of individuals (e.g., sharing common interests, attraction, potential friendship development) that contribute to an individual making decisions to engage in either more or less privacy management on an SNS (Child et al., 2009).

The *fifth principle* concerns the prediction that if owners and co-owners do not coordinate the privacy rules to regulate information flow, disruption will occur

and boundary turbulence will result. When this type of disruption happens, the outcome exposes implicit or taken-for-granted expectations that have been violated. CPM also predicts that this boundary turbulence requires the owners and co-owners to recalibrate and readjust privacy management practices because it becomes clear that they are not functioning adequately or as intended. When boundary turbulence occurs, individuals discover that information they have moved into a collective boundary is not appropriately being managed by the individuals within the collective. Thus, boundary turbulence occurs when violations, disruptions, or unintended consequences occur as a result of privacy management practices (Petronio, 2002). Original owners of the information often expect that co-owners, composing the collective privacy boundaries, will know and follow the privacy rules they use for management.

As a response to boundary turbulence, individuals revisit, readjust, or renegotiate privacy expectations with other members of the collective boundary where the disruption occurred. Through experiencing boundary turbulence, individuals learn about the adequacy of current privacy management practices and dynamically adjust and readjust privacy rules over time to meet evolving privacy needs and expectations (Petronio, 2002). Boundary turbulence may be experienced by bloggers who assume that others will not communicate information they disclose to other co-workers or adults. If a breakdown occurs and the transgression is discovered, the blogger needs to assess privacy rules regulating disclosure he or she has used that has lead to uninvited co-workers having access. Repairs to this privacy breakdown necessitate adapting the level of boundary permeability, ownership, and linkage rules to mend the integrity of the privacy boundary and prevent further breeches from occurring (Child et al., 2009).

CPM and SNS Disclosure Practices

There are many clues to privacy management strategies people use online but they have not been connected within a meaningful framework to see the larger picture. CPM theory allows a rich context to predict and examine CMC disclosure practices on SNS profile pages (Allen, Coopman, Hart, & Walker, 2007; Child et al., 2009; Cochran, Tatikonda, & Magid, 2007; Mazer, Murphy, & Simonds, 2007; Metzger, 2007; Petronio & Durham, 2008; Tyma, 2007). Previous research demonstrates that incorporating others either without any restrictions or allowing only certain categories of people to access an SNS profile and postings is the most common way people utilize an SNS to manage disclosures (Graham, 2008; Lenhart, 2009; Madden et al., 2007). Given this pattern, the creation of an SNS for most users functionally establishes a collective privacy boundary between the user and those who access the site according to CPM predictions (Child et al., 2009; Petronio, 2002). Consequently, allowing, inviting, and encouraging others to share the SNS profile space, fundamentally gives permission to become a co-owner of the posted information. A collective boundary is established through granting

access permission, for any given social network site. The collective privacy boundary is further enhanced by disclosure contributions that site visitors make adding their information to the information already posted. Interestingly, because CMC interactions on SNS spaces are written, they offer a unique opportunity to see the sequencing of how collective privacy boundaries are formed and managed according to the theoretical propositions of CPM.

Influence of Decision Criteria in Privacy-Disclosure Choices

Applying the theoretical frame of CPM opens up many avenues of inquiry not considered previously. From this theoretical base, one of the important CPM predictions concerns the basis for choice-making that influences online users to either disclose or remain private. In CPM terms, the decision criteria drive the kinds of privacy rules that people apply to communicative situations (Durham, 2008; Petronio, 2002). From existing research, it is clear that there are a number of decision criteria leading to the development and implementation of privacy rules that function in the background (Petronio, 2002). For example, whether someone has a higher or lower level of self-consciousness, it impacts choices for privacy regulations and by implication, the privacy rules are influenced by the criteria that are used as a result (Child et al., 2009).

Individuals with higher levels of self-consciousness spend more time in general considering their own internal thoughts (private self-consciousness) as well as how their own thoughts might be interpreted by others (public self-consciousness) before acting or making decisions (Buss, 1980; Child et al., 2009; Fenigstein, Scheier, & Buss, 1975). In both cases, bloggers with higher public and private self-consciousness levels employed more of a public orientation towards the management of blogging disclosure and privacy management practices, disclosing more and seeking a wider array of individuals to provide feedback about their thoughts than individuals with less self-consciousness (Child et al., 2009). Miura and Yamashita (2007) found that higher private self-consciousness also ultimately strengthened an individual's overall blogging intentions. Thus, bloggers' internal personality dispositions are aligned with SNS privacy management disclosure practices and blogging persistence (Child & Agyeman-Budu, 2010; Child et al., 2009; Guadagno, Okdie, & Eno, 2008; Miura & Yamashita, 2007).

In addition, research shows that self-monitoring and concern for appropriateness (CFA) dispositions also function as base decision criteria influencing the privacy rules that are used. Child and Agyeman-Budu (2010) explored self-monitoring and concern for appropriateness dispositions (CFA) as types of motivational influences on blogging privacy management practices within CPM theory. Higher self-monitors were more likely than lower self-monitors to enact a more private orientation in all of their blogging privacy management practices, where more coded language was used and less permeability of private information and fewer linkages occurred. While high self-monitors were more cautious about en-

acting overly public CMC disclosure and privacy management practices on their blogs, they ultimately blog more frequently than do low self-monitors. Individuals who were more concerned about enacting socially appropriate behaviors in their personal relationships employed more of a public orientation towards their blogging boundary permeability rules (Child & Agyeman-Budu, 2010). As such, high-CFA individuals are increasingly likely to utilize a blog as a forum to disclose more information about a variety of topics; consequently, there is a tendency for high-CFA individuals to blog more frequently than do low-CFA individuals.

Curiously, the findings about self-monitoring and CFA dispositions are consistent with previous research supporting that higher levels in both of these personality dispositions are related to greater sensitivity to message misinterpretation and using communication to proactively and carefully manage impressions (Bello, 2005; Flynn et al., 2006; Shaffer & Pegalis, 1998; Tardy & Hosman, 1982). Thus, self-monitoring skills and CFA dispositions are associated with the amount of privacy control bloggers exercise over online disclosure practices, a prediction of CPM theory (Child & Agyeman-Budu, 2010).

From this body of research, an initial set of conditions emerge that serve as online decision criteria that drive the way that privacy rules are developed ultimately guiding choices about CMC interactions. Thus, decisions about privacy rules to use are predicated on the degree to which people are private or public in their orientation to self-consciousness, whether they engage in high or low self-monitoring, and what their public-private orientation is to behavioral appropriateness when interacting online.

CPM argues that another possible basis for decisions leading to the establishment of privacy rules concerns gender (Petronio, 2002; Petronio & Martin, & Littlefield, 1984; Petronio & Martin, 1986). Because men and women tend to have a different set of needs where privacy is concerned, they use different privacy rules to regulate the disclosures that they make to others. Child (2007) explored connections between bloggers' orientation towards privacy management on blogs and gender as an individual difference criterion. From this study, women were more concerned with blogging privacy management and as such used more coded language on their blogs, blogged in ways that limit public information ownership, and were more cautious than men about who was allowed to link to their blog. Men enacted more of a public orientation in the blogging privacy management rules guiding their CMC interactions overall on blogs. These findings are also supported by recent research among Facebook profiles and privacy management practices (Lewis, Kaufman, & Christakis, 2008).

Influence of Family Privacy Orientations

CPM research demonstrates that families have a significant role in socializing the children to learn the kinds of privacy rules to which the family ascribes (Morr Serewicz & Canary, 2008; Petronio, 2002). Further, families also attempt to so-

cialize new members, such as spouses of children, teaching them the family privacy orientations that are held by the members as a whole (Morr, 2002; Morr Serewicz & Canary, 2008; Morr Serewicz, Dickson, Morrison, & Poole, 2007; Petronio, 2002). Family privacy orientation refers to rules that have been developed and endorsed overtime by a family of origin (Petronio, 2002; Petronio, in press). The privacy orientation represents a value structure of the family and is a whole family perspective concerning how they define privacy. Family privacy orientations can range from very open to completely closed (Petronio, in press). Within these orientations, families manage two types of privacy boundaries. First, there are internal privacy cells, where private information is held and controlled by only certain members. These cells shift and change depending on the disclosure and privacy needs of the particular members with the privacy chamber. Second, families also have an external privacy boundary where the whole family ascribes to a rule about what can and cannot be disclosed to outsiders as well as the general level of access to information outsiders are given.

Typically, family privacy orientations serve as a guideline for choices about dissemination of family-private information. However, as children grow into adults, they often develop their own set of standards about privacy regulation regarding information they own that fit their needs, thereby moving away from closely following their family of origin's privacy orientation (Hawk, Keijsers, Hale, & Meeus, 2009; Petronio, 1994, 2002). This process of deindividuation that adolescents and young adults experience represents their claim to their own personal privacy boundary with rules that they develop and control apart from the family (Petronio, 2002; Youniss & Smollar, 1985). Clearly, the family orientation to privacy is an influencing factor, but it is unclear how the privacy rules, ascribed to by the family as a whole, impact choices that might be seen as more individualistic for adolescents and young adults when it comes to managing their own web interactions.

With the concept of family privacy orientation in mind, Child (2007) examined whether parental socialization about privacy orientations was related to the way that bloggers managed their privacy on their blogs. Interestingly, the findings suggest that families advocating a more open orientation did not result in the young adults applying the family's values to their choices about information access in their blogging rules. Furthermore, when the family privacy orientation advocated being more closed about information to outsiders, the young adult blogging choices regarding privacy management practices also did not match the family's orientation (Child, 2007; Morr Serewicz & Canary, 2008). Therefore, family privacy orientations do not seem to carry over to the decision-making processes occurring on blogs by young adults.

Because living in their parents' household, for young adults, may be an influential factor in the degree to which they ascribe to their family privacy orientation, Child (2007) also assessed the impact that being under the same roof might have on privacy choices. The findings indicate that blogging privacy management prac-

tices for individuals who lived with their parents were no different from individuals who did not live with their parents. The influence of being under the same roof as the parents does not appear to change decisions about privacy management for these young adults where blogging management is concerned. However, this study found another clue to unpacking this riddle because the majority of participants (94%) were certain their parents did not read or know anything about their blogging disclosure practices. These finding may be tapping into choices and conditions of privacy rules that are seen as more pertinent to management of personal privacy boundaries for these young adults rather than applying to the whole family. This may be especially true for blogging, given that the SNS culture has largely been developed and reinforced by young adults for more peer versus parental interaction (Pempek, Yermolayeva, & Calvert, 2009).

Influence of Context

Another predictive factor that CPM advocates is the influence of context. Many times context serves as a catalyst for changing personal or collectively held privacy rules, because there is a need to reach a particular goal (Westerman, Van Der Heide, Klein, & Walther, 2008). When people want to use online banking, for example, they trade a certain amount of privacy to attain the ease of managing their money (Petronio, 2002). Metzger (2007) examined CMC from a CPM perspective within e-commerce online settings, demonstrating that CPM theory propositions extend to understanding CMC interactions between organizations and individuals beyond the more commonly relationally-oriented applications of the theory exploring CMC interactions. In e-commerce settings, individuals often withheld private information or falsified more sensitive information (such as social security numbers or credit card information) when interacting with organizations, such as banks. Organizations have a common practice of soliciting a substantial amount of privacy information in exchange for promises of free promotional products. Withholding or falsifying private information is a common way to enact privacy protection rules. The strategy is similar to the way bloggers, or social network site users, may utilize more coded language or allow less permeability to protect private information they choose to retain in their individual boundary versus allowing it to reside within the collective boundary (Child, 2007; Child & Agyeman-Budu, 2010; Child et al., 2009). As such, individuals who utilize CMC develop appropriate ways to manage the inherent tensions with the public/private dialectic.

Facebook is another popular context where privacy is managed, a second type of SNS. Facebook allows substantial opportunity for CMC and variations in privacy management practices through the upgraded feature of status updates that took place in 2006 (Thompson, 2008). For instances, through such options as photo tagging/commenting, and open-ended wall discussions, individuals can regulate their private information more effectively than in the past. Some of these features are

similar to the CMC that takes place on a personal-journal type blog or SNS. As a result, Facebook users have a central profile page where they can upload pictures, provide status updates, and post wall comments that are archived on the profile. Because Facebook offers several unique opportunities for social networking, the landscape created offers the ability to gain insights into distinctive aspects of privacy management, particularly from a CPM perspective (Child et al., 2009; Petronio, 2002; Stross, 2009; Thompson, 2008). In particular, a central tenet of CPM is privacy control. For Facebook, control plays a fundamental role in this context and therefore offers ways of understanding contextual constraints and latitudes. Christofides et al. (2009) explore individual's disclosure patterns in comparison to face-to-face interactions and information control needs on Facebook.

The findings of the Christofides et al.'s study bring into question the perceptions and rule differences people have for face-to-face interactions as opposed to those they have on Facebook. Consequently, this research underscores that individuals tend to be more likely to reveal information on Facebook than in their face-to-face relationships. Yet, a strong individual predictor of Facebook disclosure practices tends to be how people disclose relationally when they are face-to-face. In other words, their privacy rules are set on the same wave length, using the same criteria for both Facebook and face-to-face interactions. However, the amount of information they tell is mediated by the medium that is used. Possibly, in face-to-face interactions the discloser receives immediate feedback and adjusts the amount depending on the reactions of the receiver, whereas, in the Facebook interactions, the feedback is in writing (losing the non-verbal messages) and lag behind an already constructed message (Child et al., 2009; Petronio, 2000, 2002). This research also found that the need for popularity has some impact on the Facebook disclosure practices.

Privacy control needs on Facebook appear to be discernibly different than in face-to-face interactions (Christofides et al., 2009). Accordingly, individuals with lower overall propensity to disclosure in face-to-face interactions tend to have higher information control needs on Facebook. In CPM terms, this finding indicates that there appears to be a consistent privacy rule across both communicative situations regarding more emphasis on privacy protection than open disclosure. Thus, higher control needs are manifested in regulating privacy boundaries by controlling the flow of information to others, regardless of conversational context. This research also suggests that when individuals have lower levels of trust for the use of the medium, the target of the information, or the unknown others who might gain access and higher levels of self-esteem they feel greater concern for the ability to control their information on Facebook (Christofides et al., 2009). Because people believe they own their information and have the right to control the information, the ability to retain jurisdiction over personal information is paramount to feeling that it still belongs to the person (Petronio, 2002). As a result, any time control, even perceived control, is compromised; the turbulence that erupts causes significant consequences for the information owner and those sharing the information.

Mechanisms of privacy control are also seen in the study by Lewis et al. (2008). Because social groups influence each other on multiple levels, it stands to reason that the same types of issues would be found with SNSs and particularly with Facebook use. This study finds that individuals who have more friends who use private profiles are more likely to maintain their own Facebook profiles in a similar way. While it makes sense that friends would influence each other, interestingly, roommates also have an impact on the way they influence each other to ascribe to specific ways to regulate their privacy online. In this manner, friends and roommates were influenced to restricted access to their information when their friends used high-control privacy setting. The social use and general cultural adaptations of privacy norms exert a strong influence on privacy management practices as theorized and suggested by CPM theory (Petronio, 2002).

Camouflage as a Privacy Protection

Where privacy protection is concerned, there are many strategies that people use when they want to implement this privacy rule. Their boundaries can be various levels of thickness, letting in some information, no information, or a lot of certain information (Quin & Scott, 2007). Through the use of such strategies as coded language, bloggers can restrict access to others or camouflage content as ways of protecting their privacy (Child et al., 2009). While the use of coded or ambiguous language provides a way for bloggers to limit co-ownership of private information on a blog, such privacy protection strategies have been connected to lower-quality interactions in other types of CMC.

In particular, Henderson and Gilding (2004) interviewed individuals about their chatroom interactions. They found that when engaging in synchronous chat sessions, individuals who used pseudonyms and overly ambiguous or less revealing language often developed less trust and rapport with their corresponding CMC chat partners. However, the study also found that given the limited cues available with CMC chatroom interactions, engaging in deeper levels of disclosure was possible because individuals did not have to worry about someone looking at them, making eye contact, or feeling embarrassed. The users also had the opportunity to select each word and have more control over impression management. Given the unique differences of chat-based interactions from SNS interactions (i.e., use of images and a permanent profile with a wide range of information) these findings may not be related to CMC processes on SNSs. However, it is important to examine a wide array of relational outcomes associated with variations in CMC privacy management practices on SNSs.

Communication privacy management theory (Petronio, 2002) provides a rich and integrative framework to explore disclosure and interaction processes occurring through social media (Child et al., 2009). As more individuals are drawn to interac-

tion through SNSs, discovering as well as testing the ways that individual privacy rules develop deserves attention in future research. Examining the decision criteria behind the rule development and usage to learn how issues such as motivations, gender, context, and cultural factors influence privacy management practices ultimately provides deeper understanding to the way people regulate their privacy (Gavin, 2009; Lenhart, 2009; Lenhart & Fox, 2009; Madden et al., 2007). In addition, exploring the way individuals manage collective privacy boundaries for relationships established and maintained through social media and computer-mediated communication is also feasible because CPM theory gives the tools to ask meaningful questions and interpret information in consequential ways.

Future Research

Investigations into this new cultural phenomenon are just beginning to piece together insights into the "hows" and "whys" of privacy management. Fortunately, there is a long history of examining the management of private information found in the research and theoretical development of communication privacy management theory (Petronio, 1991, 1994, 2002, 2006, in press). This chapter offers applications of CPM that illustrate the utility of the theory and research underscores how researchers can benefit from using this body of information. Yet, much work needs to be done to gain a clear picture of how privacy management is enacted and why choices are made by different populations within varying contexts.

Several areas are suggested for future research capitalizing on the CPM concept of boundary turbulence. By examining instances where privacy management expectations are not met, it is possible to isolate some of the fundamental assumptions people make about the medium and identify why privacy management might be compromised and result in privacy breakdowns. Among the many possibilities, CPM theory promises to produce productive results related to two current themes surrounding SNSs, disclosure, and privacy management practices. These include (1) boundary crossings: navigating professional, personal, and familial privacy boundaries; (2) an interface between identity and privacy management.

"Boundary Crossing: "Navigating Professional, Personal, and Familial Privacy Boundaries

One of the most obvious issues emerging from the impact of social network site use is the challenge of drawing boundary lines that denote where relationships begin and end. Essentially, these are privacy boundaries that mark ownership of information. When there is a transgression or "boundary crossing," however unintended, the person feeling aggrieved makes clear that there has been a breach in some way (Petronio, 2002). In the discussion of "fuzzy boundaries" that occur when there is a disruption in the way privacy boundaries can be effectively managed, CPM argues that this state is often caused by ambiguities in who has rights to access the private information (Petronio, 2002). Clearly, these uncertainties underpin the challenges to "boundary crossing" situations when someone is at-

tempting to manage both personal and professional boundaries, but has not had the opportunity to negotiate mutually agreed upon privacy rules for how or if such "crossing" should take place. "Boundary crossing" dilemmas are seen in a variety of circumstances and need further explication with the help of CPM theory.

For example, many parents are now joining Facebook and other SNSs like MySpace in an attempt to reach out to their adult children as well as reestablish their own friendship circles through social media (Lenhart, 2009; Madden et al., 2007; Schonfeld, 2008). Given that more parents are learning to use Facebook, they see both the advantage of access to their children's Facebook page and have learned to appreciate personal rewards themselves from owning a Facebook page. Nevertheless, parents also see that access to their child's page allows a certain degree of surveillance that they never had before to keep tabs on their children's activities (Fletcher, 2009). Increased parental involvement on Facebook and SNSs in general often results in children, especially adolescents and young adults, having to consider the potential ramifications of parental friend requests and devise responses for the increasing reality of parents asking for permission to be included as members of this collective boundary, a relatively new development for young adult children (Child, 2007; Child et al., 2009). Clearly, there are boundary management issues that call for new ways of establishing parameters for how much parents know about their children's activities. Likewise, young adult access to their parents' Facebook or SNSs mean that they have access to the parent's lives in ways not possible before multi-generational use of SNSs and social media. Obviously, these circumstances are ripe for conflicts over the management of inter-family privacy boundary that likely challenge parent/child relationships (Hawk et al., 2009).

Employing a CPM framework to examine the boundary navigation that parental Facebook requests prompt allows exploration of how existing family factors may impact a child's decision to accept, modify content, or change rules regulating disclosure before accepting, ignoring, or outright rejecting parental friend requests on SNSs. Subsequent disclosure practices may also be altered by young adults in the way they manage their collective SNS boundary, knowing that their parents will have access to their general SNS disclosure practices. Likewise, exploring how the parents cope with the same kinds of requests from their children is potentially a viable and productive area of future research. These boundary negotiations may represent a new way of understanding how parents and children keep or yield access, changing permeability rules for privacy in SNS interactions. Making these changes may represent new kinds of decisions that parents and children enter into regarding private information going across boundary lines in both directions. The process of these negotiations likely holds insights into expectations that both parents and children have about the other when it comes to privacy issues.

In particular, exploring how young adults interpret parental friend requests as either a type of privacy invasion behavior or not has implications for parent/child relational quality assessments. Petronio (1994) found that when young adults per-

ceive that their parents invade their privacy, the invasive behaviors create more openness in the parent/child collective boundary often at the expense of overall relational quality. The application of CPM to parent/child face-to-face interaction and CMC allows addressing the impact of the privacy management practices among the different generations mutually drawn to SNS utilization.

"Boundary crossing" also prevails in many other kinds of situations, particularly when personal and professional privacy boundaries collide or intersect. For example, research shows that accountability and professionalism can be at risk for pharmacy students when they post personal information on their Facebook and compromise professional judgment (Cain, Scott, & Akers, 2009). Physicians may also find that if their patients try to "friend" them, the request crosses the borders of their private lives making them feel uncomfortable or realize that their professionalism is compromised having a Facebook site (Guseh, Brendel, & Brendel, 2009; Thompson, Dawson, Ferdig, Black, Boyer, Coutts, & Black, 2008). As a consequence, negotiating a professional relationship is likely a challenge for physicians or other medical providers when they maintain a personal Facebook that exposes aspects of their lives they wish to remain private.

Likewise, "boundary crossing" occurs for educators and students (Carter, Foulger & Ewbank, 2008; Dippold, 2009; Greenhow & Robelia, 2009). Students google their teachers and find their Facebook site or other "private" online social networking sites. Even if the students are not given permission, the "public" information may be more than the teachers want their students to know about them. The same kind of "boundary crossing" may occur for students who wish to enter a particular college or apply for a position in the business world (Kluemper & Rosen, 2009). In the same way these "boundary crossings" happen so do they in organizations of all sorts (e.g., Allen, Walker, Coopman, & Hart, 2007; Petronio, 2002; Shadur, Kienzle, & Rodwell, 1999). Such diverse boundary crossing applications deserve greater attention in future research.

Interface of Identity and Privacy Management

Obviously, much work is needed to better understand the nature of identity within the world of privacy in online sites. Because the basic assumption of identity speaks of sustaining a sense of autonomy in today's world, it is clear that the ways identity and privacy management are interrelated matter for people as they traverse Facebook and other SNSs. For many, identity regulation is analogous with sustaining security of their person when they are using Internet communication. Many businesses are spending large amounts of money to create encryption programs that will protect their customers (e.g., Zhang & Imai, 2009). The scope is far-reaching and includes such issues as security of medical research data of tissue samples or copyright protection for digital information, for instance (Manion, Robbins, Weems, & Crowley, 2009).

Identity management also takes into account interpersonal relationship issues where privacy and SNSs are concerned. Substantial research in interpersonal communication has explored how interpersonal motives impact relational outcomes and interpersonal processes (Barbato, Graham, & Perse, 2003; Graham, 1993; Rubin, Perse, & Barbato, 1988). Because CPM identifies "privacy motives" as an important criterion used to make judgments about privacy rule development and adjustments (Child et al., 2009; Petronio, 2002), this existing body of work is useful in examining variations in individual and collective boundary management processes. The CPM framework surrounding interpersonal privacy motives determines how diverse CMC interaction goals and needs are associated with an individual's current disclosure and privacy management practices on SNSs (Schmidt, 2007).

In particular, the way people balance social capital (an identity management strategy) they gain from having a network of friends and telling them about their trips, choices, decisions, or feelings with the risks of disclosing those things on their social networking sites. CPM predicts that when one person makes a larger contribution of information than others linked as co-owners of the now, collective boundary, doing so often means that the differential information contribution increases the likelihood of the co-owners having more power than the original discloser (Petronio, 2002; Petronio & Kovach, 1997). In this way, the web-disclosure has increased risk while trying to increase social capital by not only having people to tell (the traditional definition of social capital) but by telling personal information often designed to impress, entice, and appeal to others (Ellison, Steinfield, & Lampe, 2007; Valenzuela, Park, & Kee, 2009).

Clearly, the interface of privacy and identity management also speaks of trust as a prerequisite of starting the Internet conversations in the first place (Petronio, 2002). Although trust is a critical factor when people are considering online shopping or whether to reveal something personal on their site, the nature of trust and its place within the privacy calculus is not always understood. Through the conceptual apparatus of CPM theory, a better grasp of how trust works is offered and provides predictable ways people make decisions about trust needs (Petronio, 2002).

Learning more about the evolution of disclosure and privacy management practices of diary-based and networking-based SNSs across time and factoring in trust issues helps to illustrate how identity and privacy are collectively managed. Further, we advocate research that moves beyond cross-sectional survey designs to ultimately clarify how the development of unique privacy trajectories can occur within different kinds of Internet needs. One privacy trajectory might track how online consumer health information changes the patient's willingness to disclose symptoms to the doctor because the symptoms no longer seem ambiguous or embarrassing to the patient. Another possible privacy trajectory could be exploring how young adults adjust SNS privacy management practices in light of encountering significant life changes such as moving to college, starting a new career, or developing and maintaining a significant committed romantic relationship. Research

illuminating the moments and contexts that such changes take place is needed. Thus, significant events have the potential to impact privacy trajectories and can be identified and studied through soliciting descriptions about how people make decisions to reveal more or less information than is typical in light of important turning point events that mark significant changes in patterns of behaviors.

Finally, capturing the relationship between identity and privacy management requires more integrative research securing an understanding of the complexity found in the available types of SNSs that may be used by individuals. For example, many young adults have all three types of SNSs (diary-based blogs, Facebook social network sites, and Twitter sites). Little is known about how individuals make decisions about what information to post on which collective SNS boundary and how or if they consider issues of identity management when they make these choices.

Individuals may choose to differentiate their personal and professional networks through the three types of SNSs and interact with diverse others in nuanced ways that allows more or less protection of privacy and personal identity. Greater understanding about how individuals make privacy management and CMC decisions that take into account diverse CMC interactions in multiple venues would provide more integrative understanding of how social media work in concert. Thompson (2008) highlights how young adults easily move among the diverse SNSs in ways that result in almost constant awareness and documentation of others' thoughts, opinions, routines, habits, behaviors, and locations. This phenomenon occurs so often that some individuals are responding by creating businesses, spaces, and events where privacy expectations are explicitly reinforced with greater privacy expectations, thereby allowing the opportunity to exhale (Puente, 2009; Salkin, 2009).

Conclusion

Because social networking is new in the world and the communication system used has to borrow from existing features of social interaction, we are scratching an unexplored surface. Not only are our social relationships changing because we have access to this form of interaction with others, so too is our sense of autonomy and therefore privacy in ways we cannot fully comprehend at the moment. This chapter offers a functional beacon to begin the process of understanding the way privacy management functions within this larger mediated communicative system. Exploring privacy regulation in the SNS context pushes many of the assumptions we have made theoretically. The yield of understanding is very promising, but challenges basic hypotheses and beliefs about the way people communicate with each other. We are witnessing evolution in the making and must stand ready with an arsenal of tools to keep pace with the changes we are experiencing because of this new way to interact, always balancing both connectedness and autonomy in our socially driven world.

Note

Although the blogging privacy management scale (Child et al., 2009) was developed based on interactions on diary-based blogs, general modifications made to the scale language from blog to social network website, Facebook, or Twitter allows use of the items to explore either general privacy management practices or more specific practices tied to the other types of SNSs, beyond diary-based blogs. Further refinement and adaptation of the scale in general to a variety of SNS domains is currently under development.

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