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# Interpersonal Boundary Mechanisms within Online Social Networks

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**Abstract**

Privacy can be characterized as a process of boundary regulation, but the process is not well understood for networked social environments. This paper advocates foundational research to inform better design decisions for facilitating boundary management and privacy in online social networks. To motivate, we present a preliminary set of boundary regulation mechanisms applicable to these environments.

**Keywords**

Interpersonal boundaries, social networking, privacy

**ACM Classification Keywords**

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

**General Terms**

Design, Human Factors

**Introduction**

Child and Petronio duly note that “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” [3]. A foundational definition of privacy that is particularly useful within Human Computer Interaction

(HCI) comes from Altman [1], who views privacy as a dialectic process of *boundary regulation*, where users manage their social relationships by dynamically altering the degree of openness of the self to others. Altman further specified the primary mechanisms used within the physical environment to negotiate interpersonal boundaries, such as personal space (e.g. distance), territory (e.g. fences), and verbal behavior (e.g. social etiquette). But with the growing prevalence of all sorts of networked and online social activities, we no longer negotiate interpersonal boundaries strictly in the physical world. Boundary regulation in virtual social environments is dependent upon interaction affordances provided by technology as well as a newly developing set of social norms. Given the recent and rapid emergence and ongoing evolution of online social environments, good design principles for these boundary mechanisms are not well understood. Failure to design adequate boundary mechanisms can result in significant interpersonal and privacy issues.

According to Neilson Media, Americans spend over a quarter of their time online engaged in social networking activities [4]. While online social network (OSN) use is widespread and popular, it is not without its costs. We conducted a research study to understand the types of issues encountered by OSN users. Almost all the interpersonal and privacy problems we observed can be attributed to some sort of failure in interpersonal boundary regulation. Thus, we advocate investigating boundary regulation within OSN's more deeply. We identify interpersonal boundary mechanisms that are relevant specifically to this new, virtual social environment. A better understanding of these mechanisms can inform design decisions which

facilitate interpersonal boundary regulation to better balance the benefits and tradeoffs of interacting online.

### **Research Methods**

Our first steps towards developing a model of interpersonal boundary regulation within OSN's are to examine the current mechanisms available, their implementation by users, and the interpersonal and privacy struggles that users face. This position paper highlights a preliminary set of boundary mechanisms employed within OSN's that are unique to the characteristics of online social networking.

Three qualitative approaches were used to derive the five categories of boundary regulation mechanisms presented here. First, we reviewed literature on interpersonal boundaries, online social networking, and boundary regulation within social media. Second, we performed an interface analysis of five popular social network sites (Facebook, MySpace, LinkedIn, Hi5, and Ning) to compare and contrast the technological affordances present or not for interpersonal boundary regulation. After all functionality was recorded systematically, these mechanisms were grouped conceptually. Third, we are performing semi-structured interviews with OSN users. We have interviewed eleven participants thus far, 6 females and 5 males, ranging in age from 28 to 59 years old.

### **OSN Boundary Mechanisms**

*Network boundaries* are mechanisms to demark separation between one's connections or groups of connections. Interpersonal boundary literature has little to say about network boundaries or their importance because it is only with the advent of OSN's that access to others in our network is readily available without our

intervention. Exposed and traversable network structures are unique characteristics of OSN's [2]. While participants generally found value in sharing friends, interactions across different, potentially conflicting social circles surfaced as a main concern. For example, as a minister, Steve finds this a very difficult situation. He explained that, "I have friends and relatives who are at extreme opposites religiously and politically . . . A close friend asked me once, "Who ARE those people and why are they so angry all the time?" Due to the differences between his Facebook friends, he said, "it is very likely to lead to a heated, sometimes hateful confrontation between my 'friends'. I really don't like that!"

*Territorial boundaries* involve "use of places and objects in the environment" to personalize or mark, "ownership, possession, and occasional active defense" [1]. Most Social Networking Sites (SNS's) give users a personalized territory (e.g. "MySpace") to call their own. This space is unlike anything we experience in the real world – a tangible representation of ourselves that can be accessed at will by any of our connections. The two types of territorial boundaries we have observed are inward-facing territories, such as Facebook's NewsFeed which is only viewed by the user, and outward-facing territories, such as the Wall. Managing outward-facing territories is difficult for OSN users because others can interact or create content within those territories. For example, Allen's cousin briefly became a Neo-Nazi and continually posted hate doctrine, so Allen felt, "I had to apologize to a slew of people ... I felt like I was the Nazi, or that it was my Facebook spewing hate."

*Disclosure boundaries* require a coordination process between co-owners of private information [5]. Stutzman examined the creation of multiple profiles on social media websites, primarily Facebook, as an information regulation mechanism [6]. We found that OSN users were skeptical about their SNS privacy settings. Often, participants did not know that private information was being shared at all and blamed the SNS. Gina complained, "I was annoyed that Facebook had my phone number for all my friends and family and their friends and family to see." The lack of confidence in SNS privacy settings led many of the participants to manage self-disclosure boundaries by restricting the information they shared. Gina explained, "I don't post things because my husband says they will follow me forever."

*Relationship boundaries* are first formed when deciding to connect or not; relationship context can manage the relationship once the connection has been formed. Individuals have different boundary permeability when choosing whom to friend. The participants who had fairly public careers and used their social networks as an extension of their profession tended to have more open friendship boundaries. For instance, Kristine, Steve, and Lynn are a young adult author, minister, and photographer, respectively, "blanket accepted" friend requests for the most part, thereby allowing numerous strangers into their networks. Interestingly, our participants also required very strong reasons to break a connection. As Steve explained, "The only reason I would 'unfriend' someone is if they were obscene or rude and I didn't really know them well."

Even though relationship context is vital in determining appropriate relational boundaries, the majority (seven)

of our participants did not manage relationship context (e.g. by creating friend groups) within their OSN's at all. As a result, SNS users' online interactions tend to be more generic and less personalized, losing an aspect of interpersonal intimacy. Kristine explained, "Sometimes if I am feeling down or depressed, I don't want to go on Twitter and Facebook. One of the bad things about having all these people who are fans or whatever or that aren't family and friends...is that they expect you to be on and up and they don't expect you to have doubts or things like that."

*Interactional boundaries* refer to how OSN users manage what friends can or cannot do within their social networks. Ultimately, an all or nothing approach was observed. Participants either failed to restrict interactions with others or they blocked them completely through actions such as disabling comments on their Facebook Wall, unfriending, or blocking. Interactional boundaries were characterized with little room for boundary negotiation. "I'm not good with confrontation, so I just deleted him. I notice he still commented on [my pictures]. I don't want to be rude to him, so I'm struggling with do I just be rude or do I just let it go, I don't know," said Lynn.

### **Contributions and Future Research**

Our position is that an in-depth, theoretical understanding of the interpersonal boundary regulation process is a necessary step toward knowledge creation in the HCI OSN research community. To that end, we first need to understand how OSN users employ boundary mechanisms to manage their social interactions. In our preliminary study we found that users were employing a range of boundary mechanisms, using them in various combinations, and

switching between them to achieve their desired level of privacy. Our research is identifying and finding ways to support and enhance these processes and to inform environmental design considerations for SNS interfaces.

In our future research, we plan to perform a quantitative, empirical study to determine the relationship between interpersonal boundary regulation behaviors, contextual factors, and subsequent outcomes such as self-esteem and interpersonal intimacy. These studies will inform design considerations for application interfaces that increase boundary awareness, recommend personalized boundaries, and facilitate users' boundary negotiation. Achieving these goals will enable the HCI community to transform often superficial OSN interactions into a deeper level of human connection.

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