**Unfriend, Unfollow, Unsubscribe:**

**Unsociability on social network sites**


Marisela Gutierrez Lopez

University of Tampere
School of Information Sciences
Interactive Technology
Marisela Gutierrez Lopez: Unfriend, Unfollow, Unsubscribe: Unsociability on social
network sites
M.Sc. Thesis, 80 pages, 19 appendix pages
May 2012

---

Social network sites (SNSs) are virtual spaces for social activity where users can "undo" their social interactions, returning to a previous system state. In this thesis I study this "reversed" sociability – unsociability – as a novel way to approach and support online social interactions.

Using focus groups as research method, I explore the practices and perceptions of users engaging in unsocial events over four popular SNSs: Facebook, Twitter, LinkedIn, and Google+. As focus groups enable people to discuss their opinions in a relaxed yet moderated environment, I gathered opinions of participants expressed in their own terms. Subsequently, I used two data analysis techniques, content analysis and grounded theory, to explore participants' utterances and group dynamics.

The results show that the structure of each site reviewed is determinant to understanding how they support unsociability. Most notably, it was found that people follow a social-over-technical pattern on Facebook, as they base their interactions on their social understanding of this site instead of its technical capabilities. By following this pattern, people engage in unsocial events to save face and regulate their privacy boundaries.

I found that people try to keep their unsocial behaviors as positive as possible to reduce accountability for these behaviors. Consequently, they prefer using features that place a self-boundary around them, which I call the soft unsocial features. The hard unsocial features place a dyadic boundary, producing increased social costs. Nevertheless, different people interpret these features in different ways, as I found three distinctive attitude styles towards them: the experimental, cautious, and restrictive.

As these platforms become ubiquitous, I argue that unsociability should become an important consideration for designers of SNSs. I propose that SNSs should offer integrated options to revert social interactions in a silent, easy, and flexible way, to support users to "reverse" the increased sociability enabled on these sites.

Key words and terms: social network sites, features, unsociability, design.

# Acknowledgements

While writing this thesis has been a long and windy road, I was surrounded by the most amazing people that helped me throughout the way. It is to them that I owe my deepest gratitude.

I am extremely grateful with my advisor Saila Ovaska for her wisdom, encouragement, and patience. Her engagement with my project motivated me to think in wider and deeper ways. Without her guidance, the ideas contained in this thesis would never have come to light. I would also like to thank Prof. Kari-Jouko Räihä for his valuable advice that helped me to improve the last version of this thesis.

I would like to acknowledge the support of three Mexican organizations for helping me to fund my studies: Consejo Nacional de Ciencia y Tecnología (CONACYT), Secretaría de Educación Pública (SEP), and Banco de México. I am tremendously thankful for their commitment to my academic growth.

I am eternally thankful to my family, especially to my parents and siblings, for their unconditional love and support. I would like to express my gratitude to my friends, for being by my side no matter how crazy my life gets or how far we can be. I am enormously thankful to Ramiro Villarreal for his endless patience and encouragement, but most importantly, for never letting me down. Without the love of all of you, my work would be meaningless.

I am beholden to Lorena Escandon, for tirelessly supporting me to proofread my work, making sure that this document is legible. All mistakes and misprints, however, are only mine.

Finally, and most important, I want to acknowledge and thank the participants of my study, who took the time to talk with me, and helped me to get better clarity on this topic. Their voices made this project possible.

In the end, to all of you, I am indebted for supporting me to accomplish this goal.

# Contents

# 1. Introduction

With about 1.2 billion users worldwide, social network sites (SNSs) are the most popular online activity nowadays (ComScore, 2011). By enabling a wide variety of social behaviors that challenge traditional paradigms of socialization (Papacharissi & Mendelson, 2011), these sites have opened a new framework to study online interactions.

As SNSs and other social technologies turn ubiquitous, they have moved from a "niche phenomenon to mass adoption" (Gross & Acquisti, 2005, p. 71). Users of these platforms are becoming more diverse, unknown, and woven into intricate social contexts (Hagen & Robertson, 2010). Consequently, designers of these technologies face the challenge to minimize the gap between technical affordances and emergent social needs (Ackerman, 2000).

Social network sites, such as Facebook, evolved from previous technologies that enabled social interactions using computers. Most notably, SNSs are based on "computer-mediated communication" (CMC) tools, which are collaborative technologies that enable people to communicate and interact with others, even when they are at a distance (Preece, Rogers, & Sharp, 2002). CMC tools, such as e-mails, chats, and online communities, are popular ways for people to find each other and build social connections online (Chenault, 1998). SNSs are unique since they allow users to "articulate and make visible their social network" (boyd & Ellison, 2007).

Moreover, users of SNSs tend to connect with people they know offline (Donath & boyd, 2004; Joinson, 2008; Lampe, Ellison, & Steinfield, 2006). This offline-to-online pattern of connections has shifted the traditional paradigm of anonymity in online interactions, moving from Peter Steiner's (1993) adage[1] "On the internet, nobody knows you're a dog" to a more personal and non-anonymous way of interaction.

This challenge of SNSs to traditional paradigms of online interactions does not seem to desist. Social network sites are proven to be more than just a passing trend adopted by young people. They have expanded to other age groups, the fastest growing segment in SNSs usage being people of +55 years (ComScore, 2011).

What is more, terminology and behaviors associated to SNSs are becoming part of the popular culture. A clear example of this trend is the term "unfriend", which was elected as "Word of the Year 2009" by the New Oxford American Dictionary[2]. This

---

[1] http://www.unc.edu/depts/jomc/academics/dri/idog.html
[2] http://www.reuters.com/article/2009/11/17/us-words-unfriend-idUSTRE5AG09H20091117

dictionary defined it as "unfriend – verb – to remove someone as a 'friend' on a social networking site such as Facebook" (OUPblog, 2009).

Moreover, unfriend is not an exclusive feature from Facebook. LiveJournal, an online social network of bloggers, pioneered this feature by allowing users to "*Friend*" and "*Defriend*", i.e., add and delete other members of the site on their social network (Fono & Raynes-Goldie, 2006). Later on, other SNSs such as MySpace and Friendster joined the trend, but Facebook popularized the "*Unfriend*" concept.

In SNSs' terminology, the prefixes "un" in unfriend and "de" in defriend are metaphors for the "undo" functionality of computer programs (Zimmer, 2009). In other words, SNSs have "Control-Z" commands which allow users to "reverse" social interactions. Contrary to real life where one cannot simply "reverse" friendship, SNSs allow people to "go backwards" and return to previous system states.

I believe this mechanism of "backwards" sociality is a fundamental key to understand online interactions. For this reason, I want to study the reverse of social – the *unsocial* – interactions that take place on SNSs. I argue that as much as SNSs are virtual places for socialization, they should support users to "undo" actions, or in other words, support unsociability.

Returning to the "undo" metaphor, SNSs have features that allow people to return to a previous system state. For example, Marja can use the "*Unfriend*" feature to delete her connection with Timo, returning to a system state where she did not have Timo in her virtual social network. I define Marja's behavior as an "unsocial event", being herself the "initiator" and Timo the "target".

Unsocial events are deliberate acts people do to elude another person online using the available features, returning to a previous system state. For this study, I use unsocial events as a working definition of the process of "reverse" socialization. I am interested in finding out which behaviors and features, besides deleting connections and *Unfriend*, can be considered as unsocial events.

It is important to note that unsocial and antisocial behaviors are not the same. According to the Oxford dictionary[3], antisocial behaviors involve being against the laws or society, like online bullying or scams. Unsocial behaviors, in the scope of this thesis, refer to novel ways of social interactions that are supported by the "instant reversibility" (Zimmer, 2009) that is possible on virtual spaces.

The utility of supporting unsociability may appear to be rather simple, but it is essential. By nature, people tend to have private spaces (Altman, 1977). SNSs are all about connecting people in networked spaces. However, it is not realistic to assume that everybody wants to share everything, with everyone, all the time (Lampinen, Lehtinen,

---

[3] http://oxforddictionaries.com/definition/antisocial?region=us&q=antisocial

Lehmuskallio, & Tamminen, 2011). Still, how people can manage their privacy in virtual spaces is a challenge for technology designers (Ackerman, 2000).

As there is no current "human-computer interaction" (HCI) mechanism to translate the highly nuanced and flexible offline social interactions to an online form, people adapt the existing systems to their needs (Ackerman, 2000). Previous research has addressed the way people adapt SNSs based on privacy concerns (Lampinen et al., 2011), and particular unsocial events such as deleting connections (Kivran-Swaine, Govindan, & Naaman, 2011; Kwak, Chun, & Moon, 2011; Sibona & Walczak, 2011). Nevertheless, no previous research has studied the set of features that allow users to "reverse" social interactions. Therefore, as a novel contribution, this thesis studies the features associated to unsociability and how people adapt them to their needs.

Most SNSs have similar core elements such as profiles, contact lists, and communication tools (boyd, 2010). The particular structures of these elements over different SNSs change the ways in which people interact over them (boyd, 2004). In this thesis I review four of the most influential social network sites by the time of this study (ComScore, 2011): the open-to-all Facebook; the broadcasting channel Twitter; the professionally-oriented LinkedIn; and their new competitor, Google+.

Even though much of previous research on SNSs has been directed to study Facebook, its importance "cannot be overstated" (ComScore, 2011, p. 8), hence it is the core of my study. Reporting 845 million active users[4] by the end of December 2011, Facebook is considered the most popular social network site. Launched in February 2004 as an online network for Harvard University students, its purpose is to connect people, giving the opportunity to communicate and share content within social connections.

After Facebook, Twitter and LinkedIn are the second and third most visited SNSs respectively (ComScore, 2011). Released in July 2006, Twitter is an online social network and micro-blogging service which currently reaches one in ten internet users worldwide (ComScore, 2011). The main feature of Twitter is a real-time stream of user-generated content, which includes both personal communications and worldwide events, such as political conflicts, sports, and celebrity gossip.

LinkedIn is the largest professional network site. According to their website[5], in February 2012 there were over 150 million registered users. Launched in 2003, this site has the purpose to enable professionals to connect and find work opportunities within their group of contacts or affiliated enterprises.

Google+ (G+) is the social network site managed by Google. Google+

---

[4] http://newsroom.fb.com/content/default.aspx?NewsAreaId=22
[5] http://press.linkedin.com/about

conceptualizes online connections to resemble real life by allowing users to control what content they share with different social groups[6]. Released in September 2011, this site reached 25 million worldwide visitors in less than a month from launch (ComScore, 2011).

To the best of my knowledge, this is the first study addressing unsociability over these social network sites. Therefore, I aim to gain in-depth understanding of this phenomenon. The most suitable approach for this end is a qualitative research method, as it enables me to "tell the story" (Preece, Rogers, & Sharp, 2002, p. 379) of people engaging in unsocial events.

In order to reveal this story without biased assumptions, I approached the topic using the focus group method, which allows people to express their opinions while interacting with others in a relaxed yet moderated environment. Finally, I uncover the practices and perceptions of participants of these focus groups using two data analysis techniques, content analysis (Eriksson & Kovalainen, 2008; Stewart, Shamdasani, & Rook, 2007) and grounded theory (Glaser & Strauss, 1967).

The remainder of this thesis is divided into nine chapters. Chapter 2 describes what SNSs are, the concepts associated to them, and an overview of the four sites reviewed in this study. Chapter 3 explores what previous literature has found about unsocial events and describes how this concept is addressed in the study. Chapters 2 and 3 also articulate the research questions of this thesis in detail. Chapter 4 describes focus groups as a research method, how they are applied for this study, and their practical arrangements. Chapter 5 describes the findings on unsociability for Facebook obtained from the focus groups. These results are organized according to the research questions of this thesis. Likewise, Chapter 6 presents the results for Twitter, LinkedIn, and Google+. Chapter 7 discusses these findings under the light of previous research, and reflects about the validity and limitations of this study. Chapter 8 addresses the design implications and suggestions for supporting unsociability. Finally, Chapter 9 provides the conclusions of my study as well as implications for further research.

---

[6] http://googleblog.blogspot.com/2011/06/introducing-google-project-real-life.html

# 2. Background literature on social network sites

Social network sites are places for social activity, virtual spaces where people can get in touch and communicate with others through their profiles (boyd & Ellison, 2007; Papacharissi & Mendelson, 2011). The social connections are the basis of most of these activities (Kivran-Swaine, Govindan, & Naaman, 2011), as people build their online network and "type themselves into being" (Sundén, 2003, as cited in boyd & Ellison, 2007).

Defined by boyd and Ellison (2007), SNSs are:

*"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."*

Much of the previous research on SNSs has adopted the previous definition to study social interactions over these platforms (Lampe, Ellison, & Steinfield, 2008; Sibona & Walczak, 2011; Tokunaga, 2011), but no study has been directed to understand how the "reverse" of these interactions is supported. Therefore, the first research question of this study is oriented to shed light on this issue:

**RQ1. How do social network sites support unsociability?**

To gain understanding about these systems and what previous researchers have found on this field, in the following section I explore the structural elements of SNSs described in the previous definition. After that, I explain how these platforms support social activity, and give an overview of the sites reviewed in this study.

## 2.1. Structural elements

Even though technical features and functionalities of online social networks vary across sites (boyd & Ellison, 2007), three types of elements have a fundamental role in structuring SNSs: profiles, contact lists, and communication tools (boyd, 2010).

*Profiles*

The core element of SNSs is profiles that can display connections with other users of the system (boyd & Ellison, 2007). While profile visibility varies according to the site and user preferences, most of them can include a wide variety of user-generated content (Lampe, Ellison, & Steinfield, 2006) that create a "personalized" experience (Papacharissi & Mendelson, 2011).

Profiles reflect users' engagement to the site (boyd, 2010) by supporting two main activities. First, by allowing people to present themselves with items such as

demographics, pictures, and applications (boyd 2006b; boyd & Ellison, 2007), and second, by letting them create connections and communicate with other members of the site (Lampe, Ellison, & Steinfield, 2006).

Profiles on SNSs tend to be accurate descriptions of their owners (Zhao, Grasmuck, & Martin, 2008). The profile owner consciously crafts the way he wants to present himself to others within the site (boyd & Ellison, 2007). However, people do not have full control over their self-presentation, as others can post content on their profiles (boyd, 2010; Lampinen et al., 2011). Therefore, system features such as *Privacy Settings* are available for users to determine who can see or contribute to their profile.

*Social connections*

Social connections are considered the "heart" of SNSs, as they allow users to grow and maintain an online network (boyd, 2006b). These connections are created through a negotiation between two users. One person reaches another to create a connection, while the latter person can accept, ignore, or reject it. However, not all systems establish online relations in the same way.

Sites such as Facebook establish symmetrical relations between users. That is, the connection should be reciprocal. For instance, if Marja sends a *Friend Request* to Timo on Facebook, he has to accept her request in order to be mutually listed as *Friends*. On the other side, sites such as Twitter create asymmetrical, i.e., one-way, relations between users. As the connection is not reciprocal, users do not need to confirm the relation. To continue with the example, if Marja follows Timo on Twitter, he does not need to reciprocate or confirm the relation for Marja to be listed as his *Follower.*

Most of the previous literature agree that users tend to connect on SNSs with people they know in real life, rather than meeting new people online (Donath & boyd, 2004; Joinson, 2008; Lampe, Ellison, & Steinfield, 2006). In asymmetrical relations, people tend to connect with people they admire or are interested in, such as celebrities or bloggers, even if they do not have an offline relation (boyd, 2006b).

*Communication tools*

Even though each SNS provides different tools for users to communicate, most of them allow people to make comments and send private messages to each other (boyd & Ellison, 2007). For example, Facebook supports features such as the *Wall* to display conversations on users' profiles; and "lightweight channels of communications" (boyd, 2008, p. 114) as the *Like* and *Poke* buttons, which allow people to "be present" with one click.

While content shared over SNSs may appear to be mundane, it has a social "grooming" function (boyd, 2010). In other words, people acknowledge one another over these sites, presenting themselves and their social interactions before a broader

audience.

The content shared by users within these communication tools creates a stream of information that is consumed by the users and their network, e.g., *Friends* or *Followers*, giving users a sense of "who is around" (boyd, 2010). Naaman, Boase, and Lai (2010) called this kind of systems "social awareness streams", which can be differentiated from other CMC tools by the public (or semi-public) nature of the conversations, the brevity of content, and the socially-charged space where content is shared. Nonetheless, the pervasiveness of online communication tools has the potential to produce significant social difficulties (Aoki & Woodruff, 2005).

In summary, profiles, contact lists, and communication tools of SNSs are the basic elements that "set the stage" (boyd, 2010, p. 6) for people to interact over these platforms. However, as will be described in Section 2.3, structural differences of these elements between platforms can change the nature of the interactions.

## 2.2. Social activity and unresponsiveness

Social network sites are places for social activity. Burke, Kraut, and Marlow (2011) distinguished three kinds of social behaviors on Facebook that they argue are applicable to other similar platforms.

1. *Direct communication.* This involves using tools, such as private messages, chat, or photo tagging, to establish a one-to-one communication with another member of the site. These interactions can create feelings of connectedness and reciprocity, and signal meaningful social relations.

2. *Passive consumption of social news.* People receive social information from their connections through a stream of content, such as the *News Feed* or *Timeline*, without having the need to interact with it.

3. *Broadcasting.* This is the production of content for others to consume, without it being directed to a specific person. While these communications are less likely to support social relations, they may help to reveal similarities between users.

It may be inferred that direct communications and broadcasting involve action, or in other words, "clicking buttons". In this case, "clicking buttons" may be seen as an invitation for their connections to also be active. Specifically in the case of direct communications, if Marja sends a private message to Timo, she may expect that he reciprocates by replying to her message. However, there might be a case where Timo deliberately decides to ignore Marja's attempt of connection. This is called "unresponsiveness" (Aoki & Woodruff, 2005).

Much as in other mediated communications, such as phones, people using CMC

tools can simply decide not to answer an attempt of communication (Nardi, Whittaker, & Bradner, 2000). For Aoki and Woodruff (2005), there are two variants of unresponsiveness: failing to respond to a conversation, e.g., not answering a chat message; and failing to reciprocate an attempt to establish mutual access over a communication medium, e.g., ignoring a connection request. In both cases, people deliberately avoid action to evade a communication attempt.

Previous research with instant messaging (IM) tools (Nardi, Whittaker, & Bradner, 2000) suggests that IM users feel that they can ignore a message from another person without being rude or offensive. This is so because the sender cannot be certain that the target received the message or is available to reply. This has been called "plausible deniability" (Aoki & Woodruff, 2005; Nardi, Whittaker, & Bradner, 2000).

Are these findings also applicable to what happens in highly social-connected spaces such as SNSs? Do people feel they can avoid action in a plausible way? I attempt to answer these questions regarding unresponsiveness on SNSs by exploring unsociability. Additionally, I describe how and when "clicking buttons" is considered unsocial. Details on how these issues are addressed in this study are described in Section 3.4.

## 2.3. Structural differences of SNSs

Papacharissi (2009) points out that the structure of SNSs can be compared to the architecture of physical spaces. Virtual spaces have equivalents of rooms, walls, and doors that configure the environment and shape people's engagement with technical affordances (boyd, 2010).

The structure of each SNS is unique to the purposes of the platform. People interpret these structures to set the tone of their interactions, which creates a unique culture around each system (boyd & Ellison, 2007).

For Papacharissi (2009), four themes determine the structural differences between SNSs. (1) The balance of what users can make public or private on the site, e.g., profile visibility, (2) the possibility to elaborate different styles of self-presentation using profiles, e.g., professional or social, (3) the profile customization according to users' "tastes" that differentiate themselves from others, e.g., likes, dislikes, affiliations, and (4) the formation of social settings, where the norms of conduct can be specified by the site or by its members, e.g., privacy policies. The ways in which these themes connect and combine with each other construct the unique identity and functions of the sites.

I am interested to find out how different SNS structures shape unsocial events. Do sites with different structures support unsociability in the same way? Are people "unsociable" in a different way depending on the purpose of the site? Are there similarities or divergences between sites regarding unsocial events? To address these

questions, I propose the following research question:

**RQ2. How are the structures and purposes of SNSs related to unsociability?**

To shed light on these issues, the current section details the structure of the four social network sites reviewed in this study: the open-to-all Facebook; the business-networking site, LinkedIn; the broadcasting channel, Twitter; and their new competitor, Google+.

For illustrative purposes, over the following subsections I present screenshots of the user interface of these four sites using the profile of "Marja Salo", which is one of the four made-up user accounts created for this study. Further details on how these made-up profiles are used within the focus groups are detailed in Section 4.2.1.

### 2.3.1. Facebook

When registering to Facebook, potential users are requested to use their true identity to create an online profile. These profiles can be personalized with elements such as demographics, pictures, interests, and applications. A screenshot of the current profile interface is presented in Figure 1, pointing to (a) *Friend List*, (b) system notifications, and (c) the *Wall*.



Figure 1. Facebook profile.

It is worth noting that at the moment Facebook is introducing a radical change to users' profile interface, the so-called *Timeline*. This new layout allows users to display their profiles as a "storyboard" of their lives. By the time of this study, the adoption of the

*Timeline* is still optional[7], therefore I will not address its implications.

An important element of the profiles is a list of connections with other users, or in Facebook terminology, *Friends*. Persons listed as *Friends* share a symmetrical connection. For example, Marja sent a *Friend Request* to Timo. If Timo accepts, they will be automatically listed as *Friends*, granting mutual access to their profiles. However, to address privacy concerns, users have the option to adjust the amount of content that each *Friend* can obtain.

Users can adjust their privacy settings to accept *Subscribers* to their profile. This feature is intended for users to receive updates from people with whom they do not hold a relationship offline but are interested in, such as celebrities and politicians. The user's *Subscribers* will receive his public updates even if no mutual relation is listed, thus, these are one-way relations. Allegedly, *Subscribe* was introduced in September 2011[8] as Facebook's response to Twitter's *Followers* (Ingram, 2011).

People can interact on Facebook in a variety of ways, such as sharing text-based or media posts. The interactions that directly involve the user are listed on their *Wall* and include a system notification. Moreover, users become aware of their *Friends*' interactions over a stream of content called *News Feed*. People can "fine-tune" the content of their *News Feed* with the use of features such as *Subscribe*[9] that allows people to choose the type of updates they want to receive from their contacts, e.g., *All Updates*, *Most Updates*, *Only important*. Moreover, users can *Unsubscribe* to stop receiving updates from a person on their *News Feed*.

Without intending to create an exhaustive list, some of the communication tools of Facebook include *Messages* (e-mail service), *Chat* (IM service), and lightweight tools such as the *Like* and *Poke* buttons.

### 2.3.2. Twitter

To become members of Twitter, people have to register and provide a username to identify themselves inside the network. Even though people are encouraged to use their true identity, only accounts with public relevance, such as business or journals accounts, are validated to establish authenticity.

Twitter profiles can be customized by adding a picture, demographics, and a short personal description. Users can adjust their profiles to make them public or to allow only previously authorized people as *Followers*. Figure 2 presents a current profile page on Twitter, signaling (a) links of *Following* and *Followers* lists and (b) the list of user's *Tweets*.

---

[7] https://blog.facebook.com/blog.php?post=10150408488962131
[8] http://blog.facebook.com/blog.php?post=10150280039742131
[9] https://www.facebook.com/help/search/?q=subscribe

Figure 2. Twitter profile.

Social connections in Twitter are conceptualized under the term of *Follow,* and can be either symmetrical or asymmetrical. For instance, Marja can subscribe (i.e., *Follow*) to the profile of Timo. Meanwhile, Timo can decide to reciprocate by following Marja back, or to leave the relation asymmetrical. Connections are symmetrical, but not dependent of each other. For instance, Marja can stop following Timo, but he would still be following her.

The basic unit of communication on Twitter is the *Tweet,* which is a 140-character long post that can include URLs to pictures and other media. These *Tweets* appear in a real-time stream called *Timeline*, where people can see the *Tweets* of people they have on their network, add their own posts, reply to or re-post the *Tweets* of others (i.e., *Retweets*). The communication tools in Twitter include the possibility to send personal, or *Direct Messages* to one's followers.

### 2.3.3. LinkedIn

As a professional network, LinkedIn encourages its members to fill in their profiles with their demographics along with relevant information concerning their employment and education. Users can follow companies and join groups to search for possible job opportunities. In Figure 3, a screenshot of a user's *Home* page is presented, signaling the (a) stream of updates; (b) links to *Profile* and *Contacts* pages; and (c) system notifications.

Figure 3. LinkedIn profile.

Users are able to create a business network of people with whom they share a professional relation, such as co-workers, classmates or professors. Relationships over LinkedIn are symmetrical, which means people must confirm their relationship with another person before they are mutually listed as *Connections*.

LinkedIn has a particular approach to user networking. The system limits the user's ability to contact or view the profile of a person who is more than three degrees away from his network. To put it simply, people cannot contact users further than *Connections*-of-*Connections*-of-*Connections*.

The most notable communication tool on LinkedIn is private messaging. Within their 1st-degree *Connections*, people can freely send private messages, in addition to getting a stream of their updates on the *Home* page. Sending a private message to somebody on the user's 2nd-degree or 3rd-degree network is called an *Introduction,* but users only get a limited amount of them. Finally, for contacting someone outside their network (4th-degree and above), or if they reached the maximum amount of free *Introductions,* users must hire a premium account.

### 2.3.4. Google+

Signing up for Google+ is done through a Google account. Profiles allow users to add pictures, demographics, and other media. The most relevant feature of Google+ is *Circles,* which enables people to organize their social network into different clusters according to the relation held, such as friends or family. People can choose to share their

content with one of their contacts, or one or more of their *Circles*, in order to "bring nuance" to online sharing[10]. A screenshot of a Google+ profile is presented in Figure 4, where (a) lists of people in *Circles,* (b) stream of content, and (c) system notifications are marked.
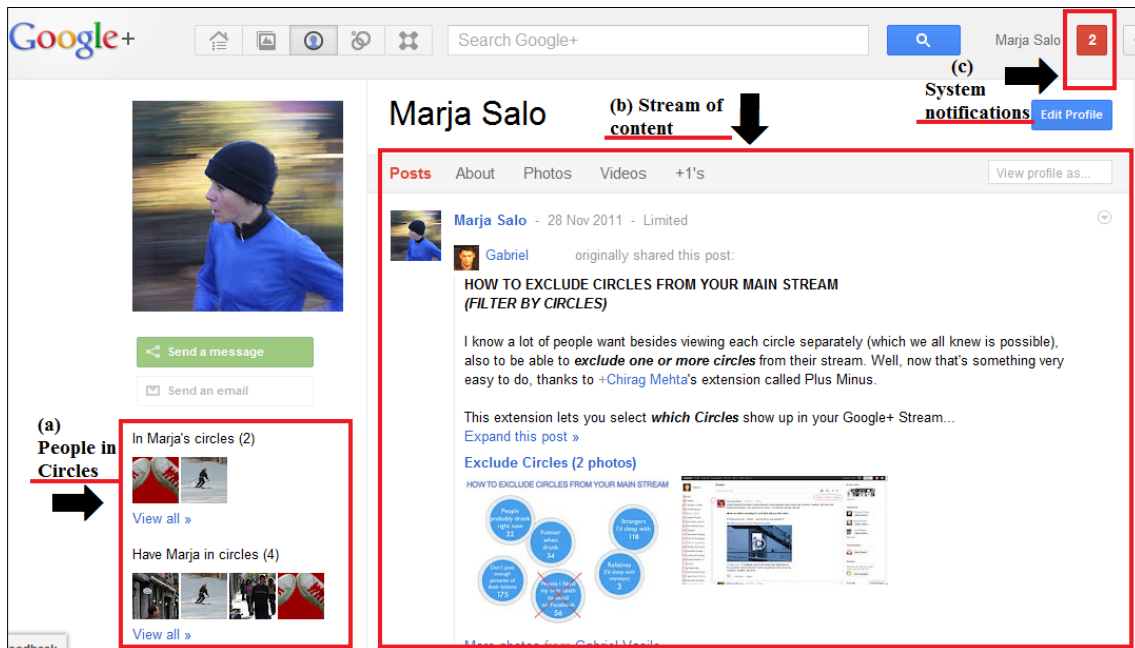


Figure 4. Google+ profile.

Social connections over Google+ can be either symmetrical or asymmetrical. For instance, if Marja adds Timo to one of her *Circles,* Timo gets to decide between adding Marja to his *Circles,* leaving her as a follower, or rejecting the connection. Timo's decision would directly affect which content Marja receives from Timo on her *Stream* of updates.

Some of the communication tools available on Google+ include *Hangouts* (video-chat service) and *Chat* (IM service).

---

[10] http://googleblog.blogspot.com/2011/06/introducing-google-project-real-life.html

# 3. Towards understanding unsocial events on SNSs

While the previous chapter gave the "big picture" of how SNSs work, it is still unclear how their elements are related to unsocial events. I argue that as much as these sites and their features are designed to promote social interactions, they should also support "reverse" social interactions. However, how SNSs support unsociability is far from clear at this point. The current chapter describes what previous literature has found on this issue and how I approach this topic.

## 3.1. Unsocial events

As I defined in the Introduction, unsocial events are deliberate acts people do to elude another person online using the available features. By borrowing the concept of "undo" command from computer programs, unsociability is the notion to return to a previous "social" state on SNSs.

In the scope of this study, unsocial events are focused on a dyadic level, i.e., involving two persons. I want to study the activities of one person (initiator) that deliberately eludes another person (target) while interacting online. These activities can include "clicking buttons" or "not clicking buttons".

To better understand this concept, Figure 5 portrays the social dynamic of *Unfriend* on Facebook. In the top image, the initiator and target share a reciprocal connection on the site, i.e., they are *Friends*. The middle image indicates that the initiator "cuts" the connection with the target using the *Unfriend* feature. The bottom image indicates that there are cues when the connection is "cut" to signal the action. For instance, these users are no longer mutually listed as *Friends*.
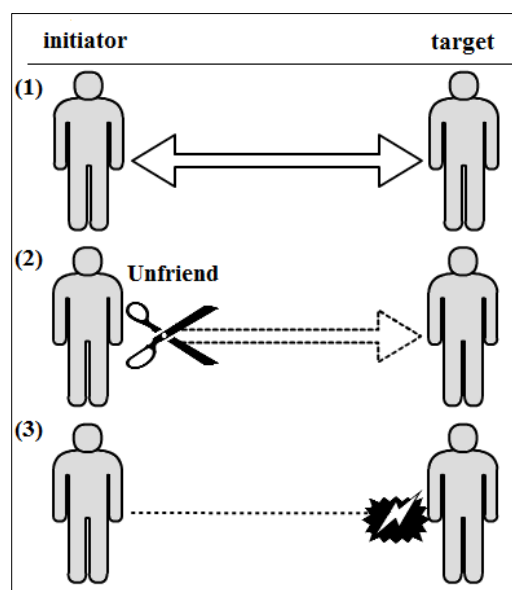


Figure 5. Dynamic of an unsocial event.

The third image of Figure 5 can be compared to erasing a pencil mark on a piece of paper. Even when the mark is erased, some trace of it can be noted on the paper. How easy it is to spot, depends on how strong was the mark. In the context of this thesis, these are the "awareness cues" that are available for the targeted person to notice that they have been involved in an unsocial event.

As can be seen in Figure 5, unsocial events include two users who are directly involved in the unfriending action. It is equally important for me to understand how these two people understand the unsocial event. Therefore, I will address the perceptions of users of SNSs, both as initiators and targets of unsocial events, as stated in the next research question.

**RQ3. What are the perceptions of individuals engaged in unsocial events, both as initiators and targets?**

I explore not only how the systems support unsociability, but also what the persons involved perceive about these occurrences. With this, I expect to find better ways to support these unsocial events by addressing users' social needs.

## 3.2. Factors that promote unsocial events

I do not assume that unsociability is associated with "negative" social interactions. However, unsocial behaviors such as rejecting a *Friend Request* have the potential to be awkward or embarrassing (boyd, 2006b), and lead to social conflicts (Tokunaga, 2011).

Therefore, in this section I explore three characteristics of social interactions on SNSs that have been identified as the key factors that create or intensify conflicts on online relations: ambiguity of social norms; reduced social presence; and friendship formation and dissolution (Tokunaga, 2011).

*Ambiguity of social norms*

Social norms that rule offline interactions also apply to virtual spaces (Papacharissi, 2009; Yee, Bailenson, Urbanek, Chang, & Merget, 2007). These norms reflect expected behaviors about what is and what is not acceptable in a certain situation online (Fono & Raynes-Goldie, 2006).

On SNSs, online social norms can be learned through other users and cues from the environment (boyd, 2008). These social norms can be "imported" from offline contexts (Papacharissi, 2009) or previous CMC, such as e-mail or IM (Lampe, Ellison, & Steinfield, 2008). Notwithstanding the source of the norms, people hold accountability for their actions over SNSs. This means, people can face "real consequences" (Zhao, Grasmuck, & Martin, 2008, p. 1832) if their online interactions do not conform to these expectations.

As there are no written or accepted conventions about social norms over SNSs, the

paradigms of which behaviors are acceptable are open to personal and social interpretations (boyd, 2006b). In this sense, ambiguity of social norms over SNSs have been detected as a source of conflicts (Tokunaga, 2011), as online social interactions are governed by them (Fono & Raynes-Goldie, 2006; Papacharissi, 2009).

*Reduced social presence*

Social presence is "the sense of being together with another" (Shen, Khalifa, & Yu, 2006). High social presence over CMC increases the level of awareness and accountability, making it easier to build social relationships and conform to social norms (Erickson & Kellogg, 2000).

Each SNS supports a unique form of social presence, which is defined by the degree of "perception, awareness, recognition, or acknowledgement of others" (Lapidot-Lefler & Barak, 2012, p. 435). However, personality traits, mood, and intentions of speaker are diminished over these platforms, particularly when compared to face-to-face interactions (Lea & Spears, 1992).

Reduced social presence decreases the number of social cues, diminishing the awareness of the "real" speaker and audience of communications. This can create a tension between privacy and visibility, as the perceived audience promotes or inhibits certain behaviors (Erickson & Kellogg, 2000).

For Lea and Spears (1992), reduced social presence modifies the social context. As a result, available non-verbal cues such as previous knowledge about the communication partner, and subtle social cues such as spelling errors, have increased value. Therefore, people display a variety of cues for others to form impressions and create awareness about the speaker. This is true for SNSs, as people interpret the cues displayed on others' profiles, make inferences about them, and get the chance to customize what cues they send to others (Papacharissi, 2009).

*Friendship formation and dissolution*

The concept of *"Friends"* in SNSs can be misleading, since friendship over these platforms does not imply friendship in the "vernacular" sense (boyd, 2006b). In other words, the notion of *Friends* admits several interpretations (Fono & Raynes-Goldie, 2006) and does not necessarily indicate significant relations as in real life. Moreover, the simple "binary mechanism" of *Friend*/not *Friend* (boyd, 2004) used to indicate relations over SNSs may destabilize the meaning of relationships (Fono & Raynes-Goldie, 2006), as they can easily be created or dissolved (Sibona & Walczak, 2011).

One of the most notable characteristics of online friendship is the creation of "visible virtual links" (Sibona & Walczak, 2011, p. 2). These links signal and raise awareness of the connections, e.g., being mutually listed as *Friends*, and are "declarative statements" about a relation (Fono & Raynes-Goldie, 2006). That is, being

listed as *Friends* over SNSs states something about the relation between two persons, and so does deleting a connection.

Connections over a contact list on SNSs tend to be heterogeneous, and vary greatly in importance for the person (Binder, Howes, & Sutcliffe, 2009; Marder, Joinson, & Shankar, 2012). What is more, even if it is clear why people add their best friends to their contact list, it is not so clear why some add others with whom they share an "awkward" social relation, such as those where a power dynamic is involved, e.g., adding a work superior as a *Friend* (boyd, 2006b).

### 3.3. Avoidance strategy

By this point, I have briefly explained how SNSs work, what users can do (or avoid doing) on them, as well as some characteristics of SNSs that may promote unsocial events. However, only deleting social connections has clearly emerged as an unsocial behavior. Therefore, in this section I explore other concrete behaviors that fit the description of unsociability.

Bryant and Marmo (2009) interviewed college students to find out the strategies they use to maintain their relationships on Facebook. These researchers adapted the relational maintenance strategies proposed by Canary, Stafford, Hause, and Wallace (1993) to find out which online behaviors were associated to each of these strategies within different social circles on Facebook.

One of the maintenance strategies proposed by Canary et al. (1993) is in line with being unsocial – the avoidance strategy. The avoidance strategy is used to evade another person or issue, as an attempt to keep a relation "in the desired level of intimacy and closeness" (Guerrero, Andersen, & Afifi, 2011). For example, if a person is uncomfortable becoming close with an acquaintance, he might avoid personal topics with that individual.

In the Facebook context, Bryant and Marmo (2009) found seven behaviors associated to the avoidance strategy:

1. Removing users

2. Rejecting Friend requests

3. Blocking or reporting people for inappropriate behavior

4. Adding persons under a restricted profile

5. Using Facebook to avoid giving out personal information

6. Intentionally not responding to messages

7. Ignoring or logging off to avoid a chat request

I analyzed these avoidance behaviors on Facebook as the starting point to understand

unsociability. However, I extend my own approach to review how these behaviors get supported by SNSs.

To begin with, it is important to notice that only some of the seven avoidance behaviors clearly indicate action. While Bryant and Marmo (2009) do not give further details on this issue, it can be inferred by the behavior description. For example, users have to click (action) *Unfriend* (feature) to remove a person (behavior). Not responding to messages is an absence of action.

I identified the last three avoidance behaviors proposed by Bryant and Marmo (2009) to be the ones where the essence is to avoid action. These behaviors fit the definition of unsocial events as they are deliberate acts to elude another person, by consciously avoiding to use the features to reciprocate the interaction, e.g., ignoring a chat message. In other words, one person (initiator) deliberately eludes another person (target) by not reciprocating an interaction. Therefore, I decided to group them under the concept of "unresponsiveness", and they are referred to in this manner from this point forward.

### 3.4. Anticipated unsocial features

How these avoidance behaviors are supported by SNSs is, then, the following step towards understanding unsociability. To this end, it would be important to anticipate the feature most likely to be associated with each behavior in order to set a basis for further discussions.

To avoid biasing the study with my own understanding of the SNSs features, I referred to the Help and FAQ (Frequently Asked Questions) sections of the sites reviewed in this study for the recommended feature to be used for each avoidance behavior. For instance, I queried on Facebook's *Help Center* "how to remove a *Friend*". Finally, those that appeared to be the most probable or "anticipated" unsocial features associated to each behavior are summarized in Table 1.

| Avoidance behaviors by Bryant and Marmo (2009) | Facebook | Twitter | LinkedIn | Google+ |
|---|---|---|---|---|
| Removing users | Unfriend | Unfollow | Remove Connections | Remove |
| Rejecting Friend requests | Not Now Delete Request | Decline | Ignore | Ignore |
| Blocking or reporting users for inappropriate behaviors | Report/Block | Block | NA | Block |
| Adding persons under a restricted profile | Unsubscribe | Turn off Retweets | Hide | Ignore and Remove |
| | Lists | | Who can see your activity feed | Share with circles |

Table 1. Avoidance behaviors and anticipated unsocial features.

Four important issues should be considered while studying these anticipated unsocial features. First, I found that the "adding persons under a restricted profile" avoidance behavior could be interpreted both for filtering inbound or outbound content. Therefore, I include the features for both activities where available. Avoidance behaviors not supported by any feature are signaled as NA. Further considerations on how this is addressed in the focus groups are detailed in Section 4.2.1.

Second, I intentionally left the "*Privacy Settings*" feature of these platforms out of the anticipated unsocial features. Even though *Privacy Settings* may be useful for some avoidance behaviors, e.g., adding a person under a restrictive profile, I had the initial assumption that this feature was oriented to protect personal data from "surreptitious capture" (Palen & Dourish, 2003, p. 129), hence it was not anticipated as an unsocial feature. The implications of social privacy are addressed in Section 3.5.2, and Section 5.1.1 details how the *Privacy Settings* can be considered an unsocial feature.

Third, to the best of my knowledge there is no previous literature on avoidance strategies applied in Twitter, LinkedIn, and Google+. Therefore, I assume that the avoidance behaviors on these sites are fairly similar to those on Facebook. Thus, I do not make any distinction between the sites in this aspect.

Finally, it is important to consider that features over SNSs tend to be modified over time. As new features are implemented, previous ones may no longer be available with the same name or functionality. For this reason, this section (and this thesis in general) is not aimed to be an exhaustive list of features, but an overview of how SNSs support unsocial behavior. For elucidation purposes a general description of how each of these features work is presented in Appendix 1.

## 3.5. Socio-technical implications of unsocial features

In this section I describe how the awareness and social privacy mechanisms support user behaviors on CMC as well as SNSs. Because no ample research has been directed to study the features described in the previous section, these concepts will serve as a framework to understand the socio-technical implications of the unsocial features on SNSs in the scope of this study.

### 3.5.1. Awareness

Awareness is "knowing who is 'around', what activities are occurring, who is talking to whom" (Dourish & Bly, 1992, p. 541), providing an overview of what other persons are up to. On CMC, awareness can be achieved with system cues to inform about the presence or activities of others in a shared environment (Nardi, Whittaker, & Bradner, 2000).

Online systems can produce social awareness by notifying actions, similar to what can be found offline, such as a phone ringing. For Nardi, Whittaker, and Bradner (2000),

notifications that contribute to social awareness in a shared environment carry information about who is present and in which state. These authors exemplify this concept on IM "buddy lists", where people can control how others see them online by setting availability status, for instance, as *busy* or *offline*. Furthermore, IM systems produce notifications such as popping up a window displaying a message to alert recipients when an interaction that directly involves them has taken place.

These awareness mechanisms are also an important consideration on SNSs. Kwak, Chun, and Moon (2011) found that some Twitter users think that it is not probable for a person to find out that he or she has been unfollowed. However, they would not unfollow a person they know offline if they knew beforehand that the unfollowed person would find out.

### 3.5.2. Social privacy

Privacy is not a static concept, as it can be shaped according to personal, cultural or contextual factors (Bellotti & Sellen, 1993). Based on social psychology principles, Irwin Altman developed a framework where privacy is a "selective control of access to the self" (Altman, 1977, p. 67).

For Altman (1977), privacy is not a one-sided process for people to avoid others, but a dynamic "boundary control" process. This means that individuals continuously "come together and move apart" (Altman, 1976, p. 12) from social interactions.

Altman (1975, as cited in Joinson, Reips, Buchanan, & Paine Schofield, 2010) described two levels of boundaries: a "self-boundary" that is placed around the person and is modified by self-disclosure, and a "dyadic boundary" that ensures safety from other persons. In this way, privacy is a "flexible barrier" between the self and others (Altman, 1976), that gets adjusted to match different social situations and contexts.

For Altman (1977, p. 68) privacy has three main functions: (1) manage social interactions, (2) establish plans and strategies for interacting with others, and most importantly, (3) develop and maintain self-identity. In this sense, how each person regulates his privacy says something about him, as it serves to "define the limits and boundaries of the self" (Altman, 1976, p. 26).

Even though Altman's theory of privacy refers to face-to-face interactions, it has been widely accepted to understand privacy concerns in virtual spaces. As social technology makes people more accessible to each other (Bellotti & Sellen, 1993), privacy has been recognized as an essential concern for developing interactive technologies (Palen & Dourish, 2003). Tufekci (2008) suggests that an individual makes use of privacy in order "to be seen" by those he wishes "to be seen by", in the way he wishes "to be seen as". In this way, privacy boundaries are manipulated for self-presentation in online social situations (Raento & Oulasvirta, 2008).

Privacy management over virtual spaces is not about "setting rules and enforcing them" (Palen & Dourish, 2003, p. 131) by features such as *Privacy Settings*. Instead, privacy is a dynamic management of boundaries between people and information.

How these mechanisms of privacy and awareness impact unsociability are discussed in Chapter 7. Finally, their design implications are addressed in Chapter 8.

# 4. Methods

This study attempts to understand the implications of unsocial events on SNSs. Rather than "enumerate their prevalence" (Powell & Single, 1996, p. 499), I aim to explore the phenomena surrounding unsociability. Qualitative data is the most appropriate for this end, as it will enable me to "tell the story" (Preece, Rogers, & Sharp, 2002, p. 379) of users engaging in unsocial events.

As much of the previous literature on SNSs, I rely on face-to-face interviews to understand the users' perspectives and experiences. Because unsocial events can be a rather sensitive social issue, it is important to give people a supportive environment to express their opinions.

Focus groups can be useful to help people to express their opinions by talking to others about them, and generating mutual understanding within a social context (Eriksson & Kovalainen, 2008). Furthermore, it enables the collection of multiple viewpoints (Preece, Rogers, & Sharp, 2002).

For these reasons, focus groups are the research method selected for this study. This section describes what focus groups are, and how their meetings were carried out and analyzed in this study.

## 4.1. Focus groups

As defined by Powell and Single (1996), focus groups are "a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of research" (p. 499). The interaction between people in these groups is the core of the method (Puchta & Potter, 2004).

Preece, Rogers, and Sharp (2002) consider focus groups as a reliable method in the HCI field, especially regarding its low cost, validity, and scalability of the data gathered. The main advantage of focus groups for this study is the possibility to gather opinions of participants expressed in their own terms (Stewart, Shamdasani, & Rook, 2007) to reduce biased assumptions and generalizations.

Nevertheless, Powell and Single (1996) elucidate the limitations that focus groups have as a research method. First, the prevalence of behaviors cannot be determined, as no quantitative data is attained. Second, people may hold back their opinions due to the lack of anonymity or to avoid having a different perspective than the rest of the group. Third, some participants may overrule the discussion, not letting other members of the group speak. Finally, the data gathered can be challenging to summarize and cannot be generalized to a larger population.

After thoughtful consideration of the advantages and limitations of focus groups,

they are still considered the most suitable method for this study, since little is known about unsociability on SNSs. Furthermore, some of the limitations are expected to be minimized with a careful planning for the groups.

## 4.2. Planning of focus groups

I expect to gather perspectives and experiences of active users of SNSs. Hence, the planning of the focus groups should be done having these expectations in mind (Morgan, 1997). The current section describes in detail the planning of the groups concerning the interview protocol and recruitment of participants.

### 4.2.1. Interview protocol design

According to Barbour (2007), interview protocols for focus groups only require a few questions or material to encourage discussion. For this study, I generated a semi-structured protocol of 12 questions and supplementary visual materials. The protocol, which is available in Appendix 2 in full, was divided into five phases following Robson (1993): introduction, warm-up, main topic, cooling-off, and closure.

*(1) Introduction*

The introductory phase intends to create a supportive environment for participants by explaining what to expect from the session and grounding rules for the group, e.g., "Everyone's opinion is important". The introductory speech (available in Appendix 2) is presented in the same manner to all groups. To address privacy concerns, participants are required to agree and sign an informed consent form. The form used is presented in Appendix 3.

*(2) Warm-up*

The warm-up phase is a preparation for the interview situation. To begin, participants "break the ice" by introducing themselves. What is most important for this phase is for people to achieve, with guidance of the moderator, a common ground about what the concept of "unsocial" refers to in the context of this study.

*(3) Main topic*

The main topic phase is divided in three parts to gather the experiences of people with unsocial events on Facebook. The first part addresses the unsocial features; the second, usability issues; and the last, personal viewpoints and experiences.

In order to discuss the unsocial features of Facebook, it is important to first give participants enough material to motivate discussion. With this purpose, I generated five "scenarios" based on the avoidance behaviors of Bryant and Marmo (2009) presented in Section 3.3. The scenarios are basic task descriptions of these behaviors, which allow me to explore and discuss the context of use and needs of users (Preece, Rogers, & Sharp, 2002). These scenarios are associated with the anticipated features detailed in

Section 3.4, and listed in full in Appendix 1. The avoidance behaviors and tested scenarios are summarized in Table 2.

| Avoidance behaviors by Bryant and Marmo (2009) | Tested scenarios |
|---|---|
| Removing users | She wants to dissolve the connection with one of her contacts |
| Rejecting Friend requests | She wants to reject a connection request |
| Blocking or reporting users for inappropriate behaviors | She wants to prevent one person from contacting her online |
| Adding persons under a restricted Profile | She wants to hide the posts of one of her contacts |
| | She does not want to share her posts with one of her contacts |

Table 2. Avoidance behaviors and tested scenarios.

Participants are introduced to each scenario and asked to advice a (hypothetical) friend on how to "solve" the situation. To aid participants to recall the features and how they work, I used made-up profiles to prepare a series of printouts with screenshots of the anticipated features for each avoidance behavior. An example of one of these printouts is presented in Appendix 2.

Expecting to minimize possible bias caused by the scenarios' wording, I attempted to keep the words as neutral as possible, avoiding pointing to an obvious or "correct" feature. I also explained to the participants that the presented printouts correspond to the feature that Facebook suggested their friend to use on each situation, but that they could give her a better advice as experienced users.

The second part is planned to be a mid-session break, where volunteers are invited to take refreshments and evaluate the usability considerations of the previously discussed features. To this end, I developed a questionnaire which is available in Appendix 4. This pen-and-paper questionnaire does not intend to be an exhaustive evaluation, but a "thermometer" of the opinions and perceptions of people about unsocial features' "usage satisfaction" (Preece, Rogers, & Sharp, 2002). This questionnaire also serves to anchor quantitative data about how many participants think they have been engaged in unsocial events before.

The third and final part of this phase involves rather sensitive issues, as participants are asked for their personal experiences when it comes to handling unsocial events both as targets and initiators. Moreover, I intend to shed light on what users expect from the system while engaging on these events, for instance about awareness and system notifications.

*(4) Cooling-off*

The cooling-off phase includes questions to relax the session, giving time for participants to return, if they wish, to previous topics. This phase additionally includes

the revision of the unsocial features in Twitter, LinkedIn, and Google+. This is done using the same scenarios discussed with Facebook, but with printouts of the anticipated features for each platform as were described in Section 3.4.

*(5) Closure*

The closure phase is a space for participants to wrap-up their ideas about unsocial events and the discussion in general. Finally, the moderator should thank people for their participation, address any unanswered concerns, and close the session.

A pilot group is needed for testing the interview protocol and making the necessary improvements before carrying out the rest of the groups. The audio and video of all groups, including the pilot test, are recorded for further analysis.

While the described interview protocol is expected to remain mostly the same for all groups, each question can be slightly adapted to fit each group's dynamic. A set of sub-questions are also planned to clarify or expand the answers of participants and prompt questions to promote equal participation among people, e.g., what do others think about this?

Time blocks are allocated to each of the previously described interview phases to fit a 90-minute session. However, time invested on each phase should be adapted within the course of the discussion according to the topics that prove more important to each group (Stewart, Shamdasani, & Rook, 2007). No extra-time is to be added to the groups without previous authorization of the participants.

### 4.2.2. Recruitment of participants

Focus groups are usually formed by two to ten participants and a moderator (Eriksson & Kovalainen, 2008). Participants should be willing to get involved in the study (Morgan, 1997) and have a diversity of "backgrounds, views and experiences" (Powell & Single, 1996, p. 500). The moderator should act as a neutral guide for the group, encouraging interaction between participants in a relaxed and safe environment.

The only recruitment criteria for selecting participants is being an active member (log in at least once a week) to one or more of the four sites reviewed in the study. No personal characteristics such as technical knowledge or age group are considered, expecting to have people from a variety of backgrounds.

Recruiting participants for focus groups is challenging, as it can be difficult to gather people together in a suitable location (Preece, Rogers, & Sharp, 2002). In an attempt to simplify the recruiting process, and to prevent these coordination difficulties, the process was divided in three steps: invitation, selection, and confirmation.

*Invitation*

The first step was to publish an invitation to join the groups over e-mailing lists and online forums. This invitation included a brief description of the objectives of the groups and asked interested volunteers to answer an online questionnaire on Survey Monkey, a free survey site. This questionnaire, available in Appendix 5, inquires about basic demographics, SNSs usage, and time availability for focus groups.

The invitation was sent to four e-mailing lists of students (foreign and national) of the University of Tampere (UTA) and the Tampere University of Technology (TUT). Additionally, the invitation was extended to the staff of the UTA and posted over SNSs forums relevant to both Universities and the city of Tampere. A total of 24 volunteers responded to this invitation over a three-week period.

*Selection*

The second step started by screening the responses of the first questionnaire to find suitable participants. The 18 respondents who matched the previously mentioned recruitment criteria were contacted with a follow-up e-mail. People were asked to confirm their participation in a group by answering a second online questionnaire on Survey Monkey with more detailed information about their demographics and SNSs usage. This questionnaire is available in Appendix 6. Ten volunteers responded to the second questionnaire.

For practical reasons, this second questionnaire was personalized to fit the volunteer's SNSs usage. For example, if a person stated on the first questionnaire to be a member of Facebook and Twitter, she or he was asked about the number of their online connections on Facebook and Twitter, leaving out LinkedIn or Google+.

As every screened volunteer was an active member of Facebook, all of them were asked general questions about their behaviors on this site. For instance, how they receive system notifications, e.g., e-mail, mobile; and whom they usually add to their online network, e.g., family, close friends, acquaintances.

*Confirmation*

The third step was a final e-mail confirming the time and venue for the session. Due to time availability issues, only seven out of the 10 volunteers who responded to the second questionnaire fitted into the groups.

As foreseen, gathering people and coordinating groups turned out to be very challenging, especially since the recruitment was done near the end of the fall semester. From the described recruitment process, seven volunteers formed three groups. The first of these three groups was expected to be a pilot to refine the interview protocol. However, since no major changes were done to the protocol, and a considerable amount of relevant

information emerged in this group, it was decided to be considered as an actual group instead of a pilot.

In an effort to overcome recruitment difficulties, a fourth focus group was carried out with personal acquaintances. To protect the privacy of participants, from this point forward all groups are treated as equal and anonymized. The implications of this potentially "risky" recruitment process are discussed towards the end of this thesis.

## 4.3. Execution of the focus groups

Groups were held in comfortable, yet controlled environments. Three groups were held at the Usability Laboratory in the University of Tampere premises between November and December 2011. One group was held in January 2012 at a private venue in Ghent, Belgium, replicating as far as possible the conditions of the previous groups.

The settings of the rooms were arranged equally for these groups, with participants seated face-to-face to promote interaction (Powell & Single, 1996). To address possible unpleasantness on sensible issues, none of the participants were forced to answer the entirety of the questions (Barbour, 2007). No monetary incentives were given to volunteers, only light refreshments were offered during the sessions.

Audio and video of groups were recorded. Sessions held at UTA premises were recorded using an Olympus voice recorder for the audio and a Microsoft webcam for video. The audio for the session held in Belgium was recorded using an iPad, and a Dell laptop to record video. These recording devices were carefully positioned to avoid disturbing or inhibiting participants.

All discussions were carried out in English. The duration of each group, as well as the length of the transcript of the sessions are detailed in Table 3. Further details about this transcript and data analysis are given in Section 4.5.

| Group | Duration (in minutes) | Number of transcript rows |
|-------|-----------------------|---------------------------|
| G1 | 100 | 125 |
| G2 | 86 | 83 |
| G3 | 76 | 110 |
| G4 | 101 | 218 |

Table 3. Group duration and length of transcript.

## 4.4. Participants and SNS usage

Four groups (two all-male, one all-female, and one mixed gender) with a total of 10 users of social network sites (7 males and 3 females) were included in this study. The

age of seven participants ranged between 18 to 29 years, the rest were from 30 to 49. The sample was formed by participants of seven countries: Bangladesh, Czech Republic, Finland, India, Mexico (4 participants), Slovakia, and Spain. All participants are well-educated, four have a graduate level, five are undertaking a graduate degree, while one is studying for an undergraduate degree. Seven volunteers are studying or working on a technology-related field, i.e., they are Computer Science (CS) literates. The demographics of participants are outlined in Table 4.

| Group | Participant | Gender | Age group | CS literate |
|---|---|---|---|---|
|  | P1 | m | 18 – 29 | no |
| G1 | P2 | m | 18 – 29 | no |
|  | P3 | m | 18 – 29 | yes |
| G2 | P4 | m | 30 – 49 | no |
|  | P5 | m | 30 – 49 | yes |
| G3 | P6 | f | 18 – 29 | yes |
|  | P7 | f | 18 – 29 | yes |
|  | P8 | m | 30 – 49 | yes |
| G4 | P9 | f | 18 – 29 | yes |
|  | P10 | m | 18 – 29 | yes |

Table 4. Demographics of participants.

### 4.4.1. Facebook use

This study comprised of frequent Facebook users. Eight persons log to the site daily or almost daily, while two log 2 or 3 times a week. About the number of online contacts, or *Friends,* four participants mentioned to have 150 or less, four have between 151 and 450, and two have 451 or more. In terms of interacting with these connections on the site, three persons mentioned doing so every day, while three claim to interact 2 or 3 times a week, and the rest do it once a week. Table 5 presents the outline of participant's Facebook usage.

| Group | Participant | Login frequency | Interaction frequency | Number of contacts |
|---|---|---|---|---|
|  | P1 | daily | daily | 150 or less |
| G1 | P2 | daily | daily | 151 to 450 |
|  | P3 | daily | once a week | 151 to 450 |
| G2 | P4 | 2 or 3 times a week | once a week | 150 or less |
|  | P5 | daily | once a week | 150 or less |
| G3 | P6 | 2 or 3 times a week | once a week | 150 or less |
|  | P7 | daily | 2 or 3 times a week | 451 or more |
|  | P8 | daily | 2 or 3 times a week | 151 to 450 |
| G4 | P9 | daily | 2 or 3 times a week | 451 or more |
|  | P10 | daily | daily | 151 to 450 |

Table 5. Facebook: groups, participants, and usage.

**4.4.2. Twitter, LinkedIn, and Google+ use**

Six participants reported having an account on Twitter, while Google+ and LinkedIn had seven members each. However, not all of them claimed active levels of engagement to these sites. For this reason, only the SNSs where at least one group member logged on a weekly basis to the site were discussed in each group. Twitter was discussed with three groups, while LinkedIn and Google+ only with two. Further details on platforms discussed with each group, and the participants' engagement levels to the sites are outlined in Table 6 for Twitter, Table 7 for LinkedIn, and Table 8 for Google+.

| Group | Participant | Login frequency | Interaction frequency | Profiles followed | Followers |
|---|---|---|---|---|---|
| G1 | P2 | daily | 2 or 3 times a week | 150 or less | 150 or less |
| | P3 | 2 or 3 times a week | less than weekly | 150 or less | 150 or less |
| G2 | P5 | daily | 2 or 3 times a week | 150 or less | 150 or less |
| G4 | P8 | once a week | less than weekly | 150 or less | 150 or less |
| | P9 | less than weekly | less than weekly | 150 or less | 150 or less |
| | P10 | less than weekly | less than weekly | 150 or less | 150 or less |

Table 6. Twitter: groups, participants, and usage.

| Group | Participant | Login frequency | Interaction frequency | Number of contacts |
|---|---|---|---|---|
| G3 | P7 | daily | less than weekly | 150 or less |
| G4 | P8 | once a week | less than weekly | 150 or less |
| | P9 | less than weekly | less than weekly | 151 to 450 |
| | P10 | less than weekly | less than weekly | 150 or less |

Table 7. LinkedIn: groups, participants, and usage.

| Group | Participant | Login frequency | Interaction frequency | Number of contacts | Number of circles |
|---|---|---|---|---|---|
| G1 | P1 | less than weekly | less than weekly | 150 or less | less than 5 |
| | P2 | less than weekly | less than weekly | 150 or less | less than 5 |
| | P3 | once a week | less than weekly | 150 or less | less than 5 |
| G4 | P8 | once a week | less than weekly | 150 or less | 5 to 10 |
| | P9 | less than weekly | less than weekly | 150 or less | 5 to 10 |
| | P10 | less than weekly | less than weekly | 150 or less | less than 5 |

Table 8. Google+: groups, participants, and usage.

**4.5. Data analysis**

After the sessions, full transcripts of the groups were made using a spreadsheet system and the audio of the sessions. Video was not used for this purpose. As suggested by Kolb (2008) the transcript was organized using columns, e.g., spoken words, notes, coding purposes. Figure 6 shows a screenshot of the transcript spreadsheet of this study.

Each turn of the conversation was placed on a separate row, and signaled with individual markers so that each utterance could be easily attributed to its speaker.

| | Minute | ID | Questions | P | Transcript of recording | Notes | Coding |
|---|---|---|---|---|---|---|---|
| 2 | 7.40 | G1.1 | What is unsociability | 1 | sometimes I get Friend Requests from people I barely know or from parents of friends. I don´t know the person, so I just hide the request, I think that´s Facebook option. | Friend Request on Facebook | 2. Approve Friend Requests only from persons you know |
| 3 | | G1.2 | What is unsociability | 3 | I also didn´t aprove a few people. I never add someone from my family [laughs] because I know a lot of friends who already have some problems with like friends and like mother, father… After some party its hard to hide all pictures. It shouldn´t be allowed to see that [laughs]. But in my case, it´s a little bit different because my parents are a bit older, and they are not… we can say… computer skillfull so I don´t have any problems like this one. | Friend Request on Facebook | 1. Family on Facebook |
| 5 6 | | G1.3 | What is unsociability | 1 | Yeah, me neither. My parents are not in Facebook, so I don´t have to worry about it | | 1. Family on Facebook; 3. Audience on Facebook |
| 7 8 | | G1.4 | What is unsociability | 3 | Yeah, I didn´t approve anybody, I choose it… | Friend Request on Facebook | 1. Family on Facebook; 3. Audience on Facebook |
| 9 10 | | G1.5 | What is unsociability | 2 | Yeah, I have family. I have my family on Facebook. But I don´t accept any random people that you get request from. But, yeah, I think sometimes I forget about my list of friends, and I forget that everyone can see what is posted there | Friend Request on Facebook | 2. Approve Friend Requests only from persons you know; 3. Audience on Facebook |
| 11 | 10.50 | G1.6 | Report/Block | 2 | If it´s a concrete person you want to avoid… But what many people do, is not to have their real name, not use their real name (laughs). I use my real name, and I don´t like people that use strange names because I don´t know.. It´s a bit strange… Because they have to add you, you can´t add them, because there is no way… But yeah, maybe that´s another option, but if you just want to Block someone concretly, it´s good to | Report/Block | 4. Alternative strategies |

Figure 6. Screenshot of transcript spreadsheet.

In general terms, there is no "better" way to analyze qualitative data from focus groups, but it has to be done according to the nature of the study (Stewart, Shamdasani, & Rook, 2007). It is useful to distinguish between what participants find interesting from what they find important (Morgan, 1997).

Accordingly, I sorted the full transcript of the groups considering the research questions of this study (Kolb, 2008) and used content analysis techniques (Eriksson & Kovalainen, 2008; Stewart, Shamdasani, & Rook, 2007). The content analysis was done exploring various levels, such as groups, individuals, and utterances, to search for recurrent words, topics, and discourses.

As suggested by Eriksson and Kovalainen (2008), results extracted from focus groups can be reported using four structural alternatives: thematic structure, reporting content; chronological structure, reporting interactions; narrative structure, reporting stories constructed by groups; and ethnographic structure, reporting selective incidents. A thematic structure is the most adequate for this study, since the content is analyzed using content analysis techniques and therefore the content is reported within or across groups, using quotations, and putting emphasis on the interactions and patterns of the whole data.

On the other hand, quantitative data was extracted from the participants using three questionnaires. As this is a small data set, actual numbers are given for most of the responses to the questions (Preece, Rogers, & Sharp, 2002). In the case of the mid-session questionnaire, as I was interested in identifying possible trends, I determined the most frequent response to each answer, i.e., mode, using a spreadsheet. No further statistical techniques were applied.

*Conventions of transcript*

As mentioned before, the results of the focus groups are presented under a thematic structure, which highlights quotations and group interactions. Therefore, I explain the conventions I used for the transcript fragments to be presented over the following chapters.

Fragments include a code for participant (P "X") and group (Group "Y"), which are identified by the corresponding number (in place of "X" and "Y" respectively). The interventions of the moderator are coded as "Mod".

Some dialog clarifications and details about the group dynamics are signaled between square brackets. For example, when participants laugh or expressed agreement over the conversation, I have marked it in brackets. For the sake of clarity, some of the contributions of participants have been shortened. Eliminated fragments are signaled using three dots between parentheses.

# 5. Findings on unsociability on Facebook

The analysis and results of the data gathered during the focus groups are presented over two chapters. The current chapter includes five sections exploring the implications of unsociability on Facebook. Chapter 6 describes those implications on Twitter, LinkedIn, and Google+.

## 5.1. How can you be unsocial?

At the beginning of the interview protocol, participants were encouraged to express what, off the top of their heads, meant to be unsocial on Facebook. This question was important to establish a common understanding on the topic with the groups. Interestingly, three groups described that unsociability is related to who should or should not be able to access their profile on the site, while one group initially talked about blocking other persons. Moreover, I clarified which behaviors are not unsocial but antisocial, as in some groups online bullying and security concerns where mentioned as related to unsociability.

After achieving this common ground, the following phases of the interview protocol expected to answer the first research question of this study, regarding how SNSs support unsociability. As described in Section 3.4, I made a first approach to unsocial events by making assumptions about what features support them. However, they were not fully supported by the data, and rather turned out to be incomplete. For instance, some participants described using *Privacy Settings* as an unsocial feature while I had not previously considered it.

More importantly, the anticipated features were not clearly related to their corresponding scenario. The reason for this was that participants focused on their social understanding of the features, not on technical capabilities; this I call the "social-over-technical" pattern. The scenarios and anticipated features appear summarized with the data gathered from the groups in Table 9.

| Tested scenarios | Anticipated features | Features mentioned by participants |
|---|---|---|
| She wants to dissolve the connection with one of her contacts | Unfriend | Unfriend<br>Report/Block<br>Unsubscribe |
| She wants to reject a connection request | Not Now<br>Delete request | Not Now<br>Delete Request<br>Pending requests |
| She wants to prevent one person from contacting her online | Report/Block | Report/Block<br>Unfriend<br>Unsubscribe |
| She wants to hide the posts of one of her contacts | Unsubscribe | Unsubscribe<br>Privacy Settings<br>Lists<br>Unfriend<br>Report/Block |
| She does not want to share her posts with one of her contacts | Lists | Lists<br>Privacy Settings |

Table 9. Unsocial features of Facebook.

An example of this social-over-technical pattern was, as most participants described, the "steps" for avoiding people. Participants used different features, with dissimilar technical capabilities, for achieving the same end: keeping another person away. They described, as illustrated in Fragments 1 and 2, that the first step to take distance from another person is to use *Unfriend*. If this fails, the second step would be to use *Report/Block*.

*Fragment 1*

*P8: Yeah, because I mean, the report would be a second step. I mean. She can just remove him, and if he starts to be more extreme, to report him. But the first step for me would be just remove him.*

*P9: And then, second step blocking. Because I think even if you are not Friends, you can get messages from the person. They can't post on your Wall or anything, but they could send messages. And if you don't want that, you block him.*

*P8: Yeah, exactly that.*

*P9: And then if he starts... I don't know, posting bad things, like he's going to kidnap you or something, then you should call the police [laughs]. [Group 4]*

*Fragment 2*

*I would say if it's not harassment, Unfriend would be like OK (…). Maybe the next day you realize you don't want that person to be checking your photos or whatever, so maybe Unfriend would be the first step. And then, if the person has more things to do, then maybe Block. I mean, both options are fine, in my opinion they are like steps. First one, and then another one, and another one, and then you got the chance to explain why you are reporting this person. It kind of makes sense, if there is some harassment or you do not feel comfortable with the person. [P4, Group 2]*

Participants who mentioned being familiar with the fairly-new feature of *Unsubscribe* described it as the first step to avoid somebody. As illustrated in Fragment 3,

*Unsubscribe* is preferred over *Report/Block,* while in Fragment 4, over *Unfriend.* That is, even though the technical capabilities of *Unfriend, Unsubscribe*, and *Report/Block* are different, participants link them together under the same discourse.

> *Fragment 3*
>
> *Maybe I would first ask her if she wants to block him permanently, maybe she can unsubscribe from part of his profile. It's quite common, especially for some people. I use Unsubscribe, not to block people. [P3, Group 1]*

> *Fragment 4*
>
> *P9: I use unsubscribe a lot.*
>
> *P8: Unsubscribe?*
>
> *P10: Me too.*
>
> *P8: That means that you don't see what others post? I don't know this feature.*
>
> *P9: Unsubscribe means when you don't want to see everything of a person... In the Unsubscribe you can select to see all his updates, or only the important, or nothing at all.*
>
> *P8: OK.*
>
> *P9: It's useful when people is saying: "OK, I'm having breakfast" [laughs]. "I'm going to the supermarket".*
>
> *P10: I also use the Unsubscribe. I don't use Unfriend. I only use Unsubscribe. [Group 4]*

It is not only the technical capabilities, but the perception that users get from them what determines the usefulness of unsocial features. Hence, it would be inconsistent to just present findings on technical aspects, as they can only be understood when related to personal and social variants (Hargittai, 2007).

When trying to understand these other variants of the unsocial features, I found that participants consistently described two kinds of features: "hard" and "soft" unsocial features. I found differences on how people perceived these two kinds of features, particularly considering the awareness cues produced, and the privacy boundaries described in Section 3.5.2. Findings on these hard and soft features are described in the following sections, and their implications are discussed in Chapter 7.

## 5.1.1. Soft unsocial features

*Unsubscribe*, *Lists*, and *Privacy* S*ettings* were described as soft unsocial features. They are mostly used as self-boundaries of privacy, as they apply directly on the profile of the user. In general terms, participants had a positive attitude towards them. That is, no awkward or unpleasant social situation was described after their use. For example, *Unsubscribe* and *Lists* were described to produce minimal awareness cues for others to notice that they have been used. Furthermore, the outcome of these features can be easily controlled and reverted, e.g., return to a previous state. Table 10 gives an outline of these features, and each is described in greater detail below.

|  | Unsubscribe | Lists | Privacy Settings |
|---|---|---|---|
| **Motives for usage** | Filter annoying content or applications | Limit content shared<br><br>Filter content of others | Break connections<br>Limit content shared<br>Limit content of others |
| **Perception of feature** | Widely adopted as it is easy and silent | Sorting contacts can be annoying | Massive way to avoid others<br>Socially accepted |
| **Privacy boundaries** | Self-boundary | Self-boundary | Self-boundary |
| **Awareness cues** | Reduced | Reduced | High |

Table 10. Soft unsocial features of Facebook.

*The Unsubscribe feature*

*Unsubscribe* was the most popular feature when it comes to limiting the content received from others. Seven participants mentioned using it on a regular basis, while the rest of the participants mentioned not to know it beforehand. As illustrated in Fragments 5 and 6, the main reason for using *Unsubscribe* was to limit "annoying" content, such as frequent status updates from another user, with the advantage of not breaking contact with that person.

*Fragment 5*

*I have used this feature. Because I had a Friend that was very active on Facebook. And she was doing something on FarmVille and some other quizzes, so my Wall was full of her posts of those features (...). So I used this feature to temporarily not see her updates because there are so much. [P6, Group 3]*

*Fragment 6*

*P3: I would tell her that Unsubscribe in this case is OK. She can also choose what things she wants to unsubscribe or hide.*

*P1: I would also use the Unsubscribe. Which is a good option (...). With this more fine-grained control, is easier to block the content you don't what you see, but not unfriend or block the person completely.*

*P2: Is also use this option. It's OK when you do not want to be annoyed daily by some update. [Group 1]*

Fragment 6 remarks how a "fine-grained control" is important on this feature, as people get the chance to customize what they want to hide from others. Some participants mentioned to use *Unsubscribe* to block posts related to specific applications, such as online games, but for me it was important to find out when people use this feature to avoid another person, and not the content itself.

It is worth noting that those who did not know *Unsubscribe* beforehand were interested in finding out how it worked, and mentioned they would "try it out" in the

future.

*The Lists feature*

Although the creation of lists to segregate audience could represent a solution for managing different social circles (Binder, Howes, & Sutcliffe, 2009; Lampe, Ellison, & Steinfield, 2007), its current implementation on Facebook was perceived as impractical. Only a couple of participants mentioned using the *Lists* feature regularly for this end, while the rest considered it mildly annoying and time consuming. Therefore they still prefer to use other features and strategies for segregating their audience. Negative and positive opinions about *Lists* are presented in Fragments 7 and 8 respectively.

> *Fragment 7*
>
> *Kind of like one phone contact list, you can also create groups. But that's a pain in the ass, in Facebook as well as on the phone contacts, to group people into university friends, and work acquaintances, and family, so I don't usually do it since it's so... It takes lots of time and effort to think in what kind of situations would I like this people to see this post, but not this people. [P1, Group 1]*

> *Fragment 8*
>
> *I just used this feature when I wanted to update some pictures, but I don't want everybody to see all the pictures about me and my family. I don't know… Random people on Facebook. So these pictures are only available for close friends. [P6, Group 3]*

Only one group mentioned the *Smart Lists*, i.e., automatic lists that Facebook creates by default (see details in Appendix 1). However, they focused on how Facebook sets the parameters to categorize people instead of the actual uses or implications of the feature. Therefore, their implications cannot be addressed any further.

*The "Privacy Settings" feature*

*Privacy Settings* on Facebook have become a concern for many users, media, and scholars (boyd, 2006a; Hart, Ridley, Taher, Sas, & Dix, 2008). When talking about *Privacy Settings* as an unsocial feature, I refer to the feature that allows users to "build a barrier" on their profile to prevent their *Friends* from contacting them. That is, users that deliberately deny access for others to see their content or interact with them online, e.g., not allowing access to their *Wall*.

In the fragments below, participants described how *Privacy Settings* can be used to avoid others. In Fragment 9, a participant mentions it can be useful to keep away not-so-close *Friends*, while in Fragment 10 a participant indicated using it to limit his audience.

> *Fragment 9*
>
> *(…) Only few people can see my pictures [due to restrictive privacy settings], for example. I mean, everybody can... I think... I'm not really sure... But most of the people they can see my comments or my posts (…). Just because I don't want. Because I have over 400 contacts, and from those, maybe*

*they are like, if I say 30 is probably too much, of my very close friends. [P7, Group 3]*

*Fragment 10*

*P8: In my experience I started doing this of groups and stuff. In the end, I end up blocking everything [with Privacy Settings]. My Facebook is completely blocked. And I don't care. I mean, I can see things, I can post directly to people. But I mean, nobody can see what others write to me. If they want, they can write posts to me. But nobody else can see. I mean, I'm the clear example of unsocialness.*

*P9: The Alcatraz of information [laughs]. [Group 4]*

Despite the high number of awareness cues that using restrictive privacy settings produce, e.g., some persons cannot write on user's *Wall*, avoiding others with this feature was mostly interpreted as a security concern. In this context, participants that mentioned having restrictive privacy settings, do so explicitly to elude others.

### 5.1.2. Hard unsocial features

The features of *Report/Block, Unfriend,* and *Not Now/Delete Request* were consistently described as harsh or impolite, mainly because they are used as a dyadic privacy boundary, e.g., to directly elude another person. Moreover, participants described they produce a high number of awareness cues for others to notice when they have been used. These features were understood as permanent actions, as reverting their outcome would involve direct awareness from the targeted person, e.g., having to re-send a *Friend Request*. Table 11 contains an outline of these features, which are detailed below.

|  | **Report/Block** | **Unfriend** | **Not Now/ Delete Request** |
|---|---|---|---|
| **Motives for usage** | Break connections | Not being in contact anymore (online and offline) | Not want to establish a connection |
|  | Limit content of others | Limit content of others |  |
| **Perception of feature** | Permanent | Permanent | Better to leave it pending |
|  | For some is harsh Confusion about its capabilities | For some is harsh | Harsh if offline relation exists |
| **Privacy boundaries** | Dyadic boundary | Dyadic boundary | Dyadic boundary |
| **Awareness cues** | High | High | Reduced (Not Now) High (Delete Request) |

Table 11. Hard unsocial features of Facebook.

*The Report/Block feature*

*Report/Block* turned out to be well-known among participants. All of them mentioned knowing about its existence. Although most participants mentioned having used it, none of them does on a regular basis. Participants gave three reasons for blocking another person. First, to push back a contact when they did not feel connected anymore. Second, to limit the content of a user that posts too much. Third, to report a case of online

harassment.

In general terms, and as illustrated in Fragment 11, *Report/Block* is considered by participants as permanent and severe, mainly regarding its report functionality.

*Fragment 11*

*P10: I think, in my opinion, that report or block is too extreme. You report someone that is really doing the "antisocial".*

*P8: I agree. [Group 4]*

Interestingly, great confusion was perceived regarding the technical capabilities of this feature. Three groups discussed the reach of *Report/Block*, however, none of them could exactly define it. This is illustrated in Fragments 12 and 13, with the utterances of three participants, from two different groups, who try (unsuccessfully) to explain the functionalities of this feature. For the sake of clarification, the actual capabilities of *Report/Block* are described in Appendix 1.

*Fragment 12*

*P1: I once blocked someone (...). The guy kept posting so much stuff [agreement], so I click the... when you go to the News Feed, you got a little cross on the border, and I block him. Which was kind of awkward, because I went to my Wall some few months later, and I saw that he has written on my Wall something of "Merry Christmas", and I never reply...*

*P3: But actually, I'm not sure if you allow the users to write on your Wall... Hmm... If you unsubscribe is the same like blocking, I'm not sure if there is a difference.*

*P2: Would it apply to the messages, the Private Messages?... OK. Yeah, maybe still... I'm not sure.*

*P3: Maybe depends on your Privacy Settings for... Yeah... Because unsubscribing for me sounds like one way, but also blocking can be the both ways. I'm not sure because I don't use it so much. [Group 1]*

*Fragment 13*

*What I understand about this feature is that you can block a person, so they don't get to see anything. I think they don't get to see your Wall. So they see you as a Friend and everything, but they don't see your Wall (...). I mean, if you block someone, they would probably figure out what you have done because they cannot see your Wall, so they probably get the hint anyway. [P6, Group 3]*

Participants, as the one quoted in Fragment 13, mentioned that *Report/Block* creates obvious cues which raise awareness of them having been used, such as not being able to access the profile of another user anymore. None of them mentioned that the visible virtual link between users is deleted from the *Friend List*.

*The Unfriend feature*

Half of participants said to have used *Unfriend* to dissolve an online connection. The reason mentioned in all of the situations for breaking a tie was not being in contact with that person anymore both offline or online. However, as participants quoted in

Fragments 14 and 15, some people described *Unfriend* as harsh, so they avoid using it.

*Fragment 14*

*Don't know, why I didn't ever [unfriend somebody]. There is some people I just left on the block list, like 5 - 6 people, I could have easily unfriended them, and I didn't for some reason, maybe I was just lazy, or maybe I think it would be a little rude. The reason I left them on the block list is because I don't feel connected to them anymore, and sharing information with them would be like overloading the buffer or something. They probably don't want me to, I mean, I probably wouldn't like to hear what they are up to either (...). [P5, Group 3]*

*Fragment 15*

*Never done it. Really I keep all the people I already accepted. I keep them there. I have a reason to accept them, so they are there. Fortunately I haven't been in those kinds of situations that I really have to remove the person. I just know that someone removed me, but I did not (...). [P7, Group 3]*

For participants, *Unfriend* is the feature that produces the clearest cues for noticing its use. As described in Fragment 16, some participants have noticed that their number of *Friends* decreased by one and assumed it was due to an unfriending.

*Fragment 16*

*...I remember once I look at my own profile to see what I was sharing, and I notice that I had 110 Friends exactly, and a week later, I went to see for some reason and I had 109. And I say: "Should I go through all my Friends to see who has unfriended me?" But no, I didn't [laughs]. [P1, Group 1]*

Moreover, most participants mentioned the reactivation of the *Add Friend* and *Friend Suggestions* features as clear awareness cues of unfriending.

*The Not Now/Delete Request feature*

All participants mentioned having rejected at least one *Friend Request* in the past. The two main reasons for this were to reject somebody they do not know offline, and to reject a person they may know in real life, but is not welcome as a *Friend*. In Fragment 17, participants of one group made this point clear by likening it to offline behaviors.

*Fragment 17*

*P5: It's good. Why would you [accept an unwanted request]. You don't talk to everybody you meet on the road, or on the shop. It's a virtual world. So, if someone wants to be your Friend, you can choose to be Friend or not to be Friend. It's good.*

*P4: It's like finding someone in the university, and you don't want to talk. You walk pass by. It's exactly the same. Just avoiding someone is not welcome in that specific occasion (...). [Group 2]*

Unexpectedly, most participants mentioned to have the common practice of keeping the unwanted requests as pending on their profile, especially when they knew the person offline. This means, not using the *Not Now* or *Delete Request* features, but simply leaving the request unanswered. As explained in Fragment 18, this strategy is used for reducing the awareness cues that are created when rejecting a request.

*Fragment 18*

*P8: Normally what I do is just to leave it there.*

*Mod: To leave it pending without reject?*

*P8: Yeah, to leave it pending forever. Because I tried to say the Not Now, but then he noticed that you are rejecting him, because if he goes back to your profile, it actives the... I don't know now, but in the past, he had active the Send Request. So that means that... [agreement] you rejected him. So he sends it again. And he sends it again. But you don't want that. I mean. For me, if its people I don't want to include and they send me the request, I just leave the request there forever. That's my opinion.*

*P9: Me too.*

*P10: I have two persons right now that they are there. I haven't clicked to anything. And I won't accept. I really don't want to be Friends with them. I am rejecting them, but in a soft way.*

*P9: I think that's another way to be unsocial, to just leave them there.*

*P8: Yeah, me too. It's a little bit. [Group 4]*

Fragment 18 also indicates the awareness cues that are similar to those of *Unfriend*, including the reactivation of the *Add Friend* and *Friend Suggestions* features. Moreover, a clear cue of an ignored *Friend Request* is not receiving a notification of being added as a *Friend*.

## 5.2. Unsociability and unresponsiveness

I was interested in finding out the impressions of participants about the phenomenon of "unresponsiveness" (Aoki & Woodruff, 2005). That is, eluding a *Friend* by not responding to them on Facebook but avoiding action.

Most participants find it rude or impolite to avoid responding to personal conversations, or not reciprocating attempts to establish a mutual connection over a communication tool in Facebook, e.g., *Chat* or *Wall* comments. Still, not all participants considered unresponsiveness to fit in the description of being unsocial, as they considered this is related to the context. Both viewpoints are illustrated in Fragment 19, where a group discussed the implications of unresponsiveness.

*Fragment 19*

*P7: Yes. With chatting, also happens that I don't want to reply, especially when I don't want to... Even when I don't want or when I don't have time. So, yeah.*

*P6: I would say that I do consider it a little antisocial [agreement] (...). I do make a point to reply to all my e-mails [Private Messages], even if I get one page and I just wrote one line (...). I just want to be in touch with the people I want to be in touch, and polite to the persons I don't. [Group 3]*

A lack of response on Facebook, even considered impolite, may hold certain level of ambiguity, and therefore, admit other possible explanations. This context-related ambiguity and accountability is illustrated in Fragment 20.

*Fragment 20*

*P10: The last time I send a message through Facebook, but I didn't receive the reply back... or I knew that the person didn't reply... I don't know why, but I thought maybe they are busy, or had no internet.*

*P8: Yeah, but the thing is, in my case, I'm still waiting. You know? You put a message and is like I'm waiting a response from a question. You still have the feeling he will respond. Maybe he's busy now, but he will respond someday...*

*P10: He has to.*

*P9: Do you know what's also interesting? That you can see that the person have been online if they post something else.*

*P8: Yeah, yeah, yeah. That's worst. If he's not responding you, and you see that he's posting to some other people, that's bad. Unfriend [laughs].*

*P9: Very bad.*

*P10: I think is now a confusion, or a different situation with the message from Facebook and with an e-mail. Because with an e-mail, you expect someone to answer [agreement]. But the message on Facebook is a little bit more informal (...). [Group 4]*

This is part of the "plausible deniability" on Facebook, which means that if a person does not answer a message, it cannot be inferred that he or she never will, or that it was done on purpose.

## 5.3. Perceiving unsociability

To address the third research question, by the middle of the session participants were asked about their personal experiences both as initiators and targets of unsocial events. In the mid-session questionnaire (see details in Appendix 4), nine participants mentioned having used unsocial features, while one was not sure. On the other hand, four noticed somebody had used these features on their profile, while three were not sure. The rest of the participants, as illustrated in Fragment 21, had no account of being the target of an unsocial event.

*Fragment 21*

*I actually never realized if someone has done that to me. I'm sure someone has done it, and they are probably not on my close friends anyways. So yeah, doesn't matter if they did it because I'm not following them, or their pictures. So I guess it's good, maybe the feeling is mutual (...). [P6, Group 3]*

Participants mentioned two "golden rules" while engaging in unsocial events. The first one, as described in Fragments 22 and 23, is keeping the (unsocial) interactions as positive and discreet as possible, using the features at hand to do what they consider the most appropriate behavior.

*Fragment 22*

*I was thinking on Friend Request. And sometimes if I get a Friend Request of someone we meet on a regular basis, but not too frequently. I accept his or her Friend Request, and then weeks later, I*

*defriend him because I do not want to have too many acquaintances on my Friend List. So in that way, the guy or the girl gets a message that I have accepted him as a Friend, but then, I unfriend them later... [P1, Group 1]*

*Fragment 23*

*The thing is, with the new features, is not necessary to remove the person so he don't feel bad, so you just remove all the updates from them. So you don't need to Unfriend. So I think Facebook is helping us to be unsocial in a polite way. [P9, Group 4]*

The second rule, illustrated in Fragment 24, was not taking "too seriously" or "too personal" any (unsocial) interaction.

*Fragment 24*

*P4: I would say I have been kind of a normal user of blocking someone, or deleting someone when I don't feel, or when I feel it has to be. It hasn't. If this had a consequence to the other person, I don't have any kind of knowledge about it. Maybe it has happened the same, that I have been deleted and I don't know, but I don't maybe care in that sense. My experience has been kind of average user.*
*Mod: And what do you think is average?*
*P4: That you choose, like the same, you have your own list, that only those people can see my profile, and these people cannot, I deleted some people... I would say its normal... But you never know (...). [Group 2]*

Under the light of these "golden rules", the issue of sending system notifications after the use of unsocial features raised strong opinions among participants. They all seem to agree that confidentiality is the best policy with Facebook.

According to the mid-session questionnaire responses, nine participants do not want to receive system notifications when an unsocial feature was used on their profile. Similarly, eight expressed not wanting Facebook to send others a notification after they have used the feature. Only one or two participants remained neutral to both statements. The most important reason given for refusing system notifications of these behaviors is the awareness cues, as illustrated in Fragment 25.

*Fragment 25*

*I don't think so. I don't think people should know. And currently, the way Facebook operates, I mean, you find out eventually [agreement]. So it's OK, for someone who probably would matter or something, you find out. And like my case, when it doesn't matter, it's OK. They don't know I did it, I don't know they did it, so I think is just OK that way. Because then, if someone does intentionally and I find out, I might just would be "Oh, why do they do it?"... You know... Even I didn't care about that person, I never see them again or something. But there would be a part of me kind of upset that they did it, and I would also think twice about doing it to somebody else [agreement]. [P6, Group 3]*

People agree that it is good to keep unsociability as silent as possible to keep away possible conflicts or awkward situations. As illustrated in Fragments 26 and 27, this was mentioned as both targets and initiators of unsocial events.

*Fragment 26*

*No, because you are trying to be as polite as possible. So if you know that they send them an e-mail when you do something, then they will know it. [P10, Group 4]*

*Fragment 27*

*Nowadays is very rare that I send someone a Friend Request, but when you send to someone... When you do not get a negative reply at all, you kind of forget the whole thing, which is good, because when you do it to somebody else they do not take it personally. [P1, Group 1]*

The socio-technical implications of these "golden rules" are thoroughly discussed in Chapter 7.

# 6. Findings on unsociability on other sites

To address the second research question, that is, to find out if the structural differences between SNSs hold a relation to unsocial events, participants were invited to discuss their viewpoints on how these behaviors are supported by Twitter, LinkedIn, and Google+. As described before, the procedure for approaching to the unsocial features of these sites was fairly similar to what was done with Facebook (see Section 4.2.1). However, the experiences of participants turned out to be fundamentally different.

As described in Section 4.4.2, only the platforms where at least one participant was an active user were discussed in each group (see Tables 6, 7, and 8). The following sections briefly present the findings for each site.

## 6.1. Twitter

The six persons that used Twitter defined the site as a channel for broadcasting public, general information. As illustrated in Fragment 28, Twitter was understood as a place for receiving content from others, rather than generating personal updates.

> *Fragment 28*
>
> *...Twitter, I have and I use. But yeah, I also have very different usage from Facebook. Most of things that I post are Retweets. I have public account, is more about news and politics, and also for following people, but not... I also have some friends there, but most of my Tweets on my Wall are from media, or from specific blogger. [P2, Group 1]*

Accordingly, participants tended to follow profiles that produce content that is interesting to them, instead of people they know offline. None of the participants limits the content they share on Twitter or the people that have access to their updates.

For participants, the unsocial features of Twitter were only useful to cease receiving certain updates, but not for avoiding the person producing that content. As presented in Fragments 29 and 30, this "content-over-social" pattern was remarked by four participants in two different groups, where they mentioned to use the *Unfollow* feature for this end.

> *Fragment 29*
>
> *P3: To be honest, in Twitter I don't know [how to hide posts], I have never used it [Turn off Retweets]. I would think Unfollow. But I'm not sure.*
>
> *P2: No, I haven't used it. I directly unfollow if I'm not interested, just Unfollow. [Group 1]*

> *Fragment 30*
>
> *P9: I had stopped following people on Twitter. Maybe because of the frequency and content of the Tweets.*
>
> *P10: Yeah, me too.*

*P9: Some people use Twitter as some kind of blog of 140 characters. [Group 4]*

As summarized in Table 12, out of the four anticipated unsocial features of Twitter only *Unfollow* was well-known among participants. Consequently, when presented with the printouts of the other features, most of the participants were not even aware of their existence or utility.

| Tested scenarios | Anticipated features | Features mentioned by participants |
|---|---|---|
| She wants to dissolve the connection with one of her contacts | Unfollow | Unfollow |
| She wants to reject a connection request | Decline | NA |
| She wants to prevent one person from contacting her online | Block | Unfollow |
| She wants to hide the posts of one of her contacts | Turn off Retweets | Unfollow |
| She does not want to share her posts with one of her contacts | NA | Unfollow |

Table 12. Unsocial features of Twitter.

Contrary to Facebook, none of the Twitter users had a clear idea of unsocial behaviors within this site. However, no further discussion was directed to the issue of having people they know offline as connections. Nonetheless, this does not seem to be a determinant issue for participants on Twitter, since people did not mention it in the first place.

## 6.2. LinkedIn

The four members of LinkedIn considered the site as strictly for business purposes. Therefore, they mentioned to only connect with persons they know offline, and more importantly, whom they value for their professional image. The usage of the unsocial features on LinkedIn, outlined in Table 13, hold a resemblance with the ones found on Facebook.

| Tested scenarios | Anticipated features | Features mentioned by participants |
|---|---|---|
| She wants to dissolve the connection with one of her contacts | Remove Connections | Remove Connections |
| She wants to reject a connection request | Ignore | Ignore Pending requests |
| She wants to prevent one person from contacting her online | NA | 3rd-degree Invitations Privacy Settings |
| She wants to hide the posts of one of her contacts | Hide | Hide |
| She does not want to share her posts with one of her contacts | Who can see your activity feed | NA |

Table 13. Unsocial features of LinkedIn.

On LinkedIn, participants followed the same behaviors as on Facebook, for instance, to keep the unwanted connection requests as pending on their profile (as illustrated in Fragment 31). Two participants mentioned to notice that at least one of the connection requests they have sent went unanswered.

*Fragment 31*

*That's again my personality... I don't accept invitations from people I don't know, so I just don't do anything, I just keep them there, pending. And that's it. So I don't know if the person will get the information that I didn't. [P7, Group 3]*

LinkedIn users were aware of most of the unsocial features the site offers for managing their network, such as deleting connections or privacy restrictions, e.g., *3rd-degree Connections*. However, as stated in Fragment 32, using LinkedIn is mostly about having professional contacts, rather than generating or receiving information. This I call a "purpose-over-social" pattern.

*Fragment 32*

*P8: I never share, I never do posting. I mean, in LinkedIn. I have never used this feature [Limit your activity feed].*

*P9: Me neither.*

*P10: For me, LinkedIn is just connections, not information per se.*

*P8: I only use it for keeping the contact, and maybe some personal messages and that's it.*

*P10: I don't get personal messages. [Group 4]*

It is noteworthy that even though participants use LinkedIn for professional networking, they did not mention to be interested in contacting or being contacted by persons outside their network using *Invitations*.

## 6.3. Google+

None of the six participants that were members on Google+ interact frequently on the site. Consequently, none of the unsocial features of this site were used by participants. For example, they all mentioned the *Circles* feature, even as a reason for opening an account on the first place. In practice, however, participants (as the one quoted in Fragment 33) mentioned not having enough social connections within Google+ to use this feature.

*Fragment 33*

*Having 3 contacts in G+ [Google+] doesn't leave room to leave someone out, but is good implemented in an usability point of view, and the circles are the main reason I created a G+ account. [P1, Group 1]*

As outlined in Table 14, this same situation was mentioned for the other anticipated features of this site. Participants concluded that, on Google+, the reduced number of social connections and content do not call for being unsocial. This I call the "critical

mass-over-unsocial" pattern of Google+.

| Tested scenarios | Anticipated features | Features mentioned by participants |
|---|---|---|
| She wants to dissolve the connection with one of her contacts | Remove | NA |
| She wants to reject a connection request | Ignore | NA |
| She wants to prevent one person from contacting her online | Block | NA |
| She wants to hide the posts of one of her contacts | Ignore and Remove | Share with circles |
| She does not want to share her posts with one of her contacts | Share with circles | Share with circles |

Table 14. Unsocial features of Google+.

It was interesting that some participants mentioned being confused and somehow intimidated by the site. For instance, as Google+ admits both unilateral and dyadic connections, participants were not sure of who gets to see the content that they post. This was an important topic in one group, as reflected in Fragments 34 and 35.

*Fragment 34*

*P9: I haven't used it [Share with circles], because I don't use G+ [Google+] too much.*

*P8: At the beginning, I used it just as test. But I thought it was a headache. So it came to Facebook, and it was a headache. But it's pretty similar to Facebook now.*

*P9: The thing is that people can add you without you knowing. Kind of like Twitter, but worst. Because is just a notification, so you really have to be careful of what people follow you and what you post. [Group 4]*

*Fragment 35*

*I would say with Google+, even is a very nice look with the circles, they scare me. I don't know what to do. To add my friends to the circles, or to the friends [agreement]. It looks nice, but I don't know how to use it. [P10, Group 4]*

Since they seldom share something on the site, there was no way to explore this issue any further.

# 7. Discussing unsociability over SNSs

Participants of this study, much as other users of social technology (Ackerman, 2000), adapt the systems to attain their needs. People tend to guide their interactions on SNSs using their own understanding of the site instead of its technical affordances.

I argue that the structure of each SNS reviewed in this study determines how they support unsociability and how participants understand it across sites. Nonetheless, in all of the reviewed sites I found that the social implications were determinant for understanding unsociability.

Most notably, I discuss how Facebook users base their unsocial interactions following a social-over-technical pattern. This means that participants' interactions were based upon their social perceptions of the site rather than on its technical capabilities.

The current chapter "tells the story" of unsociability by discussing the findings that led me to uncover this social-over-technical pattern on Facebook. This is presented over six subsections. In the first place, I explore the golden rules followed by participants while engaging in unsocial events. Second, I describe the three styles of attitudes towards unsocial events that I found among participants. Third, I describe how this social-over-technical pattern of interactions supports unsocial events on Facebook. Fourth, I discuss how different patterns of interactions support unsociability on Twitter, LinkedIn, and Google+. Towards the end, I reflect on the group dynamics, validity, and limitations of my study. Finally, I provide an overview of the results of this study by addressing the research questions.

## 7.1. Golden rules for using unsocial features

As described in Section 5.3, participants mentioned two "golden rules" when it comes to being unsocial and interpreting the outcomes of these actions, both as target and initiators: (1) keeping the (unsocial) interactions as positive and discreet as possible, and (2) not taking the (unsocial) interactions "too seriously" or "too personal".

The reason I use parenthesis to downplay the "unsocial" factor of these rules is that they are equally true even if the person does not consider a behavior as essentially unsocial. For instance, even if a participant does not consider unfriending an unsocial behavior, he would prefer not to send a system notification to the unfriended person about this action. In this manner, the rules are valid even if the social understandings of the functionalities of the feature differ.

The golden rules are consistent with the "spirit of reciprocity" (boyd, 2008, p. 234) and "expectations of mutual consideration" (Lampinen et al., 2011, p. 3220) that are commonly reported by users of SNSs. In other words, people try to be nice to those who

are nice to them over these sites.

In the next subsections, I discuss how these golden rules are rooted on two well-known sociological concepts for face-to-face interactions: Goffman's "face" (1967) and Granovetter's "tie strength" (1973).

### 7.1.1. Saving face

Previous literature agrees that people try to present themselves and their social interactions over SNSs in the most positive light possible (boyd, 2008; Lampinen et al., 2011; Utz, 2010). Much as in real life, people try to "save face" while interacting on SNSs or other CMC tools (Aoki & Woodruff, 2005; boyd, 2008; Lampinen et al., 2011). For Goffman (1967, p. 5), face is a "positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact". He suggests that it is not only important for people to save one's face, but to save face for others while interacting.

The measures taken to do things consistent with face are called "face-work" (Goffman, 1967, p. 12). Face-work is useful to maintain harmonious relations and to avoid awkward or embarrassing situations. To do so, a person must be aware of how others interpret his actions and how he in return interprets theirs.

This concept of face-work is what I believe to be the essence of the so-called golden rules for being unsocial. Participants exercised face-work by storing their unwanted *Friend Requests* instead of rejecting them. That is, while trying to maintain a personally acceptable face-work, they are doing the same for others, e.g., Marja stores Timo's *Friend Request* attempting to keep him from feeling awkward when noting the request he sent went rejected.

Goffman (1967, p. 14) identified three "levels of responsibility" people hold for interactions in which their actions could potentially be face-threatening. In the first level, the person acts in an innocent, unintentional, and unavoidable way. In the second level, the person acts in an incidental and unplanned way, but anticipating the negative outcome of his or her action. In the third level, the person acts intentionally and out of spite, with the intention to cause damage.

These levels of responsibility were present on the discourse of participants as they acknowledged holding accountability of their own unsocial behaviors on SNSs. Returning to the previous example of storing unwanted *Friend Requests,* participants expected to lower their level of responsibility of their rejections by reducing the awareness cues available for others to notice about this behavior. The main reason for this was to prevent others from interpreting their actions as spiteful, as remarked by the participant quoted in Fragment 36.

*Fragment 36*

*...Maybe denying the [Friend] request is such a harsh move in social circles that they [Facebook] don't want to force us to do it. So "Not Now" is just like a way to put it on the corner and not thinking about it. [P1, Group 1]*

In most cases, persons have a "repertoire of face-saving practices" (Goffman, 1967, p. 15). I found this concept to be in line with the second golden rule, where people prefer to believe that unsocial events are not personal or spiteful acts, especially if directed towards them. That is, they seem to look for face-saving alternatives to rationalize the unsocial event, e.g., "he may not be frequent on the site", instead of interpreting the action as an attack towards the self, e.g., "he does not want me as his *Friend*".

## 7.1.2. Strength of social ties

As discussed in the previous section, people try to "play nice" and under a spirit of reciprocity and expectations of mutual consideration, even while eluding others. However, participants mentioned that they were not interested in being equally nice to people they do not know offline. Therefore, to understand the implications of being unsocial, it is also important to understand the negotiations between intimate and less intimate relationships.

The concept of having different levels of intimacy on relations is in line with the "strength of ties" theory (Granovetter, 1973), where meaningful, strong ties with close friends and family provide support, while weak ties with acquaintances provide access to novel information. In agreement with previous research (Kivran-Swaine, Govindan, & Naaman, 2011), participants mentioned that it was more likely for them to use the unsocial features to take distance from a person they hold a weak relation with. Likewise, participants would not feel bad if a weak tie used the unsocial features on them, but the opposite would occur if a strong tie did.

Another implication of interacting with others with whom people share different tie strengths over an SNS is that it can be difficult to separate persons from incompatible contexts of real life online, though offline this occurs naturally (Donath & boyd, 2004). For example, having family members listed as *Friends* was described by participants as a source for conflict.

As these platforms lack natural segregation of different social circles, information may flow unrestricted and promote online tension (Binder, Howes, & Sutcliffe, 2009; Marder, Joinson, & Shankar, 2012). What may be adequate to share with one social circle may not be so to another. Additionally, segregating audience by social circles is not usually enough, as people have different level of closeness within members of the same circle, e.g., parents and siblings (Lampinen et al., 2011).

As the current features such as *Lists* for segregating audiences on Facebook are

perceived as effort and time consuming, I found people use different strategies to divide their social networks, e.g., *Unfriend, Report/Block*. Common considerations for doing so are the social norms. Depending on the personal and social understanding of these norms, people decide what is acceptable to do in a social situation online (Fono & Raynes-Goldie, 2006). However, the lack of shared norms, e.g., between cultures and generations, may be a source of social conflict (Lampinen et al., 2011).

## 7.2. Attitudes towards unsociability

There is no consensus of how personality traits correlate with SNSs usage. Some authors argue that offline behaviors are translated online (Amichai-Hamburger & Vinitzky, 2010; Ma, Li, & Pow, 2011), while others argue that there is no significant correlation (Hughes, Rowe, Batey, & Lee, 2012; Ross et al., 2009; Schrammel, Köffel, & Tscheligi, 2009). What is clear is that understanding how different people use these sites can help understand common social practices (Hargittai & Hsieh, 2010).

Consistent with previous literature (Ackerman, 2000), participants focused on their social understanding of the features and not on technical capabilities to select which one was appropriate for each of the tested scenarios. For this reason, I was curious to find if different participants had similar ways of thinking, feeling, and approaching unsocial events.

To explore this possibility, I analyzed the transcripts loosely based on the principles of grounded theory (Glaser & Strauss, 1967). The individual responses of each participant were synthesized to create codes of attitudes towards each of the features and Facebook in general, e.g., "*Unfriend* is harsh". Codes were sorted and grouped to produce a list of conceptual attitudes, e.g., "I think some features are harsh".

I then compared these concepts among participants, where I found notable similarities on the levels of agreements, disagreements, and intensity of viewpoints regarding these attitudes. These similar viewpoints seemed to cluster the participants. However, no significant relation was found between these concepts and the demographic characteristics of participants, their level of engagement to the site, or who they friend over Facebook.

At the end, participants were grouped in three clusters that I found to be distinctive attitudes towards unsociability: the "experimental", "cautious", and "restrictive" styles that are described in more detail in the following subsections. The glue that holds each style together is the likeness of participants' understanding and engagement in unsocial events, regarding both their social and technical implications.

It is worth noting that these styles intend to be illustrative, rather than comprehensive or predictive. Moreover, styles tend to overlap and do not necessarily appear pure on participants' behaviors. One person can have a strong inclination

towards one style, though he may share characteristics of another.

### 7.2.1. Experimental style

Participants who favor the experimental style tend to handle unsocial events with very little trouble, mostly because they do not mind using the hard and soft unsocial features they have at hand to control their profile. While individual preferences or context variations may play a role on which unsocial feature they use, they do not hold a strong disagreement against any of these features, as described in Fragment 37.

> *Fragment 37*
>
> *Yeah... I don't use this block [feature] so much, because it means that you also can't see... I don't know, for example, with ex-girlfriend [laughs] you want to know what is going on there, so yeah, is enough with unfriend. [P2, Group 1]*

These persons were more likely to judge the capabilities of the unsocial features regarding their technical description or naming, and not regarding the possible social implications. However, this does not mean that they do not want to be polite with others or that they have a better grasp on the technical capabilities of the system. Instead, as described in Fragment 38, it implies that they are not pulled back by the socially-charged terminology of the features, e.g., *Unfriend*. Another possible explanation, illustrated in Fragment 39, is that they do not feel that their interactions on Facebook can have serious social consequences.

> *Fragment 38*
>
> *Maybe you went for a weekend with a group to Lapland, and you meet 15 new persons, and after one year you haven't heard about them. So why not unfriend if they don't send you any messages? (...). [P4, Group 2]*

> *Fragment 39*
>
> *I have a friend of my sister that added me on Facebook, that I accepted her request, but then she kept posting this stupid horoscope thingy on her status updates who kept appearing on my Wall. Then I decided to unfriend him or her because of this, because they were constant gibberish of this horoscopes or stories. Then we meet after a few months after that and she said... "You have been awfully quiet on Facebook". And I say... Hmm... Yeah... See... There is this little thing... I unfriended you. She didn't take it so nicely. [P1, Group 1]*

Interestingly, participants that favored this style were the ones who were not working or studying on a technology-related field. However, I consider this to be purely coincidental and not related to their technical knowledge.

### 7.2.2. Cautious style

People that favor the cautious style have strong feelings of disagreement towards one or more of the hard unsocial features. They feel uncomfortable using a feature that,

according to their perceptions, is socially impolite or may hurt others' feelings. Therefore, they refrain from using that specific feature completely or use it only in exceptional situations, as described in Fragment 40.

*Fragment 40*

*I have actually used the Unfriend feature once. But it was because this was a friend of mine, of school, like years ago. And then, initially when was new Facebook, it was to find all these new friends, and add people randomly, "we went to school", even we didn't talk. And then after 2 or 3 years, I was like OK... I have no idea who this person is, somehow it was like this post [from the printout], and I was like... maybe I should just remove her, we don't message, we don't chat, we don't talk, I have no idea where she is, so I just remove her. [P6, Group 3]*

The most notable examples of the "uncomfortable" features were *Unfriend* and *Report/Block*. This can be explained due to the strong, socially-charged naming and functionality of these features, or because there is no analogy for these behaviors offline, e.g., a person cannot be blocked in real life. Overall, the cautious style gives priority to the social implications of the unsocial events. This is explained by one participant in Fragment 41, in consideration of system notifications.

*Fragment 41*

*(...) If you choose to avoid a person, you don't tell them "I'm avoiding you", you know, that would be strange... So I think is good that Facebook doesn't notify the person. "You are avoided by... the other person". So it's good [agreement], that we keep that much to ourselves, it's OK to keep the secret. [P5, Group 2].*

The persons that favor this style shared the idea of being as smooth and polite as possible when it comes to being unsocial. The reason for this was that they perceived "serious" implications of their social interactions on Facebook.

### 7.2.3. Restrictive style

Users that favor the restrictive style have a distinctive behavior: using their *Privacy Settings* as an unsocial feature. In essence, these persons also follow a cautious or experimental approach towards unsocial events. For instance in Fragment 42, a participant agreed to perhaps having used the *Block* feature before, but now she does not use it since she set boundaries using *Privacy Setting*.

*Fragment 42*

*Honestly, I don't know if I ever done it [to block someone]. I can't remember if I've done it, it has been a long time ago. At the moment I can't recall a situation. Because, actually I have it in settings, in general settings, that people are not able to write on my Wall or anything, but they can see what I put there (...). [P7, Group 3]*

As has been described in Section 5.1.1, *Privacy Settings* can be used as a massive filter to avoid people on Facebook. Consistently, these persons openly mentioned feeling

exhausted or frustrated for having to manage a large social network. Therefore, as described by the participant quoted in Fragment 43, they decided to "hide" from others behind restrictive privacy settings.

*Fragment 43*

*That's the reason I don't allow most people to post on my Wall. Because some ex-girl[friend] posted or commented more on my Wall, and OK. If it's my profile and my Wall, I don't care, it's mine, so that was the reason [for restrictive privacy settings]. Because I don't want to answer questions and things all the time, so I don't allow everybody to post on my Wall, so I prefer Private Messages, so it's a part of me that is unsocial in this case, we can say. [P3, Group 1]*

Interestingly enough, some of the participants that favor this style have used other "extreme" measures, such as not using their real name on their profile, or as illustrated in Fragment 44, having two Facebook accounts for managing their interactions on the site.

*Fragment 44*

*I've tried that [having two accounts]. But is really messy... I try that at first, to have one account for my family and one account for my friends, but in the end I started to receive requests for myself in both sides, and requests from everyone on the other side. And people thinking that I removed them. And it was a drama. So I closed it. [P8, Group 4]*

In this sense, and in agreement with previous literature (Binder, Howes, & Sutcliffe, 2009), participants restrict their privacy settings because they felt they had lost control over their private space. Furthermore, as in the case of the participant who had two accounts for segregating his audience (friends & family), restrictive privacy settings were useful for presenting himself in different ways to different social circles (Zhao, Grasmuck, & Martin, 2008).

I found these classifications to be fairly consistent with what was reported in previous literature. Fono and Raynes-Goldie (2006) hint at the existence of two types of users on LiveJournal. The first perceived friending behaviors as trivial and more as a functional description than a source of conflict. This seems to match the experimental style. The second were aware of the existence of social norms for friending but were unsure on how to stick to them, which increased the "drama" of the interactions, matching the cautious style.

Some of the behaviors described in the restrictive style are similar to what was found by Raynes-Goldie (2010). She suggests that people can go "the extra mile" to maintain their privacy boundaries on Facebook, which can even mean violating the Terms of Service of Facebook, e.g., using an alias or having two accounts.

I argue that unsociability should be understood under the same considerations than

sociability. That is, even though unsociability is the "reverse" of being social, people handle both in similar ways. For instance, unsocial events can become problematic for the same reasons as social interactions (Tokunaga, 2011), such as ambiguous interpretations of social norms. Therefore, unsociability is not a source of conflict itself, but the interpretation that users give to unsocial events can become one.

## 7.3. Social-over-technical pattern of unsociability on Facebook

I found that participants use (or avoid using) the unsocial features of Facebook to "save face" while balancing an online network of people they know offline. People attempt to present themselves as socially-desirable individuals over SNSs (Zhao, Grasmuck, & Martin, 2008). Likewise, participants decided what features to use based on their social understanding of the site, e.g., social norms, as described with the attitude styles towards unsociability.

For the reasons listed above, I argue that unsociability follows a social-over-technical pattern on Facebook, which means that participants focus on their social understanding of the site more than on the technical capabilities of its features. The current subsections describe how "clicking buttons", i.e., the unsocial features, and "not clicking buttons", i.e., unresponsiveness, support unsociability, expecting to address their design implications in Chapter 8.

*Unsocial features*

It is not only the technical capabilities, but the users' perceptions of them what determines the usefulness of unsocial features. Before considering the technical affordances, participants evaluated their social understanding to decide whether to use the system features, e.g., use *Unfriend*; not to use the features, e.g., not use *Unfriend*; or adapt the system into their needs, e.g., use *Unsubscribe* instead of *Unfriend*.

People use or avoid using the unsocial features to manage their self-presentation, keeping it consistent with face-work (Ackerman, 2000) and social norms (Raynes-Goldie, 2010; Lampinen et al., 2011). For example, participants who consider deleting connections as rude avoid using *Unfriend* so others will not perceive him or her as rude.

Using soft unsocial features such as *Unsubscribe*, *Privacy Settings*, and *Lists*, people place a "self-boundary" (Altman, 1977) around them, which makes privacy easier to handle and modify, as the features are used without involving other users. These features helped users to keep their unsocial behaviors silent and discreet in line with the first golden rule, as they produce minimal awareness cues.

Hard unsocial features such as *Report/Block*, *Unfriend*, and *Not Now/Delete Request*, place a "dyadic boundary" (Altman, 1977) that helps people to ensure safety from others. In other words, a person can use these features to place a boundary between himself and another person. However, the hard features involve another person directly

as they are applied directly to their profile, hence they produce a high number of awareness cues. As these cues are available for others to notice that a privacy regulation has taken place, some people found them harsh and rude.

*Unresponsiveness*

Unresponsiveness was related to unsociability in the sense that some participants avoid action for not producing awareness cues of their unsocial behaviors, especially when directed to somebody they know offline. Moreover, participants use ambiguity for creating a personal space and try to influence how others account for their actions (Aoki & Woodruff, 2005).

This was the case of storing unwanted *Friend Requests*, as participants use ambiguity to create a "plausible deniability" of their rejection, e.g., "maybe he is not so frequent on Facebook". In other words, participants use ambiguity for creating multiple explanations for their actions, reducing social difficulties and costs (Aoki & Woodruff, 2005). Ambiguity helps users save face, as it allows people to influence how others account for their actions. However, what each person defines as "plausible deniability" depends on his or her interpretations of social norms.

Nevertheless, ambiguity defies the visibility of online behaviors, which has been regarded as one of the main design principles in social technologies (Erickson & Kellogg, 2000; Shen, Khalifa, & Yu, 2006). For SNSs, it has been suggested that users are eager to increase the visibility of their online interactions to find out who access the content they share on Twitter (Gilbert, 2012). However, when it comes to unsociability, increased visibility may have undesired results.

Almost all participants expressed strong disapproval for having notifications about unsocial behaviors both as targets or initiators. That is, they expected Facebook to support ambiguity in some interactions, so that they can deny themselves in plausible ways. In this way, even though visibility of online behaviors can be a valuable tool for some situations, such as evaluating what content to share according to its "perceived novelty" (Gilbert, 2012), it may not be the same for unsocial behaviors.

## 7.4. Patterns of unsociability on Twitter, LinkedIn, and Google+

I found that the structure of each SNS is determinant in how it supports unsociability. This is in agreement with previous literature (Donath & boyd, 2004; Papacharissi, 2009; Zhao, Grasmuck, & Martin, 2008) that argues that a site's elements are determinant for shaping social interactions.

In this way, participants' social perceptions of the elements of Twitter, LinkedIn, and Google+ determined how they understood unsociability over each platform. This is consistent with previous literature that has described that while deleting social connections is common behavior over Facebook and Twitter, on Facebook it can be

done for personal reasons, but on Twitter it is mostly done to limit content (Kwak, Chun, & Moon, 2011; Sibona & Walczak, 2011).

In the following subsections, I describe specific patterns of unsociability found on the other sites reviewed: the "content-over-social" pattern on Twitter; the "purpose-over-social" pattern on LinkedIn; and the "critical mass-over-unsocial" pattern on Google+.

*Twitter: Content-over-social pattern*

Participants mentioned they use Twitter as a stream of news and information. Therefore, they usually follow users for the content they share, not because they have an offline connection. This behavior is consistent with previous literature that describes Twitter as a place for content, and not for social interactions (Huberman, Romero, & Wu, 2009). In other words, Twitter is more about what you have to say and less about who you are (Hughes et al., 2012).

Accordingly, out of the four anticipated unsocial features for Twitter, only *Unfollow* was heavily used by participants. As many other users (Kwak, Chun, & Moon, 2011), they tend to use Twitter features to ensure their profile is a source of relevant data, not self-presentation or social connections. In this sense, social connections on Twitter tend to be "someone who I like to read" (Hughes et al., 2012).

Kwak, Chun, and Moon (2011) suggested that reciprocal Twitter connections where users communicate over the site, e.g., mutual *Mentions*, are less likely to be broken as they provide emotional support. Even though these tight connections were not addressed by participants in my study, I consider that it is likely that people would follow the same social-over-technical pattern of Facebook for handling these connections on Twitter, as they hold increased accountability for their actions.

*LinkedIn: Purpose-over-social pattern*

LinkedIn aims to get "the most" out of the professional network of their users[11] with a system of online networking that mirrors the professional context (Papacharissi, 2009). Thus, participants invested most of their efforts on this site to maintain what they considered to be an adequate professional image.

Even though business networking is an important feature of LinkedIn, as the site emulates professional modes of interaction, e.g., referrals and introductions (Papacharissi, 2009), participants did not mention using the site for this end. This is consistent with previous literature, which suggests that people do not visit the profiles of their LinkedIn contacts frequently (Skeels & Grudin, 2009).

Much as CVs, self-presentation on LinkedIn profiles tends to be fairly static (Skeels

---

[11] http://www.linkedin.com/static?key=what_is_linkedin&trk=hb_what

& Grudin, 2009), and the site structure provides little room for spontaneous interactions (Papacharissi, 2009). Therefore, participants managed their *Connections* using unsociability as an integral part of their self-presentation on LinkedIn, e.g., storing or rejecting unwanted contacts. This agrees with previous literature that argues that having the "correct" social relations in this site is considered to add value to the profile (Donath & boyd, 2004).

*Google+: Critical mass-over-unsocial*

By its launch in June 2011, many expected Google+ to become an immediate success and a major competitor for Facebook[12]. However, by February 2012, Efrati (2012) reported Google+ to be a "virtual ghost town" where users only spend an average of three minutes a month on the site, this according to ComScore research. Likewise, participants mentioned not having enough connections or content to make it worth accessing Google+ frequently. Participants simply mention not to care about being unsocial on Google+, because in there is nobody to socialize with in the first place.

The current failure of Google+ proves right the argument of Preece (2000) about the importance of the "critical mass" in online communities, as she argues, "without people, there is no community" (p. 34). Likewise, it proves right that without people there is no unsociability.

In summary, I argue that it is important to understand the pattern of unsociability of each site to determine how they should support these "reversed" interactions. As a general consideration, unsociability is an integral part of "being social", as people use the unsocial features to manage their self-presentation and privacy concerns over these platforms, using their personal understanding of the social norms as the basis for their actions.

## 7.5. Reflections on group dynamics, validity, and limitations

The results of this study are suitable to be scaled for further research, as focus groups are an already understood method where findings appear reliable when the method is properly applied and data carefully analyzed (Preece, Rogers, & Sharp, 2002). Nevertheless, in the following subsections I reflect about the group dynamics, validity, and limitations of the findings of my study.

*Focus group dynamics*

Focus groups are an appropriate research method for this study. Foremost, because the group dynamics for the four focus groups "took off" as participants were eager to share

---

[12] http://www.nytimes.com/2011/06/29/technology/29google.html?pagewanted=all

and discuss their opinions about unsociability, this without much involvement of the moderator.

In general terms, the dynamics of the four focus groups were a reflection of the positive tone of interactions on SNSs. Participants were open and polite to each other's viewpoints, even if they expressed opposing opinions. While as a moderator I encouraged interaction, all participants were eager to share their opinions and personal experiences with others.

Even though most participants had points of agreement, e.g., shared privacy concerns, the ambiguous social norms produced divergent opinions. For instance, people who opined that unresponsiveness is acceptable on Facebook raised notable argumentation about social norms. However, even when discussing sensible topics such as social norms, group dynamics remained in a positive tone.

Collaborative group dynamics were present whenever participants attempted to build understanding of system features. For instance, to define *Report/Block*, participants collaborated to match the pieces of their personal experiences and construct how the feature works.

The positive tone of the discussions could be explained both as actual agreements, or that people avoided having different opinions with the rest of the group. Moreover, the neutral wording of the interview protocol, especially regarding the 3rd-person scenarios using made-up profiles, could be the reason why opinions where mostly expressed in terms of neutral contributions "from the outside" than in terms of personal feelings.

I believe that dynamics between groups were alike because participants had fairly similar demographic characteristics (see Table 4) and, since they were volunteering, with at least a little interest on the topic. Moreover, the influence of the moderation style cannot be discarded. It is worth mentioning that besides the established interview protocol questions and simple prompting, e.g., what do others think?, I contributed with roughly 12 to 20 lines in each group to clarify or expand discussions, counted from the transcript details presented in Table 3.

*Focus groups limitations*

As I described before, results from focus groups can be reliable when the method is properly applied and data carefully analyzed. However, my study has significant limitations regarding how this research method was applied.

First, it is unwise to make generalizations out of a homogeneous and small group of participants. For instance, 40% of participants are males working in the technology field, and are frequent users of Facebook. This is an important limitation since this study does not include participants with a wide variety of backgrounds. Likewise, not having an

adequate balance on the gender of participants (70% of them are male) could represent a limitation.

Second, the potentially "risky" recruitment process of carrying out a group with acquaintances in a different venue could be a limitation. I believe that the fact that they knew each other and the moderator beforehand may have influenced their responses, as they tended to produce more agreements on their discussion than the other groups.

Third, the response parameters for the two screening questionnaires and the mid-session questionnaire (see Appendix 4, 5, and 6) were set using a general "rule of thumb" based on previous literature. For example, the parameters to screen whom participants add as *Friends* on Facebook were based on Bryant and Marmo (2009). Further research should set more refined response parameters searching for correlations between my results and the demographics of users.

Finally, as I gathered and analyzed qualitative data, the results of my study are expressed in opinions of users, which may not represent their actual behaviors. It is open to future research to challenge these results based on quantitative data.

*Reflections on validity of my study*

Two important changes have taken place during the course of this study that could affect its validity. First, this study relies on the seven avoidance behaviors proposed by Bryant and Marmo (2009) as a starting point to define the unsocial behaviors (see Section 3.3). However, Bryant and Marmo (2010, p. 22) revise and update these behaviors listing only the following four behaviors under the avoidance strategy:

1. Using Facebook to avoid giving out personal information to acquaintances
2. Purposely not responding to a message or comment you are sent
3. Logging off when someone you do not want to talk to sends a chat request
4. Adding someone under a limited profile settings so they cannot see your full profile

Bryant and Marmo (2010) do not provide details on the reason for this revision to the avoidance strategy, or explain why removing, blocking, or rejecting users are no longer considered avoidance behaviors. However, I argue that as much as this change challenges my interpretation of the avoidance strategy, when it comes to unsociability it is important to consider the seven avoidance behaviors proposed by Bryant and Marmo (2009), as users actively use them to "go back" from social interactions.

Second, this study comprises the user interfaces of Facebook, Twitter, LinkedIn, and Google+ as available in November 2011. However, by the end of this study in May 2012, these four platforms have re-designed at least one of the reviewed features. As explained before, this study does not intend to be an exhaustive list of features, but an overview on how the reviewed SNSs support unsocial behaviors through them. These

changes may have an effect on the perceived usability of the features (as reviewed in Section 8.1), but not on the underlying social needs discussed in this study.

## 7.6. Overview of findings

To conclude this chapter, I provide an overview of the main findings of my study. This is done by addressing the research questions presented in Chapters 2 and 3.

RQ1 asked how SNSs support unsociability. While there may not be a simple way to answer this question, participants described three ways in which Facebook supports their unsocial behaviors.

1. *Unresponsiveness*. Facebook allows users to interact "without clicking buttons". In unresponsiveness, people expected to find plausible ways to reduce the accountability of their unsocial behaviors.
2. *Soft unsocial features*. These features place a self-boundary around a user to avoid another person. They produce a minimum of awareness cues and can be easily reverted.
3. *Hard unsocial features*. These features place a dyadic boundary between a user and another person. They produce notable awareness cues, since they directly involve the targeted person.

Additionally, it is important to consider the structure of each site to understand how it supports unsociability. How the structures and purposes of the SNSs reviewed here are related to unsociability is addressed by RQ2. I found that participants' social perceptions of the structures and purposes of these sites determine how they supported unsocial events, as each of the reviewed platforms had a distinctive pattern of unsociability.

In the case of Facebook, people follow a social-over-technical pattern of unsociability. This means that people use (or avoid using) the unsocial features based on their social understandings rather than on features' technical capabilities. For Twitter, people follow a content-over-social pattern to limit content they receive, but not to avoid a specific person. For LinkedIn, users follow a purpose-over-social pattern, using unsociability to maintain what they consider to be an adequate professional image within the site. On Google+, I found a critical mass-over-unsocial pattern, where people are not unsocial since there is nobody to socialize with in the first place.

From this perspective, it is important to understand these patterns to determine how each site should support unsociability. As a general rule, people try to keep unsociability as positive and ambiguous as possible, expecting to reduce the accountability of their online actions when they know the targeted person offline.

This leads me to provide an answer for RQ3, regarding the perceptions of participants engaging in unsocial events. I found that people feel accountable for their

online behaviors, and therefore use two golden rules when they engage in unsocial events: as initiators, they keep unsocial behaviors as silent and discreet as possible, and as targets they do not take other's unsocial behaviors "too seriously".

Nevertheless, not all participants interpreted these golden rules or the social-over-technical pattern of Facebook in the same way; it is their personal interpretation of the online social norms which determines how they engage in unsocial events. I found three styles of attitudes towards unsociability: the experimental style, where people perceive none or few social costs out of unsocial events; the cautious style, where people feel that some of the unsocial features should be avoided as they may be rude or impolite; and the restrictive style, where people use stringent privacy settings to put a barrier between them and their *Friends* to avoid interactions.

In sum, unsociability is supported by the structure and purpose of each SNS. However, the social understandings of each user determine how and when the unsocial features are used. It is important to consider the existing social practices to determine how each site should support users while engaging in unsocial events. As a result, systems that adequately support unsocial events facilitate their users to manage their self-presentation and privacy concerns.

# 8. Design considerations for supporting unsociability

As the usage of SNSs is often motivated by emotions and experiences, it has been suggested that design efforts should be placed on social interactions rather than on the system capabilities (Hagen & Robertson, 2010). This is consistent with the findings of my study, where participants used a social-over-technical pattern to select what unsocial features to use or avoid using.

In this chapter, I expect to shed light on how SNSs should support unsociability by addressing usability and design considerations. As Facebook is the focus of this study, I directly discuss the design considerations for this site. However, the same considerations may apply for other SNSs where people interact with others they know offline, and thus hold an increased level of accountability for their behaviors (Kwak, Chun, & Moon, 2011).

## 8.1. Usability considerations

As said by Preece, Rogers, and Sharp (2002), usability is the capability of a system to be "easy to learn, effective to use, and enjoyable from the user's perspective" (p. 14). For these authors, usable systems optimize the interactions between people and technology, enabling users to carry out their activities through the system. Accordingly, on the mid-session questionnaire (see Appendix 4), I asked participants to evaluate their level of agreement with eight statements to assess the usability of the unsocial features on Facebook.

Over the following subsections, I present a brief evaluation of the usability of Facebook's unsocial features considering five usability goals described by Preece, Rogers, and Sharp (2002). This evaluation is based on both participants' responses to the mid-session questionnaire and their statements throughout the focus groups. It is noteworthy that while I only discussed their responses to this questionnaire with two groups, all groups brought ideas about usability considerations within their discussions.

*Effectiveness, efficiency, and learnability*

Half of the participants feel that the unsocial features of Facebook are easy to use (see Statement 3 in Appendix 4), being efficient to support their tasks without much effort. However, participants expect more support and feedback from the system, tending to be neutral when it comes to evaluate if Facebook behaves as they expect after clicking on one of these features (see Statement 8).

Six participants agree that it is easy to learn how to use the unsocial features (see Statement 4). Likewise, six participants agree that these features are easy to find (see Statement 5). However, these responses are inconsistent with the utterances of some

participants, who were unsure about the technical capabilities of *Report/Block* or were not aware about the existence of the *Unsubscribe* feature.

*Safety*

In the scope of this evaluation, safety refers to how Facebook prevents users from accidentally making errors or unwanted actions. Six participants agree that they feel in control of the system when using the unsocial features (see Statement 6). However, during the discussions some participants expressed concerns for not having enough feedback about what happens after they click on an unsocial feature. This is illustrated in Fragment 45, where a participant expressed this concern while comparing Facebook and Google+ features.

> *Fragment 45*
>
> *...It's complicated to match the results on Facebook. Because at the end, you don't know what you did. There's so many things that at the end, is kind of guessing what you could do. Is the same thing with the Circles [of Google+]. You don't know exactly what is going to happen. [P9, Group 4]*

On the other side, five participants remain neutral when asked if they feel that their privacy is well-protected using these features (see Statement 7). During the discussions, most of them expressed that privacy is their main concern while using Facebook. This is illustrated in Fragment 46, where a participant states the importance of protecting his privacy with these features.

> *Fragment 46*
>
> *The less control you have, the less active you are on those... I would say... If I'm not kind of protected with this of kind features, that you can control in some sense... I would not share as much... Even I don't share much... But definitely is like going out in the winter with only one sweater, is like protecting yourself, in my opinion. [P4, Group 2]*

Nonetheless, most participants feel that privacy considerations can still be further addressed, and they would expect to have more ways to protect their information.

*Utility*

All participants agreed that it is important to have unsocial features on Facebook (see Statement 9). This is illustrated in Fragment 47, where a participant describes that these features can make the difference for some users to continue or stop using Facebook.

> *Fragment 47*
>
> *...[The unsocial features] can mean the difference if you continue or stop using the account. Because maybe you start having problems with someone, or you don't want people to know things, or... I don't know... And in this way you can control. And if you don't have that option, you just close the account... Maybe this is the reason some people continue [using Facebook]. [P8, Group 4]*

Four participants feel that Facebook offers all the unsocial functions that they expect it to have (see Statement 12), another four feel that they need more features, while the two

remaining were neutral to this statement.

In general terms, and in agreement with previous literature (Hart et al., 2008), I found that participants had positive impressions on how these features are implemented on Facebook. However, I also found that they expected the system to have more feedback, support, and options for being unsocial.

## 8.2. Design considerations for unsociability

People tend to follow a social-over-technical pattern on Facebook. That is, they tend to guide their interactions on their social understanding of the site instead of its technical affordances. Similarly, Ackerman (2000) emphasized a mismatch between social requirements and what systems are capable to do. He called this the "social-technical gap". In this way, people adapt the systems to attain their needs, expecting to address privacy concerns and to maintain face.

As human activity is "highly flexible, nuanced, and contextualized" (Ackerman, 2000, p. 180), it is not wise to offer immediate design solutions based in one study with a limited amount of participants. However, even in such a small group of people, I found many expectations on how and why SNSs should support unsociability.

It is important to understand the underlying social needs of users to design features for this kind of platforms (Lampinen et al., 2011), supporting social interactions beyond the "functional and user-friendliness requirements" (Shen, Khalifa, & Yu, 2006, p. 4466). In the following subsections, I propose four general design considerations for these systems to support the social needs behind unsociability.

*Offer a coarse-grained control for Privacy Settings*

Features such as *Privacy Settings* (Zhao, Grasmuck, & Martin, 2008) and *Lists* (Binder, Howes, & Sutcliffe, 2009; Lampe, Ellison, & Steinfield, 2007; Raento & Oulasvirta, 2008) have been suggested to bring nuance to online interactions, allowing people to present themselves in different ways to different people. However, Facebook's current implementation of these features fails to make them easy and accessible for their users (Lampinen et al., 2011; Marder, Joinson, & Shankar, 2012).

According to Lederer, Hong, Dey, and Landay (2004), systems should enable users to manage their privacy as a "natural consequence of the ordinary use of the system" (p. 447). *Privacy Settings* and *Lists* features require excessive configuration to create and maintain privacy. These authors argue that features requiring users to "predict" future circumstances to configure their privacy can become overwhelming and go unused.

With a user base in the hundreds of millions, Facebook designers cannot assume that everybody has the time, ability, and willingness to "micromanage" their profiles

(Papacharissi, 2009). Figure 7 illustrates the current user interface of the *Privacy Settings* feature of Facebook, where users have two coarse-grained options: to share all their content as *Public*, or only with *Friends*. An additional fine-grained option is available for users to set *Custom* privacy settings.
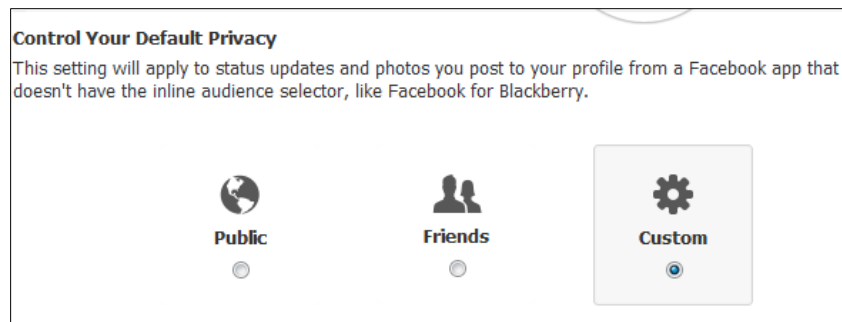


Figure 7. *Privacy Settings* feature of Facebook.

Figure 8 presents the user interface to set *Custom Privacy* on Facebook, which as described before requires users to configure (and remember) what they want to share in the future and with whom, e.g., *Public*, *Friends*, *Only Me*. Furthermore, this configuration can be done using the *Lists* that, as mentioned before, are mostly unused among people.
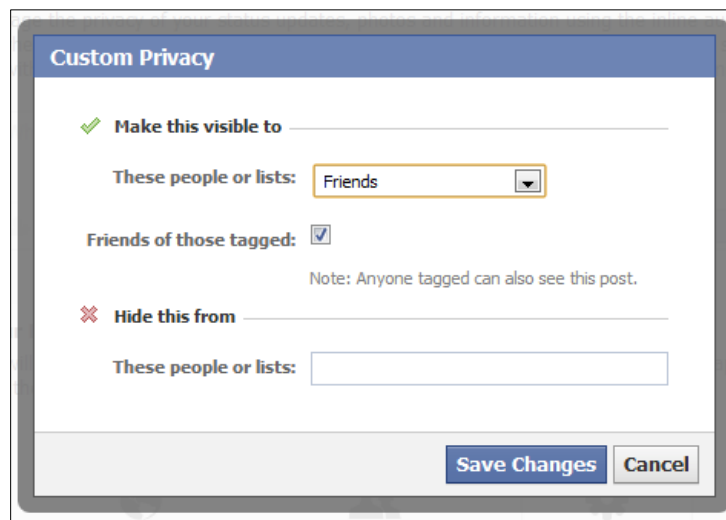


Figure 8. *Custom Privacy* feature on Facebook.

Setting customized privacy on Facebook may require users to invest a considerable amount of time and effort. Moreover, *Custom Privacy* is applied by default to the content they share, but does not limit other ways of interactions. That is, even if the user selects an *Only Me* privacy setting by default, his *Friends* would still be able to post unrestricted content to his *Wall*, e.g., tag him on pictures.

To set stringent privacy settings that do not allow others to interact with the user, he should go through several options (which are not available at a glance) to restrict the access of others to his profile. As people generally do not explicitly "protect their privacy", but manage it through their activities (Lederer et al., 2004), I suggest that

Facebook should implement a top-level mechanism to these privacy settings, so people simply select an option that applies to both, content shared and received.

While redesigning the *Privacy Settings* of Facebook is by itself a topic for a thesis, I propose two improvements to help users to revert social interactions on Facebook using their privacy settings.

First, I suggest implementing three coarse-grained "templates" of privacy: "I like to share with everyone", "I like to share with *Friends*", and "I'm a private person". These templates should apply to the whole profile, that is, to the content shared and received. Additionally, users could fine-tune their settings, but being sure that by default the system would assume the selected template.

Second, I noticed that one of the most commonly described problems with Facebook privacy was not being able to know for sure "who gets to see what". While Facebook currently offers the option to use the "*View as…*" feature to see how their profile appears to others, they can only do this for a specific *Friend* or the public. Therefore, it does not give an image of how their profile looks to the majority of their contacts at a glance.

I suggest improving this by implementing a visual feature to each post according to how protected it is. This can be done by giving a certain line thickness or color to posts according to their audience, e.g., *Public*: green posts, *Friends*: yellow posts, *Only Me*: red posts. Nevertheless, the actual choice of colors should be left to the user. By implementing this feature, users would be able to see at a glance the privacy settings of their posts, photo albums, and personal information.

*Integrate unsocial behaviors*

Facebook constantly reminds people on ways to be social within their site, e.g., *Friend Suggestions* feature. However, less attention is placed to remind people on ways to revert social interactions. I found it interesting that although most of the participants of my study logged every day to Facebook, not all of them were fully aware of the available unsocial features and their capabilities, e.g., *Report/Block* or *Unsubscribe*. Furthermore, most of them were at some point doubtful about the features' functionalities, and used phrases such as "I don't know now, but in the past..." to denote that it is difficult to keep up with the constant changes made by Facebook.

I suggest giving context-sensitive information for the unsocial features. Providing help in the specific point of usage would make easier for users to be informed about the feature's capabilities. The current state of Facebook is such that users must access the *Help Center* page to get detailed information of the system capabilities. However, it was clear that participants do not have the common practice to access this help documentation, and even more clear that it is not always possible for users to keep up with the constant changes.

Facebook needs to inform users about the available system options in an integrated way. Therefore, I propose implementing this context-sensitive information in two ways.

First, I suggest implementing a "tool-tip" for the unsocial features. While the current version of Facebook provides context-sensitive information for some features, this is not consistently implemented throughout the site and tends to only remind users ways to be social. Figure 9 depicts Facebook's tool-tip for the *Audience Selector* when a post's audience is *Only Me*. However, there is no similar tool-tip to suggest the user to restrict their audience, e.g., when the post's audience is *Public*. Therefore, I suggest that similar context-sensitive information should be integrated to facilitate unsociability.
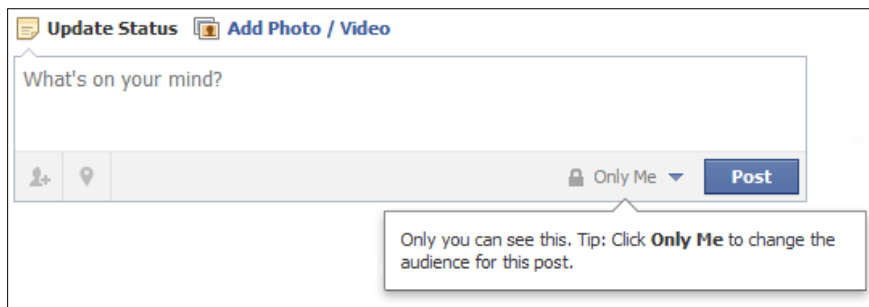


Figure 9. Tool-tip for the *Audience Selector* feature.

Second, I suggest implementing context-sensitive information and a "*Learn More*" link redirecting to the *Help Center* into the dialog windows of the unsocial features. This is illustrated in Figure 10. The top image presents the current dialog that pops up after clicking the *Unfriend* link. The bottom image presents the proposed dialog, including context-sensitive information and a link to the help documentation of *Unfriend*.
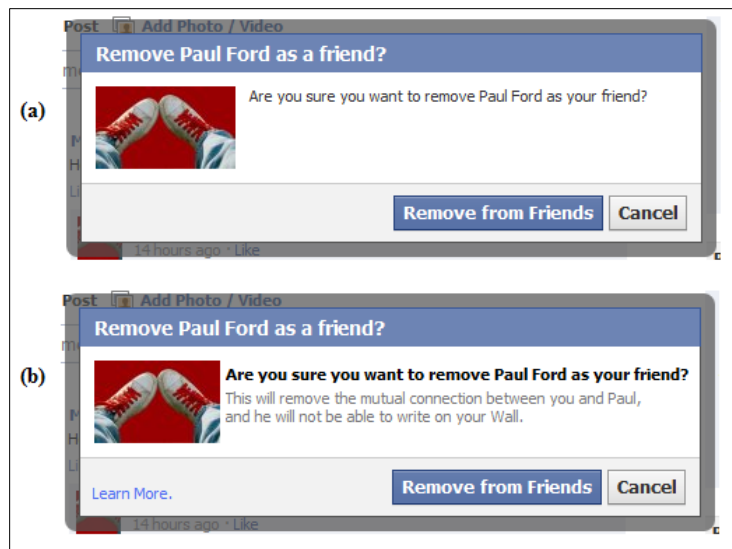


Figure 10. *Unfriend* dialog help.

By implementing context-sensitive information to the unsocial features, users get information on how to proceed when they are unsure about the capabilities of the features. Moreover, it would make easier for them to keep up to date with the capabilities of the system.

*Provide flexible and reversible unsocial features*

People switch gracefully among states, systems do not (Ackerman, 2000). For instance, the binary mechanism to indicate social connections on SNSs has no in-between as friendships do in real life. Therefore, people use (or avoid using) unsocial features to switch between states, matching their actions with their social understanding of the site.

I found that participants had mostly positive perceptions of the unsocial features that place a self-boundary around them to manage their privacy, since they are more accessible to use for some participants, e.g., users favoring the cautious style, than those features that place dyadic boundaries. Therefore, I argue that allowing users to set self-boundaries to switch among states is vital to support unsociability.

I suggest implementing a "soft" version of *Unfriend*, to give users the possibility to reduce their network size without feeling rude or harsh to others. This could be done by implementing a "*Disconnect*" feature to place an invisible self-boundary between users, so that they mutually stop sharing and receiving content, but continue to be listed as *Friends*. In other words, this feature would be a sort of two-way *Unsubscribe*.

Figure 11 presents the proposed social dynamic of *Disconnect* that can be compared to the dynamic of *Unfriend* depicted in Figure 5. In the top image of Figure 11, the initiator and target share a mutual connection. In the bottom image, the initiator uses the *Disconnect* feature to blur the connection with the target, but the mutual connection between both users still exists.
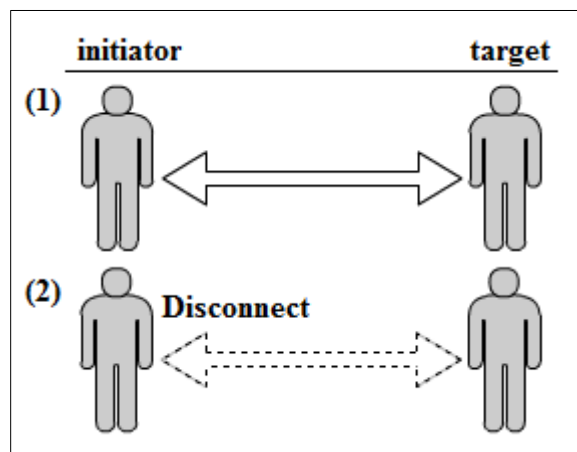


Figure 11. Proposed *Disconnect* dynamic.

After using the *Disconnect* feature, users would still be able to establish personal communications and have the possibility to "connect back" any time given that a mutual relation still exists. Implementing this feature provides more options for users to manage their privacy and self-presentation without producing increased awareness cues to others.

*Remember that people do not want to be social every time*

I argue that Facebook should assume that "people do not want to be social every time" as a default when it comes to designing unsocial features. That is, Facebook designers should consider the existence of different social practices used to elude people and support users when they simply do not want to be social. To illustrate the importance of assuming this "unsocial" design policy, I describe two common unsocial behaviors that currently are not adequately supported by Facebook: storing unwanted *Friend Requests* and ignoring chat messages.

People store unwanted *Friend Requests* to reduce the unpleasantness and social costs of rejecting someone they know offline (boyd, 2004). However, since the request is not rejected, Facebook "assumes" that both users are connected in some way. Therefore, when a user stores a request, Facebook lists their public updates on their *News Feed*, even if the connection has not been accepted[13].

On the other hand, Facebook recently introduced the "*Seen*" functionality to Facebook chat[14]. With this new feature, users get notified whenever a *Friend* reads a chat message they have sent[15]. As illustrated in Figure 12, this new functionality does not allow users to simply ignore a message, as the sender would notice that his or her message was read and went ignored. The "*Seen*" functionality cannot be deactivated.



Figure 12. *Seen* functionality of Facebook chat.

The problem with the current design of these features is that they do not allow users to be "interactionally unresponsive" (Aoki & Woodruff, 2005), i.e., interact without action. That is, the system gives a meaning to their unresponsiveness, and more importantly, communicates it to the targeted person. Therefore, to better support these unsocial behaviors, Facebook should allow users to be ambiguous.

---

[13] https://www.facebook.com/help/?page=132070650202524
[14] http://techcrunch.com/2012/05/04/facebook-messenger-read-receipts/
[15] https://www.facebook.com/help/?page=168044269923334

Using ambiguity, people try to untie their actions from the observed result, so that their behaviors can admit multiple interpretations (Aoki & Woodruff, 2005). Therefore, designers should "beware inhibiting" these existing social practices (Lederer et al., 2004, p. 448), as people try being intentionally ambiguous to create "plausible deniability" and reduce accountability from their actions.

Even though the concept of "ambiguity" is usually avoided by HCI designers, it can signify multiple advantages for users (Gaver, Beaver, & Benford, 2003). In this case, ambiguity would reduce the social costs of unsocial behaviors. That is because it is up to the targeted person, and not to the system, to give meaning to the unsocial behavior.

In summary, supporting unsociability will allow users to save face and address privacy concerns according to their social needs. This support is even more important as SNSs continue to grow and stay over time. I illustrate this point in Fragment 48, where two participants build on each other's words to express their increasing concern about how to interact on Facebook.

*Fragment 48*

*P6: I just think that Facebook is kind of...*

*P7: Growing*

*P6: Growing more...*

*P7: Without directions...*

*P6: Yeah, without any direction, it's expanding. Growing everywhere, and is no sense of direction, no sense of privacy actually [agreement]. [Group 3]*

Though the previously outlined ideas have a long way to become fully functional design considerations, the purpose is to provide users with integrated options to "revert" social interactions in a silent, easy, and flexible way. My aim is to set guidelines that can ground and motivate further research for developing the concept of unsociability.

While it is still a challenge for designers of SNSs to enable interactions sensible to various interpretations of social norms (Binder, Howes, & Sutcliffe, 2009), understanding specific online behaviors is a step towards overcoming this challenge (Hughes et al., 2012). Accordingly, I claim that is vital to understand and support unsocial behaviors as a mechanism for satisfying the underlying social needs, such as privacy and self-presentation management. Supporting unsociability will encourage and facilitate social interactions over SNSs. For this end, it is important to design mechanisms to meet the social needs that are enabled by the structure and purpose of each SNS. The unsocial features should then be considered as "a pair of running shoes instead of crutches" (Hollan & Stornetta, 1992) for enhancing online social interactions.

# 9. Conclusions

In this thesis, I study the "reversed" sociability – unsociability – as a novel way to approach online social interactions. I found that unsociability should be supported under the same considerations of sociability, as people handle both in similar ways.

Using focus groups as research method, I uncovered the practices and perceptions of people engaging in unsocial events. This method enabled participants to discuss with others their opinions about these events in relaxed, yet moderated environments. After that, I used two data analysis techniques, content analysis and grounded theory, to reveal the significance of participants' utterances and group dynamics.

Results show that the structures of Facebook, Twitter, LinkedIn, and Google+, are determinant to how each site supports unsociability. I argue that people consequently follow different patterns to approach the unsocial features on each site: a social-over-technical pattern on Facebook; a content-over-social pattern on Twitter; a purpose-over-social pattern on LinkedIn; and a critical mass-over-unsocial pattern on Google+.

The social-over-technical pattern of Facebook indicates that people use (or avoid using) the unsocial features based on their social understandings rather than on the technical capabilities of the features. Moreover, people follow this pattern to save face, and manage their privacy while "reversing" social interactions.

I learned that people try to keep their unsocial behaviors as positive and ambiguous as possible, expecting to reduce personal accountability for these behaviors, especially when they know the targeted person offline. To this purpose, I found people use two "golden rules" to guide their unsocial behaviors: (1) keeping unsociability as silent and discreet as possible, and (2) not taking the unsocial behaviors of others "too seriously".

Accordingly, results point to participants favoring what I call soft unsocial features, which enable users to place a self-boundary around them and produce a minimum of awareness cues out of their unsocial behaviors. In contrast, hard unsocial features place a dyadic boundary, directly involving the targeted person. Therefore, participants consider these hard features to have increased social costs.

Nevertheless, not all people interpret these golden rules and unsocial features in the same way. I found three distinctive attitudes towards unsociability: the experimental style, where people perceive none or few social costs out of unsocial events; the cautious style, where people feel that some of the unsocial features should be avoided as they may be rude or impolite; and the restrictive style, where people use stringent privacy settings to put a barrier between them and their *Friends* to avoid interactions.

As these platforms continue to take over online activities, their users grow to be

more diverse, unknown, and woven into intricate social contexts. I argue that unsociability should be an important consideration for SNSs designers. The reason for this is that people use these sites to manage their self-presentation over a large network of mostly persons they know offline. In view of that, it is important to offer users integrated options to "revert" social interactions without threatening their privacy and face. I argue that the unsocial features should be silent, flexible, and easy to use. Furthermore, designers should remember that people do not want to be social all the time; and that they have established practices that should be respected and supported, such as the use of ambiguity to reduce accountability for their actions.

The contribution of this thesis is to reveal the concept of unsociability, exposing the unsocial events users engage in, and placing them as important considerations of interactions in these platforms. For future research, I recommend HCI designers and researchers to further expand the concept of unsociability and continue to develop the design considerations proposed.

Online social interactions are complex processes that include much more than just "adding *Friends*". The concept of unsociability has a tremendous potential as a mechanism for helping users to satisfy the underlying social needs of privacy and self-presentation management. Designing for unsociability will enhance the performance of these platforms by supporting user's social needs to encourage and facilitate online interactions.

# References

Ackerman, M. S. (2000). The intellectual challenge of CSCW: The gap between social requirements and technical feasibility. *Human-Computer Interaction, 15* (2), 179–203. doi:10.1207/S15327051HCI1523_5

Altman, I. (1975). *The Environment and Social Behavior*. Monterey, CA: Brooks/Cole.

Altman, I. (1976). Privacy: 'A conceptual analysis'. *Environment and Behavior, 8* (1)*,* 7–29. doi:10.1177/001391657600800102

Altman, I. (1977). Privacy regulation: Culturally universal or culturally specific? *Journal of Social Issues, 33* (3), 66–84. doi:10.1111/j.1540-4560.1977.tb01883.x

Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior, 26* (6), 1289–1295. doi:10.1016/j.chb. 2010.03.018

Aoki, P., & Woodruff, A. (2005). Making space for stories: Ambiguity in the design of personal communication systems. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (CHI '05), 181–190. doi:10.1145/1054972. 1054998

Barbour, R. (2007). Practicalities of planning and running focus groups. Ch. 6 in Barbour, R., *Doing Focus Groups* (pp. 75–91). London, UK: Sage Publications. doi:10.4135/9781849208956

Bellotti, V., & Sellen, A. (1993). Design for privacy in ubiquitous computing environments. In *Proceedings of the third European Conference on Computer-Supported Cooperative Work* (ECSCW '93), 77–92. Norwell, MA: Kluwer Academic Publishers.

Binder, J., Howes, A., & Sutcliffe, A. (2009). The problem of conflicting social spheres: Effects of network structure on experienced tension in social network sites. In *Proceedings of the 27th international conference on Human factors in computing systems* (CHI '09), 965–974. doi:10.1145/1518701.1518849

boyd, d. m. (2004). Friendster and publicly articulated social networking. In *Extended abstracts on Human factors in computing systems* (CHI EA '04), 1279–1282. doi:10.1145/985921.98604

boyd, d. m. (2006a, September 8). Facebook's 'privacy trainwreck': Exposure, invasion, and drama [Blog entry]. Retrieved from http://www.danah.org/papers/Facebook AndPrivacy.html

boyd, d. m. (2006b). Friends, friendsters, and MySpace top 8: Writing community into being on social network sites. *First Monday, 11* (12). Retrieved from http://www.firstmonday.org/issues/issue11_12/boyd

boyd, d. m. (2008). *Taken out of context: American teen sociality in networked publics*. (Doctoral dissertation). University of California, Berkeley. Retrieved from http://www.danah.org/papers/TakenOutOfContext.pdf

boyd, d. m. (2010). Social network sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), *Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 39–58). Retrieved from http://www.danah.org/papers/2010/SNSasNetworkedPublics.pdf

boyd, d. m., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, *13* (1). Retrieved from http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html

Bryant, E., & Marmo, J. (2009, November). *Relational maintenance strategies on Facebook*. Presented at the National Communication Association (NCA) 95th Annual Convention, Chicago IL.

Bryant, E., & Marmo, J. (2010). Relational maintenance strategies on Facebook. *The Kentucky Journal of Communications*. Retrieved from http://kycommuni cation.com/jenniferpdf/Bryant.pdf

Burke, M., Kraut, R., & Marlow, C. (2011). Social capital on Facebook: Differentiating uses and users. In *Proceedings of the 2011 annual conference on Human factors in computing systems* (CHI '11), 571–580. doi:10.1145/1978942.1979023

Canary, D. J., Stafford, L., Hause, K. S., & Wallace, L. A. (1993). An inductive analysis of relational maintenance strategies: Comparisons among lovers, relatives, friends, and others. *Communication Research Reports, 10* (1), 3–14. doi:10.1080/08824099309359913

Chenault, B. G. (1998, May). Developing personal and emotional relationships via computer-mediated communications. *Computer-Mediated Communication Magazine, 5* (5). Retrieved from http://december.com/cmc/mag/1998/ may/chenault.html

ComScore. (2011). *It's a social world: Top 10 need-to-knows about social networking and where it's headed.* Retrieved from http://www.comscore.com/Press_Events/ Presentations_Whitepapers/2011/it_is_a_social_world_top_10_need-to-knows_ab out_social_networking

Donath, J., & boyd, d. m. (2004). Public displays of connection. *BT Technology Journal, 22* (4), 71–82. doi:10.1023/B:BTTJ.0000047585.06264.cc

Dourish, P., & Bly, S. (1992). Portholes: Supporting awareness in a distributed work group. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (CHI '92), 541–547. doi:10.1145/142750.142982

Efrati, A. (2012, February 28). The mounting minuses at Google+ [Blog entry]. Retrieved from http://online.wsj.com/article/SB10001424052970204653604577 249341403742390.html

Erickson, T., & Kellogg, W. A. (2000). Social translucence: An approach to designing systems that support social processes. *ACM Transactions on Computer-Human Interaction* (TOCHI), *7* (1), 59–83. doi:10.1145/344949.345004

Eriksson, P., & Kovalainen, A. (2008). Focus group research. Ch. 12 in Eriksson, P., & Kovalainen, A., *Qualitative Methods in Business Research* (pp. 174–192). London, UK: Sage Publications. doi:10.4135/9780857028044

Fono, D., & Raynes-Goldie, K. (2006). Hyperfriends and beyond: Friendship and social norms on LiveJournal. In M. Consalvo & C. Haythornthwaite (Eds.), *Internet Research Annual, 4* (33). Retrieved from http://k4t3.org/publications/hyper friendship.pdf

Gaver, W., Beaver, J., & Benford, S. (2003). Ambiguity as a resource for design. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (CHI '03), 233–240. doi:10.1145/642611.642653

Gilbert, E. (2012). Designing social translucence over social networks. In *Proceedings of the 2012 ACM annual conference on Human factors in computing systems* (CHI '12), 2731–2740. doi:10.1145/2207676.2208670

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine Publishing Company.

Goffman, E. (1967). *Interaction Ritual: Essays in Face-to-Face Behavior.* Chicago: Aldine Publishing Company.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology, 78* (6), 1360–1380. Retrieved from http://www.jstor.org/stable/2776392

Gross, R., & Acquisti, A. (2005). Information revelation and privacy in online social networks. In *Proceedings of the 2005 ACM workshop on Privacy in the electronic society* (WPES '05), 71–80. doi:10.1145/1102199.1102214

Guerrero, L. K., Andersen, P. A., & Afifi, W. A. (2011). Staying close: Maintaining relationships. Ch. 9 in Guerrero, L. K., Andersen, P. A., & Afifi, W. A., *Close encounters: Communication in relationships* (3rd edition) (pp. 205–230). Thousand Oaks*,* CA: Sage publications.

Hagen, P., & Robertson, T. (2010). Social technologies: Challenges and opportunities for participation. In *Proceedings of the 11th Biennial Participatory Design Conference* (PDC '10), 31–40. doi:10.1145/1900441.1900447

Hargittai, E. (2007). Whose space? Differences among users and non-users of social network sites. *Journal of Computer-Mediated Communication, 13* (1). Retrieved from http://jcmc.indiana.edu/vol13/issue1/hargittai.html

Hargittai, E., & Hsieh, Y. P. (2010). Predictors and consequences of differentiated social network sites. *Information, Communication and Society, 13* (4), 515–536. doi:10.1080/13691181003639866

Hart, J., Ridley, C., Taher, F., Sas, C., & Dix, A. (2008). Exploring the Facebook experience: A new approach to usability. In *Proceedings of the 5th Nordic*

*conference on Human-computer interaction* (NordiCHI '08), 471–474. doi:10.1145/1463160.1463222

Hollan, J., & Stornetta, S. (1992). Beyond being there. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (CHI '92), 119–125. doi:10.1145/142750.142769

Huberman, B., Romero, D. M., & Wu, F. (2009). Social networks that matter: Twitter under the microscope. *First Monday*, *14* (1). Retrieved from http://firstmonday.org/issues/issue14_1/huberman

Hughes, D. J., Rowe, M., Batey, M., & Lee, A. (2012). A tale of two sites: Twitter vs. Facebook and the personality predictors of social media usage. *Computers in Human Behavior, 28* (2), 561–569. doi:10.1016/j.chb.2011.11.001

Ingram, M. (2011, September 14). Should Twitter be afraid of Facebook's subscribe feature? [Blog entry]. Retrieved from http://gigaom.com/2011/09/14/should-twitter-be-afraid-of-facebooks-subscribe-feature/

Joinson, A. (2008). Looking at, looking up or keeping up with people?: Motives and use of Facebook. In *Proceedings of the twenty-sixth annual SIGCHI conference on Human factors in computing systems* (CHI '08), 1027–1036. doi:10.1145/1357054.1357213

Joinson, A., Reips, U., Buchanan, T., & Paine Schofield, C. B. (2010). Privacy, trust, and self-disclosure online. *Human-Computer Interaction*, *25* (1), 1–24. doi:10.1080/07370020903586662

Kivran-Swaine, F., Govindan, P., & Naaman, M. (2011). The impact of network structure on breaking ties in online social networks: Unfollowing on Twitter. In *Proceedings of the 2011 annual conference on Human factors on computing systems* (CHI '11), 1101–1104. doi:10.1145/1978942.1979105

Kolb, B. (2008). Analyzing verbal and other qualitative data. Ch. 14 in Kolb, B., *Marketing Research* (pp. 229–245). London, UK: Sage Publications. doi:10.4135/9780857028013

Kwak, H., Chun, H., & Moon, S. (2011). Fragile online relationship: A first look at unfollow dynamics in Twitter. In *Proceedings of the 2011 annual conference on Human factors in computing systems* (CHI '11), 1091–1100. doi:10.1145/1978942.1979104

Lampe, C., Ellison, N. B., & Steinfield, C. (2006). A Face(book) in the crowd: Social searching vs. social browsing. In *Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work* (CSCW '06), 167–170. doi:10.1145/1180875.1180901

Lampe, C., Ellison, N. B., & Steinfield, C. (2007). A familiar Face(book): Profile elements as signals in an online social network. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (CHI '07), 435–444. doi:10.1145/1240624.1240695

Lampe, C., Ellison, N. B., & Steinfield, C. (2008). Changes in use and perception of Facebook. In *Proceedings of the 2008 ACM conference on Computer supported cooperative work* (CSCW '08), 721–730. doi:10.1145/1460563.1460675

Lampinen, A., Lehtinen, V., Lehmuskallio, A., & Tamminen, S. (2011). We're in it together: Interpersonal management of disclosure in social network services. In *Proceedings of the 2011 annual conference on Human factors in computing systems* (CHI '11), 3217–3226. doi:10.1145/1978942.1979420

Lapidot-Lefler, N., & Barak, A. (2012). Effects of anonymity, invisibility, and lack of eye-contact on toxic online disinhibition. *Computers in Human Behavior, 28* (2), 434–443. doi:10.1016/j.chb.2011.10.014

Lea, M., & Spears, R. (1992). Paralanguage and social perception in computer-mediated communication. *Journal of Organizational Computing, 2*(3–4), 321–341.

Lederer, S., Hong, I., Dey, K., Landay, A. (2004). Personal privacy through understanding and action: Five pitfalls for designers. *Personal and Ubiquitous Computing, 8* (6), 440–454. doi:10.1007/s00779-004-0304-9

Ma, H. K., Li, S. C., & Pow, J. W. (2011). The relation of internet use to prosocial and antisocial behavior in Chinese adolescents. *Cyberpsychology, Behavior, and Social Networking, 14* (3), 123–130. doi:10.1089/cyber.2009.0347

Marder, B., Joinson, A., & Shankar, A. (2012). Every post you make, every pic you take, I'll be watching you: Behind social spheres on Facebook. In *Proceedings of the 2012 45th Hawaii International Conference on System Sciences* (HICSS '12), 859–868. doi:10.1109/HICSS.2012.12

Morgan, D. L. (1997). Planning and research design for focus groups. Ch. 4 in Morgan, D. L., *Focus Groups as Qualitative Research* (2nd edition) (pp. 32–45). Thousand Oaks, CA: Sage Publications. doi:10.4135/9781412984287

Naaman, M., Boase, J., & Lai, C. H. (2010). Is it really about me?: Message content in social awareness streams. In *Proceedings of the 2010 ACM conference on Computer supported cooperative work* (CSCW '10), 189–192. doi:10.1145/1718918.1718953

Nardi, B., Whittaker, S., & Bradner, E. (2000). Interaction and outeraction: Instant messaging in action. In *Proceedings of the 2000 ACM conference on Computer supported cooperative work* (CSCW '00), 79–88. doi:10.1145/358916.358975

OUPblog (Oxford University Press) (2009, November 16). Oxford Word of the Year 2009: Unfriend [blog entry]. Retrieved from http://blog.oup.com/2009/11/unfriend/

Palen, L., & Dourish, P. (2003). Unpacking "privacy" for a networked world. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (CHI '03), 129–136. doi:10.1145/642611.642635

Papacharissi, Z. (2009). The virtual geographies of social networks: A comparative analysis of Facebook, LinkedIn and ASmallWorld. *New Media and Society, 11* (1–2), 199–220. doi:10.1177/1461444808099577

Papacharissi, Z., & Mendelson, A. (2011). Toward a new(er) sociability: Uses, gratifications, and social capital on Facebook. In S. Papathanassopoulos (Ed.), *Media Perspectives for the 21st Century* (pp. 212–231). Milton Park, UK: Routledge.

Powell, R. A., & Single, H. M. (1996). Focus groups. *International Journal for Quality in Health Care*, *8* (5), 499–504. doi:10.1093/intqhc/8.5.499

Preece, J. (2000). *Online Communities: Designing Usability, Supporting Sociability.* Chichester, UK: John Wiley & Sons.

Preece, J., Rogers, Y., & Sharp, H. (2002). *Interaction Design: Beyond Human-Computer Interaction.* New York: John Wiley & Sons.

Puchta, C., & Potter, J. (2004). Focus groups and interaction. Ch. 1 in Puchta, C., & Potter, J., *Focus Group Practice* (pp. 2–24). London, UK: Sage Publications. doi:10.4135/9781849209168

Raento, M., & Oulasvirta, A. (2008). Designing for privacy and self-presentation in social awareness. *Personal and Ubiquitous Computing, 12* (7), 527–542. doi:10.1007/s00779-008-0200-9

Raynes-Goldie, K. (2010). Aliases, creeping, and wall cleaning: Understanding privacy in the age of Facebook. *First Monday*, *15* (1–4). Retrieved from http://firstmonday.org/issues/issue15_1/Raynes-Goldie

Robson, C. (1993). *Real World Research.* Oxford, UK: Blackwell publishing.

Ross, C., Orr, E., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior, 25* (2), 578–586. doi:10.1016/j.chb.2008.12.024

Schrammel, J., Köffel, C., & Tscheligi, M. (2009). Personality traits, usage patterns and information disclosure in online communities. In *Proceedings of the 23rd British HCI Group Annual Conference on People and Computers* (BCS-HCI '09), 169–174. Swinton, UK: British Computer Society.

Shen, K., Khalifa, M., & Yu, A. (2006). Supporting social interaction in virtual communities: Role of social presence. In *Proceedings of the Twelfth Americas Conference on Information Systems* (AMCIS '06), 4461–4469. Retrieved from http://aisel.aisnet.org/amcis2006/527

Sibona, C., & Walczak, S. (2011). Unfriend on Facebook: Friend request and online/offline behavior analysis. In *Proceedings of the 2011 44th Hawaii International Conference on System Sciences* (HICSS '11), 1–10. doi:10.1109/HICSS.2011.467

Skeels, M. M., & Grudin, J. (2009). When social networks cross boundaries: A case study of workplace use of Facebook and LinkedIn. In *Proceedings of the ACM*

*2009 international conference on Supporting group work* (GROUP '09), 95–104. doi:10.1145/1531674.1531689

Stewart, D. W., Shamdasani, P. N., & Rook, D. W. (2007). Analyzing focus group data. Ch. 7 in Stewart, D. W., Shamdasani, P. N., & Rook, D. W., *Focus Groups: Theory and Practice* (2nd edition) (pp. 109–133). Thousand Oaks, CA: Sage Publications. doi:10.4135/9781412991841

Sundén, J. (2003). *Material Virtualities*. New York: Peter Lang.

Tokunaga, R. S. (2011). Friend me or you'll strain us: Understanding negative events that occur over social networking sites. *Cyberpsychology, Behavior, and Social Networking, 14* (7–8), 425–432. doi:10.1089/cyber.2010.0140

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. doi:10.1177/0270467607311484

Utz, S. (2010). Show me your friends and I will tell you what type of person you are: How one's profile, number of friends, and type of friends influence impression formation on social network sites. *Journal of Computer-Mediated Communication, 15* (2), 314–335. doi:10.1111/j.1083-6101.2010.01522.x

Yee, N., Bailenson, J. N., Urbanek, M., Chang, F., & Merget, D. (2007). The unbearable likeness of being digital: The persistence of nonverbal social norms in online virtual environments. *Cyberpsychology & Behavior, 10* (1), 115–121. doi:10.1089/cpb.2006.9984

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior, 24* (5), 1816–1836. doi:10.1016/j.chb.2008.02.012

Zimmer, B. (2009, September 15). The age of undoing [blog entry]. Retrieved from http://www.nytimes.com/2009/09/20/magazine/20FOB-onlanguage-t.html?_r=2

## Appendix 1: Glossary of unsocial features

This appendix briefly describes the functionalities of the anticipated unsocial features for the four sites reviewed in this study. The information here presented can be found on the Help documentation pages of each site. Moreover, I experimented with the functionalities of these features using the made-up profiles created for this study. Further details on where the information can be found for each individual site are presented below.

It is worth noting that the features and functionalities presented were available as of November 2011, when the printouts for the focus groups where prepared. However, they may not be accurate to current system versions.

### Facebook

The information presented below can be found in Facebook's *Help Center*[16]. Additionally, I experimented with these features to test the functionalities and review the awareness cues they produce. Facebook gives context-sensitive information after clicking on some of these features, e.g., *Report/Block*, giving basic details on its functionality.

*Unfriend*

The purpose of the *Unfriend* feature is to remove a *Friend* connection. Unfriending can be done through the *Friend List* or directly on the profile of the person one wants to remove, as illustrated in Figure 1. After clicking the *Unfriend* option, a confirmation window pops up. If the action is confirmed, the visible virtual link between both users will be automatically removed.

Facebook does not actively notify the use of the *Unfriend* feature. However, the *Friend List* gets reduced by one; the *Friend Suggestions* feature and *Send Friend Request* button are reactivated; and the updates of both users are no longer listed on each other's *News Feed*. To revert unfriending, a new *Friend Request* should be sent.
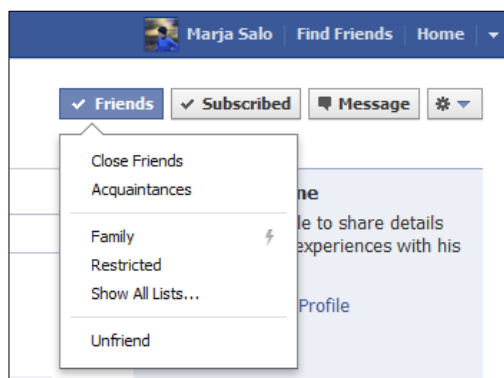


Figure 1. Facebook *Unfriend* link.

---

[16] https://www.facebook.com/help/

*Not Now/Delete Request*

Facebook's *Friend Requests* can be handled in two ways. The first is to agree on creating a connection. The second is to click the *Not Now* button in order to ignore the request (see Figure 2). After selecting the *Not Now* option, the system enquires if the user knows the requester outside Facebook. If the answer is *No,* the request is automatically rejected and blocked. When the answer is *Yes,* the request is stored under the *Hidden Requests* list, which is a storage of unanswered *Friend Requests.*

On the *Hidden Requests* list, users get the chance to *Delete* or *Confirm* any stored request. Facebook does not send a notification when a *Friend Request* is deleted or ignored, but when a request is deleted, the *Friend Suggestions* feature and the *Send Friend Request* button are reactivated. Accepted requests are notified.
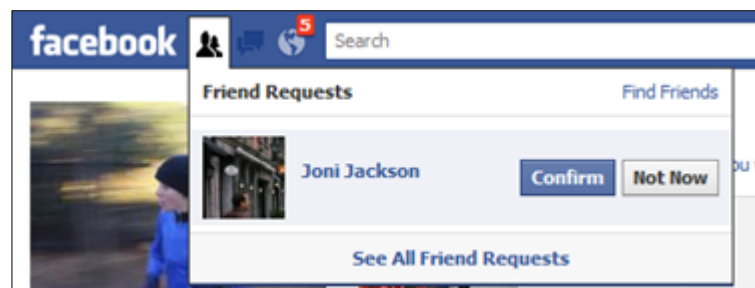


Figure 2. Facebook *Not now* button.

*Report/Block*

The *Report/Block* feature restricts access to a profile by mutually cutting the connection between two persons on Facebook. In other words, the users become "invisible" to each other[17].

This feature has two clear functionalities: to *Report* and to *Block* users. The *Block* functionality produces three results. First, the visible virtual link between users is automatically removed. Second, the updates of both users are no longer listed on their *News Feeds*. Finally, the users are not able to interact or find each other on Facebook, with the exception of external applications, such as online games. On the other hand, *Report* has the same results of *Block*, but it also sends a notification to Facebook's moderators about inappropriate behaviors, e.g., bullying or impersonation.

The *Report/Block* link can be found on the *Privacy Settings* or directly on each *Friend* profile. After clicking, a window pops up for people to choose between using the *Unsubscribe, Unfriend,* or *Block* features with that person. In addition, users have four options for reporting inappropriate behaviors, e.g., "*My friend is harassing or bullying me*". This dialog is presented in Figure 3.

Selecting the *Block* option will display a feedback message, giving the option to edit the *Block list* on the *Privacy Settings*. The connection can only be restored after the user is removed from the *Block list* and a new *Friend Request* is sent. Blocking a *Friend* does not produce an automatic system notification.

---

[17] https://www.facebook.com/help/search/?q=block

Figure 3. Facebook *Report/Block* dialog.

*Lists*

Users can create groups to filter both inbound and outbound content on Facebook using the *Lists* feature. These *Lists* can be done manually or automatically. By using the *Lists* feature manually, people can classify "by hand" their *Friends* into different groups. Some groups are suggested by Facebook, e.g., *Close Friends* and *Restricted*, while others can be customized by users. Automatically-created lists are called *Smart Lists*, where Facebook clusters people with common characteristics under a list, e.g., people listed as *Family* on a profile.

People do not get notified when they are added, either automatic or manually, to a group. Furthermore, users can control the privacy restriction for each *List*. For instance, the *Restricted List* by default can only access public content. The *Lists* feature can also be used to filter the content shared, as users can choose to share (or not to share) a post with one or more of their *Lists* with a feature named *Audience Selector,* available near each *Post* button of the profile as illustrated in Figure 4.
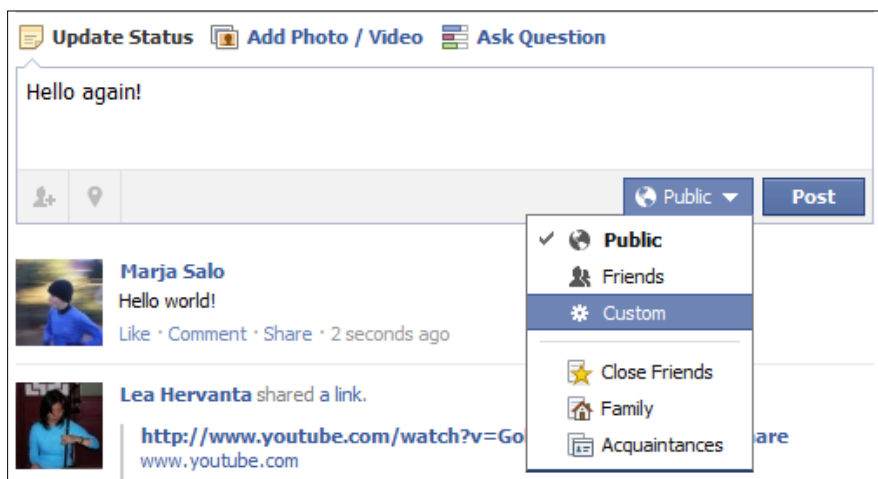


Figure 4. Facebook *Audience Selector* menu.

*Unsubscribe*

The *Unsubscribe* feature is used to customize the posts a person wants to see listed from each of their *Friends* on the *News Feed*. Unsubscribing from a person means that none of the updates of that *Friend* are shown on the stream. This only serves to limit content, but not to break online ties with that person.

The links to *Unsubscribe* are located on the menu available on each post of the *News Feed*. As appearing in Figure 5, people can choose to hide individual posts, i.e., *Hide Story,* unsubscribe from all the posts from a person, or just from status updates. Users can customize to show *All Updates, Most Updates* or *Only Important* posts from those of whom he or she is subscribed to. No notifications are given about any of these actions and people can *Subscribe* back to the updates of their contacts at any time.
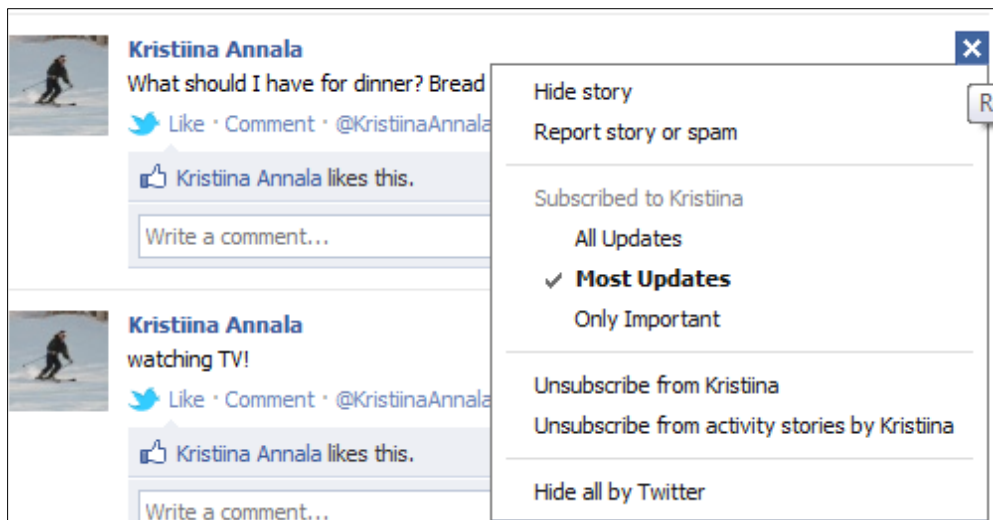


Figure 5. Facebook *Unsubscribe* menu.

## Twitter

The following information about the unsocial features of Twitter was retrieved from the site's *Help Center*[18]. By hovering over some of the unsocial features, Twitter offers context-sensitive information about its functionality, e.g., *Turn off Retweets*. Finally, I experimented with these features using made-up Twitter profiles.

*Unfollow*

Twitter users can revert a *Following* by using the *Unfollow* button (see Figure 6). After unfollowing a profile, their updates are not shown on the *Timeline*. The *Unfollow* button can be found by hovering over the *Following* button. After clicking *Unfollow,* that profile is automatically unfollowed, and the *Follow* button reappears on the profile. Using the *Unfollow* feature does not generate any system notification.

---

[18] https://support.twitter.com/

Figure 6. Twitter *Unfollow* button.

*Decline*

Even though Twitter accounts are public by default, users can change their *Account Settings* to protect their broadcasted content, i.e., *Tweets,* by only sharing it with approved *Followers*. This means that users have to *Accept* or *Decline* their connection *Requests,* like presented in Figure 7. After selecting the *Decline* option, the request is deleted from the list, but no system notification is sent to the rejected person.
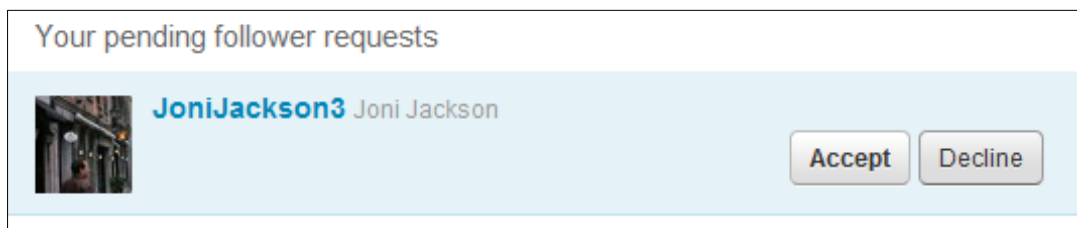


Figure 7. Twitter *Follower* request.

*Block*

Using the *Block* feature stops a person from sending messages or following a profile, as illustrated in Figure 8. Nevertheless, the public *Tweets* are still visible. The *Block* feature is found on the profile page of each user. After clicking on the link, a *Blocked* tag will appear on the profile, but the blocked user will not be notified of this action.
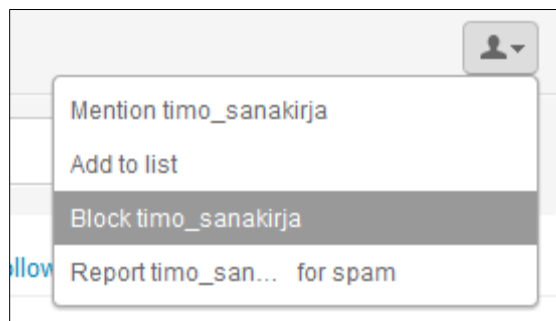


Figure 8. Twitter *Block* link.

*Turn off Retweets*

To stop receiving the *Retweets* from one person that is being followed, users can use the *Turn off Retweets* feature (see Figure 9). That is, the *Tweets* a person re-posts from another user, i.e., *Retweets*, will not be

visible anymore. This *Turn off Retweets* feature can be found by entering any followed profile and clicking a small button that reads "*Retweets from this user won't appear in your timeline*" when hovered. By selecting it, the action is performed. To undo, it is only necessary to click on the same button again.
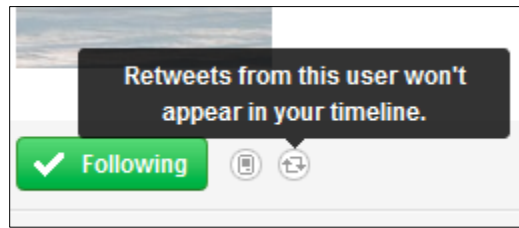


Figure 9. Twitter *Turn off Retweets* button.

# LinkedIn

The presented information about LinkedIn's unsocial features was retrieved from its *Help Center*[19]. Moreover, I experimented with the functionalities of the site using made-up profiles. Context-sensitive help is given after clicking on some of these features.

*Remove Connections*

The *Remove Connections* feature on LinkedIn (see Figure 10) deletes the online relation between two persons. To use this feature, users should open the *Connection* menu, access the *Connections* page, and click the *Remove Connections* link. On the *Remove Connections* page, users select the person(s) to delete, and click on the *Remove Connections* button. This action pops up a window for the user to confirm or cancel the removal.

After confirming the deletion, the visible virtual link between the users will be mutually removed, and activity updates will not be visible in the *Home* page anymore. Moreover, these users will be unable to send messages to each other. The deleted person will not be notified of this action. The user who made the removal will still have the contact of the deleted person under the *Imported Contacts* list, giving the possibility for the user to re-send an *Invitation*.
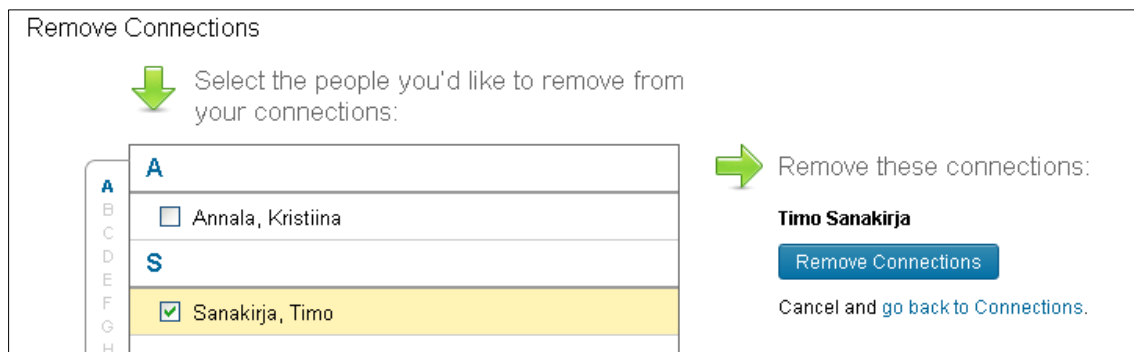


Figure 10. *Remove Connections* feature of LinkedIn.

*Ignore*

The *Ignore* feature is used to reject a connection request, or in LinkedIn terms, to reject an *Invitation*

---

[19] http://help.linkedin.com/

(illustrated in Figure 11). Rejected *Invitations* are stored under the *Archived* list. The user can choose to *Report as spam* or deny an offline connection (*I don't know (username)*) to avoid getting more *Invitations* from that person in the future. The rejected person does not get notified.
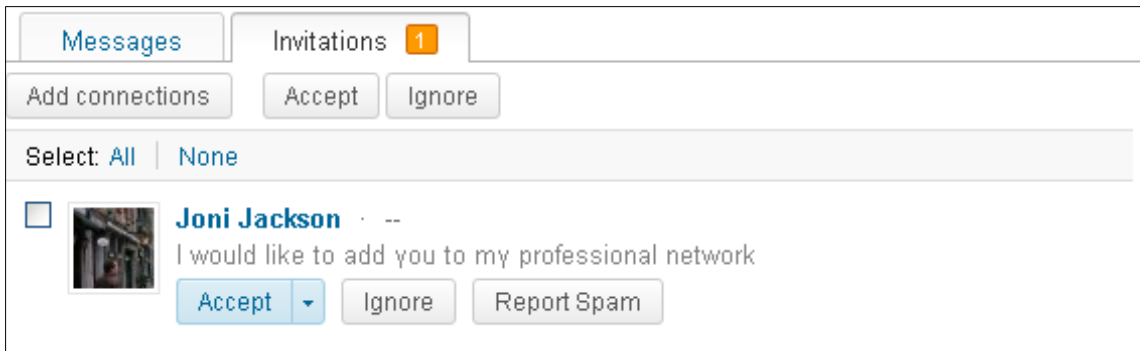


Figure 11. LinkedIn *Invitation* request.

*Hide*

The *Hide* feature (see Figure 12) is used to stop receiving updates from a contact on the *Home* page. This feature is found next to each post of the stream. People do not get notified when their updates are hidden from another profile.
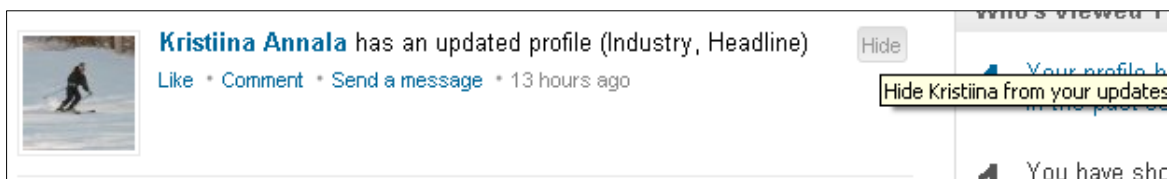


Figure 12. LinkedIn *Hide* feature.

*Who can see your activity feed*

Users can segregate the audience of each of their posts by selecting to share with their *Connections,* groups, or the general public by using the *Visible to* feature, available near the status update box. This feature is illustrated in Figure 13.
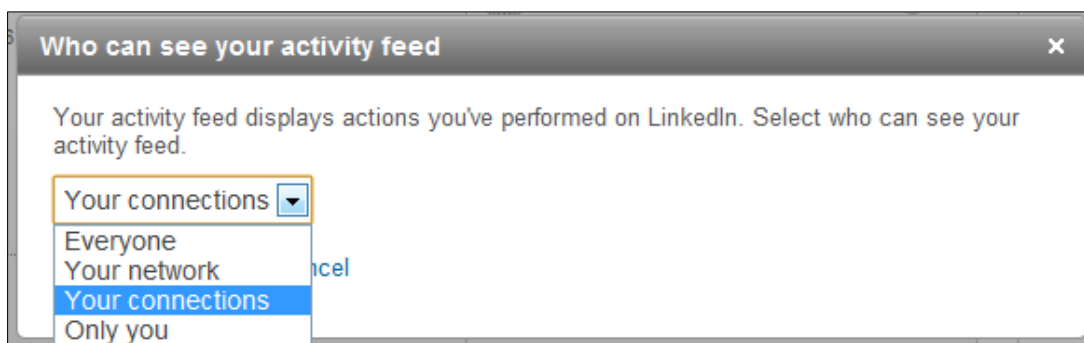


Figure 13. LinkedIn *Who can see your activity feed* dialog.

## Google+

The following information about the unsocial features of Google+ was retrieved from their *Support* page[20]. Most of Google+ unsocial features give context-sensitive information about their functionalities after the user clicks one of them. Finally, I experimented with these features to test their functionalities using made-up profiles.

*Remove*

The *Remove* feature of Google+ deletes the visible virtual link between users. This feature, presented in Figure 14, is found on the *Circles* page, where users can hover over their contacts' icons to see a tooltip with information about their connection status, e.g., in which circles is he or she listed. To remove a contact, users have to click on the icon of the person they want to remove and click on the *Remove* link. Clicking the link will automatically delete the selected person from all the *Circles* that he or she was added to.

At the same time, a banner pops up on the top of the page as a confirmation of the action. There users also have the possibilities to *Undo,* or to also remove the person from the Google contact address book, i.e., not only from Google+.

Removing users from *Circles* means that the content shared in the future will not be available to that person, but the public content will still be available. Furthermore, the updates of the removed person will no longer be visible on the *Stream.* The removal of users has no further system notification.
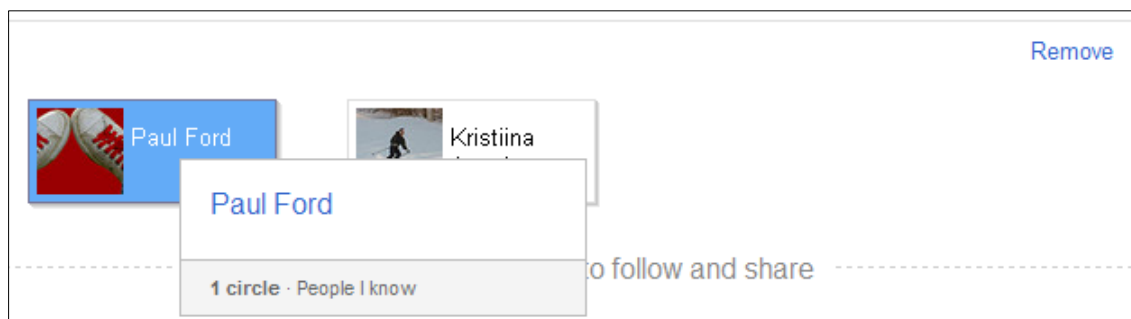


Figure 14. Google+ *Remove* link.

*Ignore*

As Google+ connections can be symmetrical or asymmetrical, there is no need to confirm a connection to add a person to *Circles.* Because users get notified when a person adds them to their *Circles,* they can choose between three options. First, they can turn the connection symmetrical by adding the person back. Second, they can leave the connection asymmetrical by leaving the person listed under the *People who've added you* (or *People you have you in circles*) tab. Third, the connection can be rejected using the *Ignore* link (illustrated in Figure 15) so the contact will no longer be listed as inside the user's network.

---

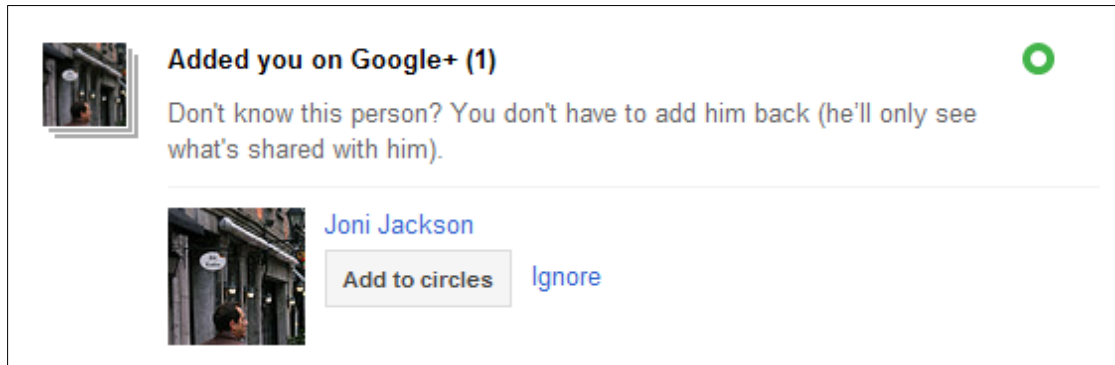[20] http://support.google.com/plus/?hl=en&p=help_center

Figure 15. Google+ *Ignore* connection request.

*Block*

The *Block* link on Google+ can be found on each user's profile or on the *Circles* tab, on the *More* menu that becomes available after selecting any contact's icon. After selecting the *Block* link, a confirmation window pops up, where users can choose to *Cancel* the action, *Report and block,* or just to *Block* the person. This confirmation window is illustrated in Figure 16.

After the blocking is confirmed, the person is no longer listed as a connection in any other way. Additionally, the person will not be able to interact with the user or comment on protected content, but it can still be done on public content. The blocked person does not get notified of the action. Blocking can be easily reversed.
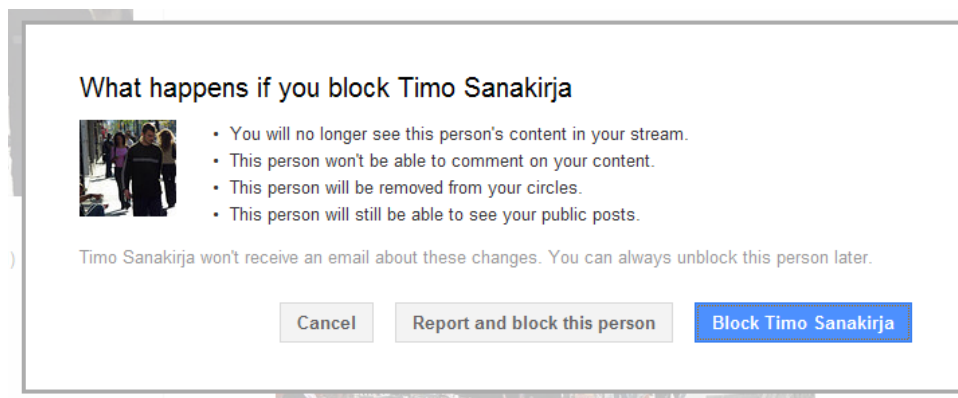


Figure 16. Google+ *Block* dialog.

*Ignore and Remove*

The *Ignore* feature is available to stop receiving the updates from another person. The ignored person will be deleted from the *Circles* he or she is listed in, and their updates will no longer appear on each other's *Stream.* The *Ignore* link can be found in the *Circles* tab, under the *People who've added you* list, by clicking in the contact's icon. As illustrated in Figure 17, a confirmation window pops up and the action will be completed when clicking the *Ignore and Remove* button. The visibility of individual posts can be limited by clicking the drop down menu available in each post in the *Stream* and then clicking *Mute this post*.
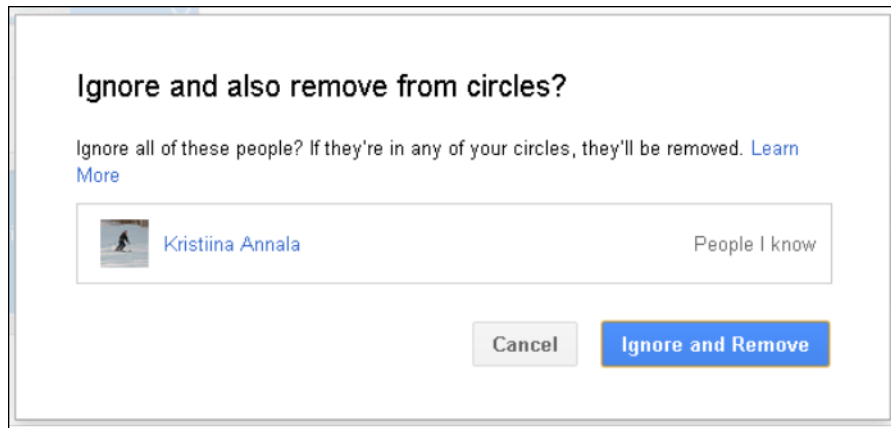
Figure 17. Google+ *Ignore and Remove* dialog.

*Share with circles*

Users can choose who can see their updates or shared content by selecting who will be able to see the posts on their *Stream*. This feature, illustrated in Figure 18, appears whenever the *Share what's new* box is clicked. People can choose to share with specific contacts or *Circles*, or with their whole network (*All Circles*, *Extended Circles*, and *Public*).
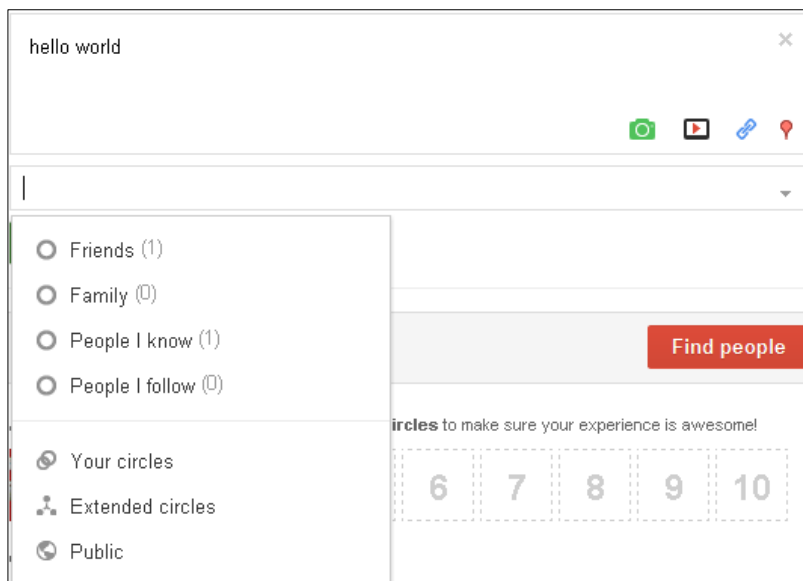


Figure 18. *Share with Circles* feature.

# Appendix 2: Interview protocol

**(1) Introduction phase**

*Hello! Please make your name tag while we wait for the others...*

Welcome to this session and to the Usability lab of the University of Tampere.

I will ask you to please turn the volume off your phones. As you may know, my name is Marisela, and I will moderate this group as a part of my thesis work for a master degree in Interactive Technology.

Before starting, let's review some practical information for the session. Please feel free to ask me questions. A video and audio of this session will be recorded so that I can analyze them later. The recording has already begun using that webcam and this voice recorder, so that I can get the picture of the whole session.

I will ask you to agree and sign a written consent for this recording later, but first let me explain what this session will be about. Today we will discuss the implication of the features of Facebook that allows users to avoid other users within the site. Your role here is to discuss as a group about this topic by sharing your experiences and opinions as Facebook users.

Being said this, is important to clarify a few grounding rules, which are also posted on the wall of this room:

1.  Everyone's opinion is important. Take the floor to express your opinions, and give the floor for others to express theirs.

2.  Listen to others. Only one speaker at a time.

3.  Respect privacy of others. What happens here, stays here.

4.  There is no right or wrong answers: all the opinions are valuable.

5.  Challenge each other, but focus on ideas and not on personal attacks.

Do you have some questions at this point? This session will last at most for 90 minutes. You can stop participating the session at any time and for any reason. You do not have to explain why you want to stop. None of the contributions made here will be attributed to individuals. Your personal data will be protected, and it will not be associated in any way within any publication.

Now that you know what the session will be about, I will ask you to sign an informed consent of your participation in the session. I'll give you 2 copies, one for you to keep if you want and one for me. Do you have some questions?

*Hand the informed consent form*

Now that everyone has agreed, let's begin.

**(2) Warm-up phase**

1.  Tell us something about yourself.

2.  What comes to your mind when we talk about being unsocial in social network sites?

3.  Do you think there is a need to be unsocial on Facebook?

**(3) Main topic phase**

4.  Let's imagine one of your close friends is a new user in Facebook. She wants to avoid some rather uncomfortable situations online. Can you help her to figure out what to do?

I will hand you printouts of the situations. If you don't remember what options Facebook has, here are some printouts with what Facebook suggested her to do.

- She wants to prevent one person from contacting her online

- She wants to dissolve the connection with one of her contacts

- She does not want to share her posts with one of her contacts

- She wants to reject a connection request

- She wants to hide the posts of one of her contacts

5.  What do you think when someone simply does not reply or answer when somebody else contacts him or her on Facebook? Can this be unsocial?

*Mid-session: refreshments and pen-and-paper questionnaire.*

6.  Can you tell us about your experiences using the previously discussed features?

7.  Can you tell us about your experiences when the unsocial feature was used on you?

8.  What cues or hints made you notice about this?

9.  What do you think on having automatic system notifications about these interactions?

**(4) Cooling-off phase**

10. In this group are users of *(insert the name of the sites)*. If our friend is also new on these sites, what would you think she can do in the same situations?

Here are some printouts of the system. Even if you are not a member of the site, you can also give your opinions about it.

- She wants to prevent one person from contacting her online

- She wants to dissolve the connection with one of her contacts

- She does not want to share her posts with one of her contacts

- She wants to reject a connection request

- She wants to hide the posts of one of her contacts

11. Do you think these features determine in some sense your experience in social network sites?

**(5) Closure phase**

12. Do you have any ideas on how to improve the unsocial features of Facebook?

Do you have some thought or comments about the whole process?

Thank you very much for participating!

Figure 19 depicts the printout presented to participants for testing the "She wants to dissolve the connection with one of her contacts" scenario on Facebook during the "main topic" phase of the previously presented interview protocol.

<div style="border:1px solid black; text-align:center; padding:4em;">

# She wants to dissolve the connection with one of her contacts

</div>
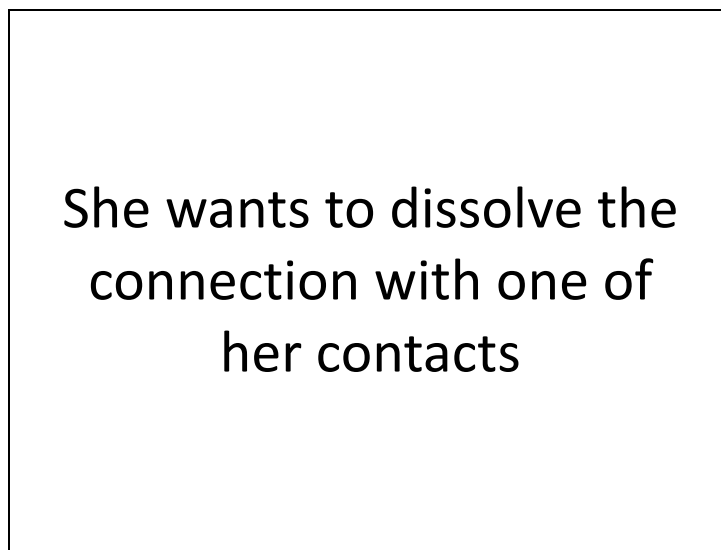
Figure 19. Scenario description.

Figure 20 depicts the printouts of the *Unfriend* feature that were presented to participants as related to the scenario presented in Figure 19. Figure 20 includes three slides with screenshots of an interaction with the *Unfriend* feature, this without including any comments or explanations beyond what appeared on the user interface itself.

Figure 20. Interaction with the *Unfriend* feature of Facebook.

Likewise, the rest of the printouts presented to the groups included a scenario and an interaction with their associated feature. Details on scenarios and their features are available in Section 3.4, and the capabilities of each one of these features are described in Appendix 1.

# Appendix 3: Informed consent

You are asked to voluntarily participate in a group interview as a part of the thesis project for a master degree in Interactive Technology at the University of Tampere. By participating in this group, you are helping us to understand the user experience on social network sites.

In this session you will be asked to discuss different questions about Facebook and other social network sites with the members of this group. Furthermore, you will be asked to fill in one more questionnaire in addition to those you already answered online.

To address privacy concerns, your personal information collected during this study will not be revealed in any way. Your contributions to this session as well as your responses to the set of questionnaires will remain anonymous. In the same way, it is expected that participants in this group respect the privacy of other members by not disclosing any of the personal information or experiences brought up in the discussion to outsiders. Please note that you are free to leave the group at any point without further explanations.

The audio and video of the session are being recorded. This recording as well as the set of questionnaires will be used for analysis in the thesis and be destroyed afterwards.

By signing this form, you will accept the above terms. You will get a personal copy of this statement.

Signature: _____

Name clarification: _____

Date and place: _____

Moderator:

Marisela Gutierrez Lopez

Signature: _____

## Appendix 4: Mid-section questionnaire

Please evaluate your level of agreement with the following statements about the unsocial features of Facebook.

| | No | I don´t know | Yes |
|---|---|---|---|
| 1. I have noticed when somebody used an unsocial feature on my Facebook profile | | | |
| 2. I have used this kind of features with at least one person on Facebook<br>*For "no" or "I don´t know" responses, please answer to statements 9 to 12 only. | | | |

| | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |
|---|---|---|---|---|---|
| 3. I think the unsocial features of Facebook are easy to use | | | | | |
| 4. It was easy to learn how to use this kind of features on Facebook | | | | | |
| 5. I think the unsocial features of Facebook are easy to find | | | | | |
| 6. I feel in control when using the unsocial features of Facebook | | | | | |
| 7. I feel my privacy is well protected when I use these features on Facebook | | | | | |
| 8. Facebook behaves just as I want after I click on one of these features | | | | | |
| 9. I think it is important to have unsocial features on Facebook | | | | | |
| 10. I should get an automatic system notification whenever a person uses an unsocial feature on my profile | | | | | |
| 11. Facebook should send an automatic system notification to a person after I use an unsocial feature on their profile | | | | | |
| 12. Facebook has all the unsocial functions that I expect it to have. | | | | | |

**Appendix 5: First online questionnaire**

You are invited to participate in a group interview to discuss about some of the *unsocial* features of social network sites. Please answer the following questions so we can include you in a discussion group that fits your profile and time availability.

Thank you for your time!

1. How often do you use each of the following social network sites?

| | Daily or nearly daily | Two or three times a week | Once a week | More rarely than once a week | Not a member |
|---|---|---|---|---|---|
| Facebook | ○ | ○ | ○ | ○ | ○ |
| Twitter | ○ | ○ | ○ | ○ | ○ |
| LinkedIn | ○ | ○ | ○ | ○ | ○ |
| Google+ | ○ | ○ | ○ | ○ | ○ |

2. Please fill in your contact information.

Name: _____

Email address: _____

3. Please select your age group:

☐ 18 – 29 years

☐ 30 – 49 years

☐ 50 – 65+ years

4. Please answer the question that better describes your current occupation.

- If you are a student, what is your major of studies? _____

- If you are a researcher, what is your primary field of research? _____

- If you are in the working life, what is your area of work or expertise? _____

- None of above (please specify) _____

5. Select the times that are suitable for you to attend a 90-minutes session at the premises of the University of Tampere. Please choose all the options that fit your schedule.

☐ Day/Month/Year, Time

☐ Day/Month/Year, Time

☐ …

☐ Other time suggestions: _____

**Appendix 6: Second online questionnaire**

Please fill in the following information.

1. Name: _____

2. Nationality: _____

3. Education:

☐ Less than high school

☐ High school

☐ Some college

☐ College degree

☐ Graduate degree

☐ Other (please specify): _____

4. How many contacts do you have on the following sites?

|  | 150 or less | 151 - 450 | 451 or more |
| --- | --- | --- | --- |
| Facebook | ○ | ○ | ○ |
| Google+ | ○ | ○ | ○ |
| LinkedIn | ○ | ○ | ○ |
| Twitter (people that you follow) | ○ | ○ | ○ |
| Twitter (people that follow you) | ○ | ○ | ○ |

5. How many circles do you have on Google+?

☐ 5 or less

☐ 5 – 10

☐ 10 – 30

☐ 30 or more

6. How frequently do you comment, post, or interact with others on the following sites?

| | Daily or nearly daily | Two or three times a week | Once a week | More rarely than once a week |
|---|---|---|---|---|
| Facebook | ○ | ○ | ○ | ○ |
| Twitter | ○ | ○ | ○ | ○ |
| LinkedIn | ○ | ○ | ○ | ○ |
| Google+ | ○ | ○ | ○ | ○ |

7. Whenever an action that involves you takes place on Facebook, how do you get notified?

☐ Directly on Facebook website

☐ E-mail notifications

☐ Mobile device applications

☐ Text messages

☐ Other (please specify): _____

8. Who do you commonly add as contacts on Facebook? Please select all that apply.

☐ Casual friends

☐ Close friends

☐ Romantic partners and interests

☐ Nuclear family

☐ Extended family

☐ Acquaintances

☐ Superiors (teachers, boss...)

☐ Random people I have never met