Abstract
We propose unsociability as a novel perspective to approach and support online social interactions. With examples taken from focus group discussions, we highlight the need of users to save face in their online interactions within social network sites. We claim that people follow a “social-over-technical” pattern on Facebook, as they base their interactions on their social understanding of this site instead of on its technical capabilities. These social norms and patterns challenge social translucence which has for more than a decade been recognized as one of the cornerstones of social computing systems.

Author Keywords
Social network sites; features; unsociability; design.

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

General Terms
Human factors; Design.

Introduction
Contrary to real life where one cannot simply “reverse” social interactions, social network sites (SNSs) allow people to “go backwards” or take a step back in order
to limit social interactions. Linguist analysis suggests that the prefix “un-” used to name some SNSs’ features originates as an analogy for the “undo” functionality of computer programs [16]. For instance, Mary can use the “Unfriend” feature of Facebook to delete her connection with Tim, returning to a system state where she did not have Tim in her virtual social network (Figure 1, step 2). We argue, in this context, that Mary’s behavior is “unsocial”, taking back some part of the social interaction that has occurred between them.

Moreover, while Facebook does not actively notify users about unsocial behaviors, there are subtle, yet present, cues for a person to figure out that they have been involved in such event. We call these the awareness cues (Figure 1, step 3). For instance, Tim may notice that he does no longer have Mary listed as his Friend, and infer that she deleted their mutual connection.

As we will point out, unfriending is only the tip of the iceberg. Based on focus group findings, we will discuss several other SNS features which allow users to reverse social interactions when applied in “unsocial” behaviors, and explain how they are considered “hard” or “soft” on the social relations that are targeted, depending on the awareness cues presented in the interface to the target of the act.

We believe this mechanism of “backward” sociality is fundamental to exploring the full spectrum of online interactions. Though much work has been directed towards so called “avoidance strategies” [6], our approach extends on those with a practical twist towards the actual behaviors in unsocial events. As can be seen in Figure 1, unsocial events include two users who are directly involved in the unfriending action. It is equally important to study both sides, and not just the avoidance strategies or privacy and self-presentation concerns of the initiator.

It is important to note that unsocial and antisocial behaviors are not the same. A common connotation of antisocial behaviors involves action against the law or society, as in online bullying or scams. Unsocial behaviors, as considered in this study, are ways of social interaction between two persons that have no society-wide negative connotations.

Our paper is structured as follows. In the Background section, we build an understanding of unsociability. Then, our data collection and analysis methods are detailed. In the Results section, we offer explanations for the social-over-technical pattern in Facebook use, and the implications for this pattern are brought up in Discussion. Finally, we present design implications.

Background
By nature, people tend to maintain private spaces [2]. SNSs are about connecting people in networked spaces, yet it is not realistic to assume that everybody wants to share everything, with everyone, all the time [13].

Privacy is a dynamic “boundary control” process [2]. According to Johnson et al. [11], Facebook offers useful privacy controls for users to mitigate their privacy concerns over sharing content with strangers. Nevertheless, Facebook controls do not mitigate “inside threats”, such as having Friends from conflicting social spheres. Therefore, persons use several “ad hoc” techniques, such as self-censorship and segregating audiences, to maintain their privacy boundaries [11] and manage their self-presentation [13].
People try to present themselves and their social interactions over SNSs in the most positive light possible [13]. Much as in real life, people try to “save face” [9] while interacting on SNSs or other CMC tools [3, 13, 5, 10]. The measures taken to do things consistent with face are called “face-work” [9]. Face-work is useful for maintaining harmonious relations and avoiding awkward or embarrassing situations.

Face-work is regarded as an important concern for users of SNSs, as the interactions take place in a public setting and are ruled by social norms [5]. More important, persons hold accountability for their online actions [5, 13]. Therefore, users may be reluctant to engage in potential face-threatening behaviors, such as unfriending [5], for normative reasons. Instead, users may prefer to find more polite ways to avoid contact.

Canary et al. [6] proposed a typology of ten strategies that play a role in maintaining different types of relationships. We find that their avoidance strategy is in line with being unsocial, as these behaviors are used to evade another person or issue attempting to prevent a relation from escalating. Thus, avoidance strategy [6] is a natural start point of our research. Nevertheless, by definition, avoidance behaviors maintain a relation. Unsocial event mediated by the SNS is a special case: it involves two persons and is based on the features available in the system; it can also extend to breaking a relation, not only maintaining it at a distance.

Seven behaviors have been associated [4] with the avoidance strategy on Facebook: removing users from one’s network on the site, rejecting Friend Requests, blocking or reporting people, adding people under a restricted profile, using Facebook so as to avoid giving out personal information, intentionally not responding to messages, and avoiding a chat request by ignoring people or logging off.

Only some of these seven avoidance behaviors clearly involve action. For example, users have to click (action) Unfriend (feature) to remove a person (behavior). Not responding to messages is an absence of action. We group avoidance behaviors whose essence is non-action under the concept of “unresponsiveness,” roughly as suggested by Aoki and Woodruff [3]. These behaviors still fit the definition of unsocial events though not associated with particular functionality, since they are deliberate acts to elude another person by consciously avoiding use of the features to reciprocate the interaction.

Extending on these concepts introduced in previous work, the present study has two objectives. First, we want to find out which behaviors can be considered as unsocial, as well as how users select which SNS feature to use in them. Second, we study how users perceive unsocial events, the features in question, and the outcome of their usage expecting to shed light on the users’ concerns of self-presentation and privacy.

Methods
First we explain our methods for relating the avoidance behavior types to functionality that can be used in these acts. Then we describe the focus groups, the interview protocol, and our recruitment of participants.

Linking avoidance behaviors and system features
We are interested in finding out which features are associated to avoidance behaviors. To avoid biasing the study with our own understanding of the SNSs
features, we referred to the Help and FAQ (Frequently Asked Questions) sections of Facebook for the recommended feature to be used for each avoidance behavior. For instance, we queried on Facebook’s Help Center: "how to remove a Friend." Finally, those features that appeared most likely to be used are named as the “anticipated” unsocial features, summarized in Table 1.

For stimulating discussion among the focus group participants, we generated five scenarios based on the avoidance behaviors [4]. The scenarios listed in Table 1 were in the form of problem statements. Further details on how this was addressed in the focus groups are given in the next subsections.

Facebook constantly modifies its features. As new features are implemented, previous ones may no longer be available with the same name or functionality. For that reason, this section (and the study in general) is intended to be not an exhaustive review of Facebook features but an overview of how SNSs support unsocial behavior and how that behavior manifests itself.

**Focus group interviews**

Focus groups are useful in helping people express their opinions by talking to peers about them and in creating mutual understanding within a social context [15]. For tackling a soft topic such as unsocial behaviors, talking to a group of strangers in a confidential environment helped participants to share their experiences. As everyone mentioned to have faced similar situations, such as getting a Friend Request rejected, empathy was generated within the groups. This feeling of “not being alone”, as well as approaching sensible issues via scenarios first, helped to reduce underreport, making focus groups a suitable method for this study.

We generated a semi-structured protocol of 12 questions and supplementary visual materials. The interview protocol was divided into two parts: features to use, and perceptions of being involved in an unsocial event.

For the features part, participants were introduced to the scenarios (see Table 1) one by one and asked to advise a hypothetical friend on how to resolve the situation. To help participants recall the features and how they work, we prepared a set of printouts with screenshots, from made-up profiles, of the anticipated features for each scenario presented in Table 1. We explained that the printouts presented correspond to the feature that Facebook suggested the friend use in each situation but that the participants, as experienced users, could give her better advice.

For the perceptions part, participants were asked for their personal experiences when handling unsocial events. With questions such as “what cues made you notice that an unsocial feature was used on you?” we gathered data on the perceptions of these behaviors.

**Participants**

We sought volunteers to join the groups via local e-mail lists and online forums. The only recruitment criterion was active membership (login at least once a week) to Facebook. No personal characteristics such as technical knowledge or age group were considered.

Four groups were formed (see Table 2) of 10 Facebook users. The sample (seven males and three females) consisted of people from seven countries, ranging between 18 and 49 years. Eight participants login on a

**Table 1.** Anticipated unsocial features for Facebook, and the five scenarios (verbatim).
daily basis to this site, while two do it on a weekly basis. The participants are well-educated, and seven of them study or work in a technology-related field.

Data analysis
After the sessions, full transcripts were made from the audio of the sessions. Subsequently, we examined the discussion transcript by applying content analysis techniques \([15]\) to explore various levels, such as groups, individuals, and utterances, searching for recurrent words, topics, and discourses. Content is reported by means of direct quotations where appropriate. Since the data set is small, no statistical analysis techniques were employed in the analysis.

Results
At the outset of our study, we made a first approach to unsocial behaviors by making assumptions about what features support them (cf. Table 1). However, they were not fully supported by the data and indeed turned out to be incomplete. For instance, some participants described using Privacy Settings as an unsocial feature, while we had not previously considered it. The features anticipated were not clearly linked to the corresponding scenario. The reason for this was that participants focused on their social understanding of the features, not on technical capabilities; this we call the social-over-technical pattern of unsociability on Facebook.

An example of the social-over-technical pattern is what most participants described as graded "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 Excerpt 1, that the first step for gaining distance from another person is to use Unfriend. If this fails, the second step would be to use Report/Block. The seven participants who mentioned being familiar with the fairly new feature Unsubscribe described it as the first step for avoiding somebody. Unsubscribe was preferred over Unfriend and, as illustrated in Excerpt 2, over Report/Block.

That is, even though the technical capabilities of Unfriend, Unsubscribe, and Report/Block differ, participants linked them together under the same discourse. These steps described by the participants lead us to believe that it is not only the technical capabilities but also the users’ perceptions of them that determine the usefulness of unsocial features. Before considering the technical affordances, participants evaluated their social understanding in order to decide whether to use the system features.

Unresponsiveness
Unexpectedly, most participants mentioned employing the common practice of keeping the unwanted requests pending for their profile, especially when they knew the person offline, not by using the Not Now or Delete Request feature but simply by leaving the request unanswered, as mentioned by P8 in Excerpt 3.

Unresponsiveness was related to unsociability in the sense that some participants avoided action in order not to produce awareness cues of their unsocial behaviors, especially for somebody they know offline. Moreover, participants used ambiguity for creating a personal space and attempted to influence how others account for their actions \([3, 10]\).

Most participants found it rude or impolite to avoid responding to personal conversations or not to
reciprocate attempts to establish a mutual connection over a communication tool such as Facebook’s Chat. Still, not all participants considered unresponsiveness to fit the description of being unsocial, since they considered this behavior related to context. This is illustrated by two participants in Excerpt 4. Additionally, some participants stated that a lack of response on Facebook may carry a certain degree of ambiguity and, therefore, admit other possible explanations. This context-related ambiguity and accountability is illustrated in Excerpt 5.

Perceiving unsocial behaviors and features
Participants consistently described two kinds of features: the “hard” and “soft” unsocial features. We build theory about how people perceived these two kinds of features, particularly in terms of the awareness cues produced and the privacy boundaries they set. The subsections that follow describe how using the hard and soft unsocial features support unsociability.

SOFT UNSOCIAL FEATURES
Unsubscribe, Lists, and Privacy Settings were described as soft unsocial features by the participants. They are used mostly as “self-boundaries” [2] of privacy, they apply directly to 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 as arising after their use. Furthermore, the outcome of use of these features can be easily controlled and reverted, so returning to a previous state is easy.

HARD UNSOCIAL FEATURES
The features 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 [2] directly to elude another person. Moreover, while the system does not actively notify about usage of these features, participants described them as producing a large number of awareness cues for others to detect that they have been used. These features were understood as permanent actions, in that reverting their outcome would involve direct awareness on the part of the targeted person, as in having to re-send a Friend Request. Since these features were considered by some participants to be harsh, permanent, and severe, they avoided their use, as mentioned by P5 in Excerpt 6.

Discussion
Participants in this study, much as other users of social technology do [1, 11], adapted the systems to meet their needs. People tend to guide their interactions on SNSs by means of their own understanding of the site instead of its technical affordances.

In general terms, unsociability is an integral part of “being social”: with the SNS platforms, people use the unsocial features to manage their self-presentation and privacy concerns, applying their personal understanding of the social norms as the basis for their actions. In this section, we discuss the implications of the social-over-technical pattern seen with Facebook.

Social over technical pattern: implications
Participants used (or avoided using) the unsocial features of Facebook to “save face” while balancing an online network of people they know offline. People attempt to present themselves on SNSs as socially desirable individuals [5]. For this, users decide what is acceptable to do in a social situation online in

Excerpts from the participant transcripts.

Excerpt 3. [P8, Group 4]
P8: Normally, what I do is just to leave it there. Mod: To leave it pending without rejection? P8: Yeah, to leave it pending forever.

Excerpt 4. [Group 3]
P7: Yes. With chatting, [it] 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 [...]. I do make it a point to reply to all my e-mails [Private Messages] [...]. 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]
accordance with their personal and social understanding of the relevant social norms [5, 13, 10]. Likewise, participants decide what features to use in view of their social understanding of the site and in consideration of the social norms.

Since the soft unsocial features are used without affecting other users, they made it easier for some participants to regulate their privacy. On contrary, hard unsocial features apply directly to the target profile. They guarantee safety but could be perceived as face-threatening.

When we consider the participants in our study in terms of the concept of face-work, we can point to two broad social considerations they brought up when it comes to being unsocial and interpreting the outcomes of these actions: 1) keeping the unsocial interactions as positive and discreet as possible and 2) not taking these interactions "too seriously" or "too personally."

For instance, participants exercised face-work by "storing" unwanted Friend Requests: keeping them pending instead of rejecting them. While trying to maintain personally acceptable face-work, they help others do the same. Mary stores Tim’s Friend Request in an attempt to keep Tim from feeling awkward upon noticing that the request he sent was rejected. This is illustrated in Excerpts 7 and 8.

Like Kwak et al. [12], we found that participants preferred to avoid creating awareness cues of their unsocial behaviors, especially when directed toward somebody they know offline. To this end, participants used ambiguity for creating a personal space and trying to influence how others account for their actions [3]. This is exemplified by the storing of unwanted Friend Requests, with participants using ambiguity to create "plausible deniability" [3] in relation to rejection (e.g., "maybe he is not on Facebook" very often). In other words, participants use ambiguity for creating multiple possible explanations for their actions, reducing social difficulties and costs [3]. 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 personal interpretations of social norms. The ambiguous social norms produced divergent opinions in the groups.

Excerpts from the participant transcripts.

Excerpt 5. [P10, Group 4]
The last time I sent a message through Facebook, but I didn’t receive a 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.

Excerpt 6. [P5, Group 3]
Don’t know why I didn’t ever [unfriend somebody]. There’s 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.

Excerpt 7. [P7, Group 3]
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 in the corner and not think about it.
Ambiguity defies the principle of visibility of online behaviors, which has been regarded as one of the main design principles in social technologies [7]. For some SNSs, users are eager to increase the visibility of their online interactions, for instance, to find out who accesses the content they share on Twitter [8]. However, when unsociability is involved, increased visibility may have undesired results.

Almost all of our participants expressed strong disapproval of being notified about unsocial behaviors. That is, they expected Facebook to support ambiguity in some interactions, so that they can engage in denial in plausible ways. Thus it is that even though visibility of online behaviors can be a valuable tool for some situations, such as evaluation of what content to share on the basis of its novelty for followers [8], the same does not apply for unsocial behaviors. Unsocial behavior concerns are interpersonal, and announcing them in larger circles would not be desirable.

Reflections on the limitations of the study
The findings of this study provide a solid grounding for further research, yet it has its limitations. To begin with, this study relied on the seven avoidance behaviors [4] as a starting point for its definition of the unsocial behaviors; these behaviors need to be attested to with further study.

Our study did not include participants with a background other than well-educated, relatively young urban person. Likewise, the absence of an adequate gender balance among participants could represent a limitation. Nevertheless, we do not suggest that the behaviors we found are the only ones but they are a proof of concept: the participants have needs for and perceptions of SNS features supporting unsociability.

Design Considerations
People tend to follow a social-over-technical pattern on Facebook. Ackerman [1] emphasized an analogous “social–technical gap,” a mismatch between social requirements and what systems are capable of doing. In this context, people adapt the systems to their needs, expecting both to address privacy concerns and to maintain face. We propose three general design considerations for these systems to support meeting of the social needs behind unsociability.

Incorporate unsocial behaviors into the design
Facebook constantly reminds people of ways to be social through the site, such as with the Friend Suggestions feature. Less attention is paid to reminding or informing people of ways to revert social interactions. We propose integration of context-sensitive information on unsocial features in two ways. The first is to add contextual “tool-tips” for the unsocial features. Second, we suggest providing context-sensitive information and a “Learn More” link, pointing to the Help Center, in the dialog windows for the unsocial features.

With context-sensitive information on the unsocial features, users can figure out how to proceed when they are unsure about the capabilities of the features. Moreover, it would enable them to keep up to date on the capabilities of the system more easily. The need for this is clear: even frequent users of the site (such as P2 and P3 in Excerpt 10) are not always aware of the system capabilities.
Provide flexible and reversible unsocial features
People switch gracefully among states; systems do not [1]. For instance, the binary mechanism to indicate social connections on SNSs has no “in-between” state as friendships do in real life. We suggest implementing a “soft” version of Unfriend, to give users the ability to reduce their network size without feeling rude or harsh to others. This could be done by implementing a “Disconnect” feature that places 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.

After using the Disconnect feature, users would still be able to perform personal communications and have the option of “reconnecting” at any time, given that a mutual relationship still exists. Implementation of this feature would add to users’ options for managing their privacy and self-presentation without providing greater awareness cues to others.

Remember that people don’t always want to be social
We argue that SNS developers should apply the assumption “people do not always want to be social” as a default when designing unsocial features. To illustrate the importance of assuming this “unsociality-aware” design policy, we 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. A consequence of this is the application of Facebook’s “assumption” while a request is pending action that the two 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. Secondly, Facebook recently introduced the Seen functionality to its Chat. With this new feature, users get notified whenever a Friend reads a chat message they have sent. This new functionality does not allow users simply to ignore a message: the sender would notice that his message was read but ignored. The Seen functionality cannot be deactivated.

The problem with the current design of these features is that they do not allow users to be “interactionally unresponsive” [3], to leave contacts pending and take no action. The problem emerges when the system assigns a meaning to unresponsiveness and, more importantly, communicates it to the targeted person. Therefore, to support these unsocial behaviors better, Facebook should let users be ambiguous.

Using ambiguity, people try to untie their true actions from the observed result, so that their behaviors can admit multiple interpretations [3, 10]. Therefore, as recommended already in [14], designers of social technologies should beware inhibiting these existing social practices. Even though the design concept of “ambiguity” is not often taken up by interaction designers, in this case, ambiguity would reduce the social costs of unsocial behaviors. That is because it is up to the targeted person, not the system, to give meaning to the unsocial behavior.

Conclusion
We uncovered practices and perceptions of people engaging in unsocial events. The social-over-technical
pattern of Facebook use indicates that people use (or avoid using) the unsocial features in accordance with their social understandings rather than in view of the technical capabilities of the features. People follow this pattern to save face and manage their privacy while "reversing" social interactions.

References


