INTERPERSONAL BOUNDARY REGULATION
IN THE CONTEXT OF
SOCIAL NETWORK SERVICES

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ACADEMIC DISSERTATION

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ABSTRACT

Interpersonal boundary regulation constitutes of the efforts needed to 'make the world work' – that is, for people to achieve contextually desirable degrees of social interaction and to build and sustain their relations with others and with the self. I argue that while widespread adoption of social network services (SNSs) disrupts central premises of interpersonal boundary regulation on which people are used to relying, interpersonal boundary regulation is best understood as a co-operative process also in our networked age. In fact, SNSs may even amplify the importance of co-operative boundary regulation and increase awareness of the necessary efforts.

This work illustrates everyday practices young adults in Finland apply to regulate interpersonal boundaries in the context of SNSs. It leverages the frameworks of interpersonal boundary regulation, self-presentation, and identity work. The dissertation contributes an examination of challenges of interpersonal boundary regulation through four central aspects of 'sharing' related to SNSs: 1) people may share content with multiple groups at once, 2) people may share content on behalf of others, 3) sharing can be achieved via automated mechanisms, and 4) sharing online and offline are connected in multiple ways. The dissertation incorporates five explorative studies that feature qualitative interviews as their primary research material.

The findings highlight the importance that users of SNSs place on mutual consideration when boundary regulation is involved. The SNS context makes it challenging to predict the potential consequences of one's actions, even when one is willing to make efforts to avoid causing harm to anyone. The findings show how boundary regulation efforts are a holistic endeavour that spans interaction in online and offline settings. Furthermore, they reveal that boundary regulation takes place both through expression of technology preferences and via diverse practices applied when people engage in social interaction in the context of SNSs. The work proposes a typology of interpersonal boundary regulation practices in the context of SNSs: Firstly, practices can be either individual or collaborative. Also, there are preventive and corrective practices. Thirdly, there are both mental and behavioural practices. While specific practices are context-dependent, the typology helps mapping the range of practices that may be at play in networked settings.

The work calls for reconsidering privacy in the networked age beyond the individual level and across the many online and offline settings in which people come together. It invites designers to consider how to support subtly co-operative interpersonal boundary regulation efforts that are not confined to the immediate technological setting that a particular service provides. Similarly, it challenges policymakers to envision how legislation could take into account the co-operative nature of boundary regulation, instead of framing privacy solely as an issue of individuals' control over information.

TIIVISTELMÄ

Sosiaalisten rajojen hallinta tarkoittaa ihmisten pyrkimyksiä saada aikaan tilannekohtaisesti toivomansa määrä sosiaalista vuorovaikutusta sekä rakentaa ja ylläpitää suhteita toisiin ihmisiin ja itseen. Yhteisöpalvelujen laaja käyttöönotto kyseenalaistaa sellaisia sosiaalisten rajojen hallinnalle keskeisiä lähtökohtia, joihin ihmiset ovat tottuneet luottamaan. Väitän, että sosiaalisten rajojen hallintaa voidaan tästä huolimatta hahmottaa parhaiten yhteistyöhön perustuvana prosessina myös verkottuneella aikakaudellamme. Yhteisöpalvelut saattavat jopa vahvistaa tarvetta yhteistoiminnalliselle sosiaalisten rajojen hallinnalle yhteistyössä toisten kanssa ja lisätä tietoisuutta sen edellyttämästä toiminnasta.

Tämä työ kuvaa arkisia käytäntöjä, joita Suomessa asuvat nuoret aikuiset soveltavat sosiaalisten rajojen hallintaan yhteisöpalvelujen kontekstissa. Väitöskirja hyödyntää sosiaalisten rajojen hallinnan, vaikutelmien hallinnan, ja identiteettityön viitekehyksiä. Työn kontribuutio on sosiaalisten rajojen hallintaan liittyvien haasteiden tarkastelu neljän yhteisöpalveluihin liittyvän 'jakamisen' piirteen kautta: 1) ihmiset voivat jakaa sisältöä samanaikaisesti monien ryhmien kanssa, 2) ihmiset voivat jakaa sisältöä toistensa puolesta, 3) jakaminen voi tapahtua automoitujen mekanismien kautta, ja 4) jakaminen verkossa ja sen ulkopuolella limittyvät toisiinsa monin tavoin. Työ koostuu viidestä eksploratiivisesta tutkimuksesta, joiden tärkeimpänä aineistona ovat laadulliset haastattelut.

Työn tulokset osoittavat yhteisöpalvelujen käyttäjien painottavan keskinäistä huomioonottavaisuutta sosiaalisten rajojen hallinnassa. Yksilöiden on vaikeaa ennakoida tekojensa mahdollisia seurauksia yhteisöpalveluihin liittyvässä vuorovaikutuksessa, silloinkaan kun he olisivat halukkaita näkemään vaivaa välttääkseen aiheuttamasta toisille haittaa. Tuloksissa korostuu, että sosiaalisten rajojen hallinta on kokonaisvaltaista toimintaa, joka ulottuu verkkovuorovaikutuksesta verkon ulkopuolisiin kohtaamisiin. Lisäksi tutkimus paljastaa, että sosiaalisia rajoja pyritään hallitsemaan sekä ilmaisemalla teknologiavalintoja että soveltamalla erilaisia hallintakeinoja yhteisöpalveluihin liittyvässä vuorovaikutuksessa. Työ esittelee typologian näistä sosiaalisten rajojen hallintakeinoista: Käytössä on sekä yksilö- että yhteistyökeinoja. Toiseksi keinot voivat olla joko ennaltaehkäiseviä tai korjaavia. Kolmanneksi voidaan erottaa ajattelulliset ja toiminnalliset keinot. Vaikka yksittäiset keinot ovat kontekstisidonnaisia, työssä esitetty typologia auttaa kartoittamaan sitä hallintakeinojen kirjoa, joka ihmisillä on käytössään verkottuneissa ympäristöissä.

Tämän tutkimuksen perusteella yhteistyön merkitystä sosiaalisten rajojen hallinnassa yhteisöpalvelujen kontekstissa ei voida sivuuttaa, vaan se tulisi ottaa huomioon niin yhteisöpalvelujen suunnittelussa kuin yksityisyyden-hallintaa koskevaa lainsäädäntöä työstettäessäkin.

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Helsinki have, for their part, helped me take part in international academic activities. I am thankful also for the staff at HIIT, University of Helsinki, and UC Berkeley for their tremendous help with all things administrative.

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CONTENTS

LIST OF ORIGINAL ARTICLES

This dissertation incorporates research reported upon in five articles. The articles are as follows:

I   Lampinen, A., Tamminen, S., & Oulasvirta, A. (2009). All my people right here, right now: Management of group co-presence on a social networking site. In *Proceedings of the 2009 International Conference on Supporting Group Work* (pp. 281–290). ACM.

II   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* (pp. 3217–3226). ACM.

III   Silfverberg, S., Liikkanen, L.A., & Lampinen, A. (2011). 'I'll press play, but I won't listen': Profile work in a music-focused social network service. In *Proceedings of the 2011 Conference on Computer-Supported Cooperative Work* (pp. 207–216). ACM.

IV   Lampinen, A., Lehtinen, V., Cheshire, C., & Suhonen, E. (2013). Indebtedness and reciprocity in local online exchange. In *Proceedings of the 2013 Conference on Computer-Supported Cooperative Work* (pp. 661–671). ACM.

V   Lampinen, A., Lehtinen, V., & Cheshire, C. Technology preference and identity work. Unpublished manuscript (in preparation for submission at Information, Communication & Society).

The publications are referred to in the text by the above Roman numerals. Articles I–IV are reprinted with kind permission from the Association for Computing Machinery, Inc.

1 INTRODUCTION

Inviting someone to enter one's home can be interpreted as an indication of the occupants' desire for social interaction (Altman & Gauvain, 1981). On a long-distance coach journey, placing one's luggage on the neighbouring seat is a known way to discourage others from taking that seat – an intentional act of keeping fellow passengers at a distance and fostering a personal space (Kim, 2012). As individuals, groups, and societies, people regulate access to social interaction both by how physical spaces are built and decorated and through the behaviours and discussions that take place in them. Practices of such regulation abound from making or avoiding eye contact to closing or opening a door. In the same vein, boundaries of professional and leisure life are negotiated in intricate ways that range from what people wear and eat to with whom, about what, and in what kind of language they converse at different times of the day (Nippert-Eng, 1996). All these practices of *interpersonal boundary regulation* are applied to achieve contextually desirable degrees of social interaction as well as to build and sustain people's relations with others and with the self.

Boundary regulation refers to the dialectic interplay of accessibility and inaccessibility that characterises social relationships (Altman & Gauvain, 1981). It is a core process of social life: Interpersonal boundaries are constantly regulated through negotiations that draw lines of division between self and others, and 'us' versus 'them'. They are used to structure how and with whom people interact. When successful, interpersonal boundary regulation allows people to come to terms with who they are and how they relate with one another as they navigate everyday interactions. In contrast, less successful or failing efforts to regulate boundaries are experienced as conflict, confusion, and clashes in expectations – that is, as boundary turbulence (Petronio, 2002).

The widespread adoption of social network services (SNSs) (see, for example, boyd & Ellison, 2007; Ellison & boyd, 2013), such as Facebook, LinkedIn, and Last.fm, challenges customary mechanisms of regulating interpersonal boundaries. At the same time, SNSs present people with novel opportunities to maintain social ties; craft an online presence; and, as a result, gain access to social validation and meaningful feedback (Stern, 2008). The dialectic of novel challenges and opportunities gives rise to the question of how to make sense of social life and how to regulate interpersonal boundaries in these networked circumstances. These themes can be addressed under the rubric of privacy, but it is worth noting that the nature of privacy is a complex question that has been addressed in several disciplines (see, for example, Newell, 1995), even before the rise of SNSs. In this work, I approach privacy as boundary regulation. The work contributes a conceptualisation of interpersonal boundary regulation in the context of

SNSs. My argument builds on five empirical studies that capture aspects of how young adults in Finland are navigating the transition to an ever more networked world in our culturally and historically specific moment.

SNSs can be understood as a 'next generation of personal home pages' that both allow for self-expression and provide opportunities for social interaction with other users (Stern, 2008, p. 98). Social network services foster interaction that is primarily interpersonal, enabling both identity expression and community building (Papacharissi, 2011). Ellison and boyd (2013) describe SNSs as networked communication platforms that are characterized by three features: First, they allow, or even force, their users to create personal profiles that are concretely mouldable, persistent, and to some degree public. Second, users of SNSs can, and are encouraged to, publicly articulate their social connections such that the resulting social networks can be viewed and traversed by others. Third, SNSs provide their users with the opportunity to consume, contribute to, and/or interact with streams of user-generated content provided by those with whom they have articulated a connection in the service. The services vary in the features they provide, the activities they support, and the focus they may have (Papacharissi, 2011). Depending on the service, diverse types of content are shared, most commonly textual updates, photos, videos, links, and behavioural information.

Interpersonal boundaries are not just an analogue of physical demarcations. However, with social interaction in settings that are not digitally mediated, interpersonal boundaries are, in part, determined by physical structures. For instance, walls, doors, windows, and furniture shape access to various spaces and to the social interaction that can take place in them. Access to visual and auditory information is limited by what is physically possible (boyd, 2008): Only people within a restricted geographical radius at any given time can see and hear what is being said and done by co-present others. Those witnessing an incident in an unmediated situation can tell others about it, carrying it further, but there are only so many people who can observe an event first-hand. Sharing one's experiences and observations with people who are not present in the immediate situation requires effort. Furthermore, in unmediated situations, those doing and saying things typically have a fairly good sense of who can see and hear their actions, as they can observe their audience in their shared temporal and spatial setting. Although someone could, of course, be eavesdropping out of sight, having such an unintended audience would be exceptional and a violation of commonly held rules of decorum. As SNSs are woven into the fabric of everyday life, some of the old practices for regulating interpersonal boundaries may no longer be applicable or effective. For instance, where social interaction via SNSs is concerned, it is not reasonable to rely solely on the supportive structures that time and space can provide for interpersonal boundary regulation. As Baym and boyd (2012) describe, social media blur

boundaries between presence and absence, time and space, and private and public.

Since the unique connection of interaction to place is broken (see, for example, Papacharissi, 2011), people need to renegotiate interpersonal boundaries as much as reconsider their practices for regulating them. While social life online and offline functions as a whole, the differences between the physical and digital spheres are profound in their implications for identity work and the regulation of interpersonal boundaries. Interpersonal interaction online is not a novelty (see, for example, Baym, 2006), but the recent widespread adoption of networked communication platforms poses a set of challenges that practices of interpersonal boundary regulation need to address if they are to be successful: How should one think about presenting oneself to multiple groups at once when sharing digital content through an SNS? How is one to make sense of what it means to share behavioural information in real time, through an automated mechanism? And how is one to cope with the lack of control over what others choose to disclose about one in a setting wherein content that has been disclosed is persistent, replicable, and also easy to search for or spread further?

While SNSs have characteristics that disrupt central premises of interpersonal boundary regulation on which people are used to relying, I argue that interpersonal boundary regulation is best understood as a co-operative process also in the context of SNSs. While individuals can regulate interpersonal boundaries on their own, ultimately their success always relies on others' support of their efforts to draw boundaries in a certain way. Alongside the continuous and subtle acts of contesting or supporting others' boundary regulation efforts, individuals display more overt co-operation too, as they co-ordinate shared efforts to regulate boundaries. For instance, they may discuss with one another what digital content to share with whom. Furthermore, I argue that, next to the interpersonal boundary regulation efforts that take place via SNSs, deliberate choices of which services to use may serve interpersonal boundary regulation.

I apply the frameworks of privacy as boundary regulation (Altman, 1975), self-presentation (Goffman, 1959), and identity work (Schwalbe & Mason-Schrock, 1996) to examine how social interaction and relationships are managed in the context of SNSs. Interpersonal boundary regulation is a perspective that casts privacy as something people do, together, instead of depicting it as a characteristic or a possession. This framing directs us away from dichotomist notions of something being either public or private. It shifts the focus to the practices that are applied to achieve contextually appropriate degrees of access to social interaction and personal information. I will elaborate on the social psychological concepts on which this dissertation builds and also on how they are connected to one another, in Chapter 2.

Nissenbaum's (2010) research informs my understanding of the central technological capacities at play in networked contexts, although her framework of contextual integrity addresses the achieving of appropriate information flows rather than the regulation of social interaction *per se*. Chapter 3 provides the reader with a more detailed description of SNSs and the characteristics that render them disruptive of conventional practices of interpersonal boundary regulation. It also includes a brief review of how prior research has addressed questions of interpersonal boundary regulation in relation to SNSs.

I present a qualitative, interpretative analysis of ongoing sense-making surrounding social life in the context of SNSs and of the emerging practices that young adults apply to regulate interpersonal boundaries in circumstances wherein people may share content with multiple groups at once, wherein others may share content on their behalf, wherein sharing can be achieved via automated mechanisms, and wherein social life online and offline are closely connected. Chapter 4 presents my detailed research questions and summarises my overarching research approach and strategy. The five studies that this dissertation brings together all feature qualitative interviews with young adults in Finland as their primary research material. An overview of each study is included in Section 4.3.

Studies I and II focus on how users of SNSs – in particular, Facebook – disclose personal experiences or views with vast and diverse audiences via manual sharing mechanisms that make it easy to spread a piece of digital content far and wide. Study I investigates the notion of group co-presence and the ways in which people negotiate sharing of digital content simultaneously with multiple groups. Study II narrows in on challenges stemming from the ability to share content on behalf of others in a networked context and the practices people apply to tackle these. Both of these studies focus on SNSs wherein the main mechanisms for sharing digital content are manual, meaning that users are required to create or upload the content that they wish to share and then press a button to share it. Manual sharing mechanisms, however, are not the only means of sharing content online. Study III sheds light on how interpersonal boundaries are regulated in the presence of an automated sharing mechanism. The study entailed an examination of individuals' experiences of sharing automated real-time updates about one's music-listening via Last.fm, a music-focused SNS.

Study IV considers exchange processes in Kassi[1], a local online exchange service that promotes sharing in geographically local communities. Kassi differs from the SNSs considered in studies I–III in that the interpersonal connections articulated in the user profiles stem from engagement in exchange processes with other Kassi users. While there are publicly articulated connections that can be viewed and traversed by others, these

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[1] Later on incorporated as Sharetribe (https://www.sharetribe.com/, accessed on 18 November 2013).

connections are largely a by-product of exchange activities, not a valued end in themselves. The main content on Kassi's front page is a stream of user-supplied offers and requests. The service explicitly supports the sharing of physical goods and services. Thus it offers a productive angle for approaching how practices of interpersonal boundary regulation online and offline are intertwined.

Finally, for understanding the role SNSs play in interpersonal boundary regulation, it is useful to consider what those who resist them have to say. Study V broadens the perspective of the work in this way. It depicts information technology students' strategic preference of Internet Relay Chat (IRC), an early text-based chat technology that was developed in the 1980s by a Finnish student of information technology. The study examines how countering the hype around SNSs and other newer communication technologies was productive for the student community's boundary regulation efforts. Chapter 5 summarises the core findings of these five studies in terms of interpersonal boundary regulation.

SNSs have already become a pervasive part of social life for many people, such as the young adults residing in Finland who participated in the studies presented in this work. While ubiquitous access to SNSs and participation in social interaction via them is not universal even among their demographic, even those who do not adopt SNS use in their day-to-day life are embedded in an age that is shaped by the existence of these services. Typically, at least among those interviewed for the studies, also those who opt out of using SNSs have – and indeed must have – an opinion on them. Furthermore, refusing to join an SNS does not mean that one would not be featured or referred to in the service (for instance, in photos and textual anecdotes that others share). The impact that SNSs have on interpersonal boundary regulation must, therefore, be understood holistically through how their broad adoption weaves them tightly into the fabric of everyday life.

Discussions of privacy have flourished in recent years (for a review, see, for example, Iachello & Hong, 2007; Smith et al., 2011), both in the popular press and among scholars of a variety of fields, from law and technology to philosophy and the social sciences. Although it is my aim that the conceptual and empirical work presented in this dissertation can inform and advance the ongoing debate surrounding privacy also among scholars who focus on law and technology, a thorough discussion of technology-centric privacy management research is not included, nor will I cover the legal, economic, political, or technological aspects of the ongoing privacy debate. Moreover, considerations of organisational privacy, including privacy concerns related to third-party applications (see, for example, Besmer & Lipford, 2010; King et al., 2011), are beyond the scope of this dissertation.

The emphasis of this work is on social practice rather than on technological solutions, even though neither can be understood in isolation in our networked age. This dissertation contributes to the continuing discussion by considering privacy in terms of interpersonal boundary

regulation. It highlights the need to look beyond people's activities as separate individuals in addressing privacy, and it invites the reader to consider the co-operative aspects of interpersonal boundary regulation. This work illustrates how people 'make the networked world work' – that is, how they regulate access to interaction, negotiate social relationships, and work on identities at a time when SNSs are an integral part of their day-to-day life. In highlighting the co-operative nature of this endeavour, the work calls for rethinking of privacy beyond the individual and beyond the online context. In Chapter 6, I will discuss the important implications the research incorporated into this dissertation has for the work of researchers, designers, and policymakers alike.

2 INTERPERSONAL BOUNDARY REGULATION AS A CO-OPERATIVE PROCESS

Scholarly interest in the efforts people make and the practices they apply to 'make the world work' pre-date the emergence of SNSs. In this work, I use the expression 'making the world work' to refer to the ways in which people try to regulate access to social interaction and come to terms with who they are and how they interact with others. The frameworks of boundary regulation (Altman, 1975), self-presentation (Goffman, 1959), and identity work (Schwalbe & Mason-Schrock, 1996) form the foundation for my examination of how social life is managed. In this section, I present the key aspects of each framework in brief and, additionally, explicate how I connect the three to approach interpersonal boundary regulation as a co-operative process. I then go on to apply these conceptualisations to examine interpersonal boundary regulation in the context of social network services.

2.1 THE FRAMEWORK OF BOUNDARY REGULATION

Altman (1975, p. 6) defines privacy as 'an interpersonal boundary process by which a person or group regulates interaction with others'. The boundary regulation framework was created on the basis of interdisciplinary research on environment and behaviour to depict how privacy is regulated in physical spaces. The framework conceptualises privacy as a dynamic process that paces and regulates social interaction. According to Altman, the desire for social interaction and withdrawal from it fluctuate over time and with circumstances: There are times when the person or group in question may be receptive and welcoming to outside inputs. In other moments, the same person or group will close off contact with the outside environment or at least wish to do so. Altman (1975) argues that the full range of openness and closedness of the person or group should be included in the notion of privacy. Boundary regulation, then, involves both restricting access to interaction and seeking interaction to achieve the contextually desired degree of access to social interaction for oneself (Altman, 1975). Social relationships are characterised by this dialectic interplay of accessibility and inaccessibility wherein each is 'anticipated and sought on a cyclical basis' (Altman & Gauvain, 1981, p. 314).

Altman's boundary regulation framework builds on the notion of an optimal degree of desired access of the self to others at any given time. Deviation from this optimum in either direction, to what feels like either too much or too little interaction, is unsatisfactory. Therefore, by regulating interpersonal boundaries dynamically and continuously, people attempt to

achieve an optimal social situation in which they reach the degree of privacy that they desire. Altman defines the desired privacy as a subjective statement of an ideal level of interaction with others at some moment in time, and thinks of achieved privacy as the actual degree of contact with others. Pedersen (e.g., 1979; 1982; 1999) has empirically identified six distinct types of privacy: intimacy with family, intimacy with friends, freedom from observation by others (solitude), being geographically removed from and free from observation by others (isolation), anonymity, and reserve (that is, not revealing personal aspects of oneself to others). Furthermore, Pedersen (1997) argues that the various types of privacy serve several psychological functions. These needs include contemplation, autonomy, rejuvenation, confiding, creativity, disapproved consumption, recovery, catharsis, and concealment.

In Altman's terminology, a higher than desired level of privacy is equated with loneliness or isolation, whereas a lower than desired level can lead to an experience of crowding or invasion of privacy. When boundary regulation efforts are successful, people feel neither isolated nor crowded. In other words, interpersonal boundary regulation is not solely a matter of restricting access to interaction. Importantly, it is also about inviting interaction, conditionally and contextually, to achieve valued outcomes such as sharing thoughts and experiences with others. It is vital to note here that boundary regulation can involve different types of social units: individuals, families, groups of mixed or homogenous gender, and so on. Thereby, it can involve a variety of social relationships, including not only ones that individuals maintain to other individuals or to groups but also those between groups.

Furthermore, boundary regulation involves both inputs and outputs: People and groups make efforts to regulate both the inputs coming from others and the outputs they give to others (Altman, 1975). Altman stresses the importance of understanding not just how individuals and groups regulate what the person or the group provides to others but also what they seek and receive from others. Interpersonal boundary regulation is, accordingly, also a matter of which invitations to social interaction people agree to and how they interpret the resulting encounters.

While the degrees of interaction desired and the choices of particular mechanisms by which accessibility is negotiated fluctuate over time and across cultures, Altman (1977) argues that the process of regulating access to interaction is universal; that is, it takes place in all social interaction. In brief, wherever there are individuals or groups with the potential to interact with one another, there are interpersonal boundaries that have to be regulated. According to Altman (1975), boundary regulation serves three purposes that are cumulative from the outside in: First, the 'outermost' function of boundary regulation is to regulate interaction with others – that is, to control and manage interpersonal interaction. Second, boundary regulation has to do with the interface between the self and the non-self, or the ways in which the individual or group relates to others. Third, the 'innermost' and most

central purpose of boundary regulation is defining the self. Interpersonal boundary regulation is central to social life because it serves these three important purposes.

Petronio (2002) has built on Altman's boundary regulation framework to develop a theory of communication privacy management. Her theory focuses on the management of disclosures of private information, emphasising the dialectical and co-operative nature of communication privacy management. It suggests that people use rules to regulate degrees of access to private information. Privacy rules are used in management of all kinds of revealing and concealing of private information. For instance, such rules come into play in determination of who receives a disclosure and under what kinds of conditions (Petronio, 2002). According to Petronio (2002), rule management processes include rule development, boundary co-ordination, and boundary turbulence. First, rule development involves exercising control through implementation of privacy rule foundations that manage disclosures personally or collectively. Second, boundary co-ordination involves co-ordinating collectively owned boundaries that result from co-owning private information with others. Third, regardless of the efforts that people make, clashes over expectations as to privacy management occasionally take place. When there is boundary turbulence, people take corrective action to restore appropriate boundaries and also to integrate new information into the rule system. This is done so that co-ordination might function more smoothly in the future. While Petronio's work expands on Altman's framework and depicts how people co-operate to regulate interpersonal boundaries through rule management processes, the communication privacy management theory, because it focuses on controlling disclosures of private information, is not directly applicable for analysis of the broader questions of how people regulate access to social interaction and how they sustain relationships to one another and to themselves. While I share the broad starting points Petronio has taken, the focus of this dissertation involves a departure from her work in that the main emphasis here is not on personal information *per se* but on how people regulate interpersonal boundaries, especially in terms of how they construct and sustain personal and social identities in co-operation with others.

In sum, people regulate boundaries not just to structure degrees of social interaction as such but also to build and sustain the relations they have with others and with themselves. Regulating interpersonal boundaries provides a sense of agency. First, individuals and groups can attempt to allocate access to interaction contextually. Second, they can try to control the definition of themselves and the situation in which they operate that others come to accept as legitimate. In this dissertation, I argue that interpersonal boundary regulation in the context of SNSs is not just a question of information disclosure and of people as separate individuals in terms of their power to allocate access to information selectively. As a whole, building on Altman's (1975; 1977) work, I consider interpersonal boundary regulation as a holistic

endeavour that people undertake in a variety of everyday situations without necessarily recognising and reflecting on the practices they apply to 'make the world work'.

2.2 SELF-PRESENTATION

Interpersonal boundary regulation entails maintaining individuals' relationships with both others and themselves. This places Altman's framework in close relation to Goffman's (1959) notion of self-presentation and his remarks on relations in public (Goffman, 1971). Discussing self-presentation, Goffman (1959) argues that the process of presenting oneself as a certain kind of person to be treated in certain ways in the course of everyday life involves both self and others. People tend to worry about how they appear in front of others and how their actions are going to influence the definition of the situation that others come to formulate.

Goffman's analysis of interaction ritual (1967) pertains to social encounters that involve individuals in either face-to-face or mediated contact with others. Goffman focuses primarily on the necessarily evanescent face-to-face encounters that take place when individuals are co-present. These encounters have clearly defined beginnings and endings, as they are created by arrivals and terminated by departures. Goffman (1967, p. 5) argues that in each contact with others, an individual has to act out a line – that is, 'a pattern of verbal and nonverbal acts by which he expresses his view of the situation and through this his evaluation of the participants, especially himself'. What we do in a social encounter has ramifications not only for how that situation plays out but also for how its participants come to be evaluated by themselves and by one another.

According to Goffman (1967, p. 6), a person may be said to maintain or have a face 'when the line he effectively takes presents an image of him that is internally consistent, that is supported by judgments and evidence conveyed by participants and that is confirmed by evidence through impersonal agencies in the situation'. Even though the concern about face is focused on the current activity, individuals must, in order to maintain face in and beyond the activity, take into consideration their place in the social world beyond the particular encounter at hand.

Using dramaturgical metaphors to illustrate the process of self-presentation, Goffman has depicted how people emphasise some aspects of the self and conceal others as they present themselves to other people in social contexts. Self-presentational acts can be more or less strategic. In terms of Goffman's (1959) theatre metaphors, the actors may sometimes be very conscious of the fact that they are performing while they may, at other times, be fully taken in by their own acting, believing in its veracity and authenticity. For instance, people may be highly conscious of the way they present themselves in a job interview or on a first date, therefore going to

significant efforts to make a good impression. They are likely to be less aware of their acting at other times – for example, in everyday encounters with close friends or family members. Furthermore, Goffman (1959) points out that the expressiveness of individuals involves two separate kinds of sign activity: Firstly, there is the expression that the individual *gives*, the verbal symbols and other acts that are used for conveying meanings admittedly and purposefully. Such cues that are given include, for example, outright statements of self-presentation, such as the things an individual chooses to say. Second is the wide range of behaviour that accompanies the individual's intentional expressions – in other words, the expression that the individual *gives off*. These are the more subtle cues that are conveyed unconsciously, unintentionally, or even involuntarily. Cues given off may include, for example, blurting things out while another individual speaks and displaying revealing facial expressions that accompany the individual's words. Others can take this aspect of expressiveness as representing the individual, making interpretations that may complement or challenge the impression that the individual is interpreted to be purposefully giving. However, the distinction between cues given and cues given off should not be accepted in a simplistic manner. As Goffman (1959) points out, individuals use both types of communication to convey the impression they desire to make, the first involving deceit and the second feigning. For example, while it can be easier to mislead with carefully selected words, it may be even more effective to use facial expressions and gestures that seem unintentional while they are, in fact, strategically chosen.

People tend to conduct themselves during encounters so as to maintain both their own face and that of other participants, following the rules of self-respect and considerateness (Goffman, 1967). In considering the individual's agency in self-presentation, it is crucial that others affirm the claims that are being made. The concept of claims and the vicissitudes of maintaining them are at the centre of social organisation (Goffman, 1971). An individual projects a definition of the situation when appearing before others, and others must, however passively, affirm or challenge this definition through their response to the individual and any lines of action they initiate to him or her (Goffman, 1959). Individuals on their own cannot make encounters function; it is only through some degree of co-operation among the participants that situations can be defined. However, Goffman (1959) argues neither that individuals would, in fact, reach a harmonious consensus during encounters nor that such an ideal state would be necessary for the smooth functioning of social life. Rather, the key argument is that participants make efforts to maintain a surface agreement that involves, primarily, whose claims about what issues will be honoured in the situation in question. Furthermore, participants tend to share agreement also over the desirability of avoiding open conflict as to how the situation and its participants should be defined. It is central to Goffman's theorising that all participants in an

encounter are expected to go to some lengths to save the feelings and the face of not just themselves but everyone present.

In considering boundary violations, Goffman (1971) proposes taking as a starting point a few participants who all attempt to avoid outright violation of the rules of the encounter. This is in juxtaposition with the traditional way of thinking about threats, which focuses on an individual and considers others as potential offenders. Goffman deems the various aims and desires of the participants who are engaged in interaction to be standard and routine and, instead, placing emphasis on the situation and its peculiarities. From this perspective, which is focused on entire encounters, everyone involved in an encounter is best understood as both an offender and a victim of boundary violations (Goffman, 1971). Goffman (1971) also points out that individuals seem to be themselves the authors of boundary violations quite often. This highlights the importance of the rule of considerateness that guides others to display tact in the face of blunders and to be supportive of the individual. Summed up, Goffman's framework depicts avoiding boundary violations as a co-operative effort. In highlighting how individuals work together toward the smooth functioning of social life, Goffman's (1959; 1967; 1971) work explicates aspects of the co-operation that are central to Altman's (1975) conceptualisation of boundary regulation.

2.3   IDENTITY WORK

Identity, the socially constructed self, situates and defines one's place in the social world (Simon, 2004). Simon summarises the psychological literature on identity in stating that identities serve important needs of belongingness, distinctiveness, respect, esteem, sense or meaning, and agency. As discussed above, defining the self is the most central purpose of boundary regulation (Altman, 1975). The notion of identity work (Schwalbe & Mason-Schrock, 1996) provides a helpful framework for considering the efforts people make to regulate interpersonal boundaries in this vein, both individually and jointly with one another.

All acts that reflect a desire to signify one's qualities to others, and thereby define one's self as a social object, can be considered as instances of *identity work* (Schwalbe and Mason-Schrock, 1996). These acts are not restricted to situated talk and appearance, for they include complex acts that extend over time – for instance, choices of consumer goods and media content, such as books and music. These signifying acts are identity claims: intentional (symbolic) statements about how an individual would like to be regarded by others, even if one does not consciously attend to the psychological outcomes of his or her actions. For example, an affluent teenager who chooses to wear second-hand clothing from a charity shop exclusively may be genuinely frugal, but such behaviour also carries identity claims about his or her values as a consumer. Broadly defined, identity work refers to anything that people

do, individually or collectively, to give meaning to themselves or others. Schwalbe and Mason-Schrock (1996) argue that people cannot co-ordinate action with others without being able to recognise them as individuals, or at least as types of individuals: in face-to-face interactions, it is necessary to know roughly what to expect from whom and what others expect of oneself. In my interpretation, these processes of negotiating identity are conceptually closely related to what Goffman (1959) addresses as defining the situation and its participants. Together these two frameworks emphasise how social interaction necessitates everyone's participation to sustain both the face of the participants and the situation in a way that does not compromise the sanctity of those participating and that makes the functioning of social life feasible.

According to Schwalbe and Mason-Schrock (1996), identity work can be broken down into four major parts: defining, coding, affirming, and policing. The first part, defining, refers to the creation of a shared idea about the existence of a category of people. This brings an identity into existence, investing it with meaning. The second part, coding, means the creation of a set of rules for signifying the defined identity. Coding includes giving meanings that individuals can use to signify who and what they are. Codes can only be made effective jointly, and they may be negotiated continually as people try to adapt them to their own goals. The third part, affirming, covers the process of enacting and validating claims to the identity – a crucial step since without others' affirmation, an individual's identity remains ephemeral. The fourth part, policing, refers to protection of the meaning of the identity and enforcement of the code for signifying it.

Identity work is not solely an individual affair; it is a process in which groups engage too. According to Schwalbe and Mason-Schrock (1996), in doing identity work, group members negotiate jointly what constitutes the identity of a given group – that is, what characteristics are used to define the group, who is considered a member, who is left out, and how the status of the group is situated relative to other groups. In other words, the regulation of interpersonal and intergroup boundaries makes it possible for individuals and groups to form and maintain identities and a sense of distinctness from others. Identities require boundaries to be formed and defined meaningfully. The questions of making and sustaining a distinction between self and others and between 'us' and 'them' are central to how people structure the social world and make operating in it possible.

While Schwalbe and Mason-Schrock (1996) do not explicate the connection, this depiction of identity work ties back in with the social identity approach. It is worthy of note here that the social identity approach holds as one of its central claims that people make social comparisons to seek positive distinctiveness for their own groups as compared to other groups (e.g., Turner, 1975; Tajfel, 1978; Turner, 2000). Social identity theory identifies such distinctiveness as a source of positive social identity and, as such, a boost for self-esteem. From the standpoint of interpersonal boundary

regulation, there are two noteworthy issues: First, consensus on 'who is who' is often shared by the group and by the surrounding groups by which and from which the group is perceived as distinct. Second, individual members of distinct groups usually have a shared perception of these group boundaries (Tajfel, 1978). I consider these issues related to Goffman's (1959) argument that people, when engaging in social interaction, make efforts both to maintain at least surface-level agreement on identity claims and to avoid open conflict as to how those participating in the interaction should be defined. Importantly, achieving the aims of identity work always necessitates co-operation among those involved in related interactions.

2.4 PRACTICES OF INTERPERSONAL BOUNDARY REGULATION

Regulating interpersonal boundaries requires the person or group in question to expend energy (Altman, 1975), regardless of the exact nature of the particular attempt to achieve the desired degree of access to social interaction. Individuals and groups use a range of behavioural, cultural, and environmental mechanisms to achieve a degree of interaction that matches their temporally fluctuating desires for openness and closedness (Altman, 1975). According to Altman (1975), these multiple mechanisms operate as a unified system, amplifying, substituting for, and complementing one another.

When conceptualised as boundary regulation, privacy is not a property or a possession but something that people do. In a similar vein, Nippert-Eng (2010) provides a detailed description of the efforts people undertake to achieve privacy through a process of selective concealment and disclosure. In her view, the work of privacy encompasses 'the daily activity of trying to deny or grant varying amounts of access to private matters to specific people in specific ways' (Nippert-Eng, 2010, p. 2). She argues that the collection of rich and nuanced activities that people use to regulate access to, for instance, their space, time, activities, possessions, bodies, and sense of self are as endless as are the specific challenges that these activities are deployed to address. The nuances of the work that people do to regulate interpersonal boundaries are, indeed, significant. For instance, as Goffman (1971) has pointed out, an act that constitutes violation of a boundary in one relationship may be expected in another, in which, instead, non-performance of the act might be interpreted as a violation. In a similar vein, Nippert-Eng (2010) points out secrets as an effective form of boundary work, since they are simultaneously inclusive and exclusive and, thus, powerful for indicating the social distance between individuals at specific times and in specific ways. Keeping, revealing, and finding out about secrets according to one's wishes, while sustaining desired relationships with others, requires understanding of the cultural, personal, and interpersonal factors at play in the interactional

situations in which one operates (Nippert-Eng, 2010). More generally, suitable practices of boundary regulation always have to be selected contextually to match the situation at hand.

The idea of practice, as Dourish (2001, p. 204) puts it, 'is concerned not just with what people do but with what they mean by what they do, and with how what they do is meaningful to them'. Similarly, Wenger (1998, p. 51) defines a practice as 'a process by which we can experience the world and our engagement with it as meaningful'. Conceptualising interpersonal boundary regulation in this broad manner as a practice fits the purpose of my enquiry well, since the goal is to shed light on both what kinds of efforts people undertake to regulate interpersonal boundaries and what kinds of meanings they attach to these activities. Building on the frameworks of boundary regulation, self-presentation, and identity work, I approach interpersonal boundary regulation in this dissertation as a practice in the sense that I consider it as a holistic endeavour that involves the organisation of social interaction and the ways in which people make sense of it. The flow of social interaction, the maintenance of social relationships, and the definition of identity all rely on the expectation that everyone involved in a situation will do his or her part to 'make the world work'. In brief, the theoretical background for this work highlights the essentiality of co-operation for all strivings to make the world work.

The terminology employed in related literature to discuss the ways in which people strive to regulate interpersonal boundaries is diverse. Altman (1975) discusses mechanisms. In his various works (1959; 1967; 1971) examining how individuals make social encounters work, Goffman has addressed the efforts people undertake as practices, or techniques, and as management. Nippert-Eng (2010) writes about activities that are used to regulate privacy, while boyd and Marwick (e.g., 2011) discuss social privacy in terms of practices and strategies. In studies I and II, 'strategy' is the term used to address how people manage group co-presence and regulate privacy and publicness. In Study III, similar issues are considered in terms of boundary regulation mechanisms, while in the write-up on Study IV the patterns identified are simply referred to as behaviours, without argument that participants must necessarily deploy them intentionally. While each term can be utilised to communicate its own nuances and emphases, all of the above-mentioned terms refer to some aspects of the vast pool of practices that are applied to regulate interpersonal boundaries. For the purposes of this dissertation, I will refer to particular ways to achieve contextually desired degrees of access as *practices*. This is done primarily for the sake of coherence and consistency. The wording also aids in avoiding confusion between the action people take and the capabilities SNSs offer, since it allows me to address as mechanisms the varied technological features that allow or afford various types of sharing. Furthermore, I use 'regulation' and 'management' as interchangeable terms with reference to interpersonal boundaries. Finally, I draw upon the concept of negotiation in relation to the

co-operation linked to regulation of interpersonal boundaries, especially in terms of contesting and supporting of identity claims. I do this to emphasise that people are not, as individuals, in control of what kinds of self-presentation they can put forth successfully and what kinds of lines they can pursue in interactions with others.

3 SOCIAL NETWORK SERVICES AND THE BROADER TECHNOLOGICAL LANDSCAPE

Information and communication technologies (ICTs) enable pervasive surveillance, massive databases, and lightning-fast distribution of information around the globe (Nissenbaum, 2010). Accordingly, they have been considered a major threat to privacy in public discourse at least since the 1960s (Nissenbaum, 2010). Over the past few decades, the concerns have multiplied in type and extent as radical transformations of technology have introduced a remarkable range of systems to public and private everyday life in societies all over the world (Nissenbaum, 2010). These systems include but are not limited to the World Wide Web, mobile devices, global positioning, ubiquitous computing, data mining, and online social networking (Nissenbaum, 2010). Social network services, the technologies under study in this dissertation, are an integral part of these developments. I argue that SNSs incorporate characteristics that make them especially interesting for the study of interpersonal boundary regulation. Their widespread adoption in people's day-to-day life all over the world has turned them into a phenomenon that merits special attention. However, it is worth noting here that SNSs are by no means the first platforms on which people have socialised online (for an overview, see for example, Baym, 2006).

In the last decade, SNSs have grown to play important roles in the everyday life of millions of people. In October 2012, Facebook reported reaching the milestone of a billion users having created a profile[2]. According to Rainie and colleagues (2013), on a typical day nearly half of all adult internet users in the US access an SNS. Furthermore, of Americans who use SNSs, more than 40% report accessing an SNS several times a day (Rainie et al., 2013). To give an idea of the volume of content being shared, as of 2013, more than 300 million photos are uploaded to Facebook on an average day[3]. Yet, while Facebook and other SNSs may seem to be everywhere in the post-industrial world and available to everyone to the point of fatigue, it is worth noting that there are also people whose access to information technology and participation in the social interaction ICTs mediate is restricted either materially (Burrell, 2012) or because of insufficient skills (Hargittai, 2002). Furthermore, the conditions for SNS use and interpersonal boundary

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[2] For news coverage, see, for example, http://money.cnn.com/2012/10/04/technology/facebook-billion-users/index.html (accessed on 18 November 2013).

[3] For news coverage, see, for example, http://gizmodo.com/5937143/what-facebook-deals-with-everyday-27-billion-likes-300-million-photos-uploaded-and-500-terabytes-of-data (accessed on 18 November 2013).

regulation differ also between political and cultural contexts. The present work is focused on how those who have an opportunity to engage with SNSs apply interpersonal boundary regulation practices in a Western, democratic context.

3.1 DEFINING SOCIAL NETWORK SERVICES

In 2007, boyd and Ellison (p. 211) defined social network sites as 'web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system'. By choosing to use the formulation 'social *network* site', instead of the also current and often interchangeably used 'social *networking* site', boyd and Ellison emphasised that what makes SNSs special is the way in which they enable users to articulate and make visible their social relationships, as well as to view the social networks of others. While SNSs provide opportunities for initiating relationships between strangers or friends of friends, such 'social networking' is not the primary practice for most people using them. With many of the large SNSs, such as Facebook, the participants are communicating primarily with people who are already a part of their social network rather than looking to meet new people (boyd & Ellison, 2007).

More recently, Ellison and boyd (2013, p. 158) offered an update to their original definition, characterising a social network site as 'a *networked communication platform* in which participants 1) have *uniquely identifiable profiles* that consist of user-supplied content, content provided by other users, and/or system-provided data; 2) can *publicly articulate connections* that can be viewed and traversed by others; and 3) can consume, produce, and/or interact with *streams of user-generated content* provided by their connections on the site'. The new version of the definition articulates in a more nuanced fashion the different types of content that individuals' profiles in SNSs may include. It is an important observation that profiles may contain content provided not only by the profiles' owners themselves but also by other users and the system. Furthermore, the new version highlights a core development in the design of SNSs whereby perusing dynamic streams of user-generated content has become the primary mode of accessing and interacting with content in SNSs. The need to update the very definition of what constitutes SNSs reflects the rapid changes in the social and technical landscape of this service category over recent years. As SNSs proliferate and evolve continuously, those conducting research on them are aiming at a moving target. However, while particular systems and features come and go, boyd (2008) suggests that examining how people engage with SNSs can provide long-lasting insights into how identities form, how status is negotiated, and how peers socialise among themselves.

In choosing to address this category of systems as social network *services* instead of as *sites*, I highlight their ubiquitous nature: While many SNSs started off as, and are primarily, Web sites, they are nowadays accessed through many devices and platforms, such as separate applications on mobile devices. Moreover, people do not interact with SNSs solely when they are on the site of the service itself. Rather, they may come across features integrated with them almost anywhere on the Web. For instance, Facebook's 'Like' feature, which allows people to indicate with a single click their approval and enjoyment of pieces of online content, is now nearly ubiquitous on the Web. I address SNSs as services with the intention of emphasising how broadly and tightly they are interwoven into everyday activities. For the purposes of this work, I consider the term 'online social network' (see, for example, Ellison et al., 2007; Steinfield et al., 2008) to refer to the same category of services and phenomena.

Furthermore, I address interpersonal boundary regulation *in the context of SNSs* instead of discussing interpersonal boundary regulation *in SNSs*. I make this distinction to highlight that one does not need to be interacting with an interface linked to an SNS directly to feel the need to take SNSs into consideration when regulating interpersonal boundaries. In fact, one does not even need to be signed up as a user of any SNS at all to be affected by them. The argument boyd (2008) has made in relation to the specific SNS MySpace applies more broadly to the whole category: whether one is for or against them, everyone knows SNSs and has to have an opinion about them. The widespread bringing of SNSs into everyday use affects sociality more broadly than solely in terms of the activities that take place on SNS platforms.

In line with the work of Warner (2002), SNSs have been addressed as networked publics (see, for example, boyd, 2011a). This conceptualisation emphasises that the imagined community emerging from the intersection of people, technology, and practices is just as integral to defining SNSs as are the spaces constructed through the technologies themselves. While I do not utilise the notion of networked publics in my analysis, I share the stance that technology alone does not define in any meaningful way what SNSs are. The meanings attached to SNSs are construed in the interactions by which different groups of people come to interpret and use these services and their features. Identification with technology occurs through the interpretation and use of the technologies in question rather than because of some inherent qualities they have (Fischer, 1992), and SNSs are no exception.

Specific functions vary across SNSs, but profiles, friend lists, public commenting tools, and stream-based updates are four central types of features typical of SNSs (boyd, 2011a). In a broader discussion of ICTs, Baym (2010) names interactivity, temporal structure, social cues, storage, replicability, reach, and mobility as seven concepts that can be used in making productive comparisons between media just as well as with face-to-face communication. She argues that such concepts are needed for

recognition of the diversity among technologies that may otherwise seem to be monolithic. In a similar vein, even as SNSs share some central characteristics, it is important to bear in mind that they are a diverse collection of networked systems whose feature sets and target user communities are varied. Individual SNSs cater to a variety of cultural and social interests, and they vary in the extent to which they support additional services such as blogging, sharing of audio/visual content, mobile connectivity, or particular content genres (Papacharissi, 2011). Furthermore, some SNSs have a professional orientation, while others cater to a specific ethnic, religious, or sexual orientation genre (Papacharissi, 2011).

3.2 CHALLENGES FOR INTERPERSONAL BOUNDARY REGULATION IN THE CONTEXT OF SOCIAL NETWORK SERVICES

The characteristics of social network services that have potential to disrupt conventional processes and practices of regulating interpersonal boundaries are best understood in the broader context of technological development. Nissenbaum (2010) maps the contemporary landscape of technologies and socio-technical systems with three broad classes of capacities that affect the flows of personal information in networked contexts: First, *the capacity to track and monitor* refers to the technological affordances of watching people, capturing information about them, and following them through time and space. Second, *the capacity to aggregate and analyse* involves novel opportunities to store massive amounts of information potentially indefinitely; to merge information from diverse sources; and to search, find, retrieve, organise, scrutinise, and analyse varied information. Third, *the capacity to disseminate and publish* refers to effective opportunities to distribute information in endlessly varied configurations. Nissenbaum (2010) stresses that systems and practices may, and often do, encompass more than one of these capacities. Indeed, SNSs incorporate aspects of all three in ways that have implications, first, for management of personal information in relation to corporations and institutions and, second, for negotiation of social interactions, social relationships, and identities with those in one's social network. The former are beyond the scope of this dissertation. The latter lie at the heart of why SNSs disrupt some premises of interpersonal boundary regulation and require reconsideration of the practices applied for reaching its aims in a networked setting.

3.2.1 CHALLENGING CHARACTERISTICS AND DYNAMICS RELATED TO SOCIAL NETWORK SERVICES

According to boyd (2008), persistence, searchability, replicability, and invisible audiences are four characteristics that separate interactions in

mediated settings, such as in SNSs, from those that are not digitally mediated. First, boyd (2008) refers by *persistence* to the fact that networked communications are recorded for posterity. This enables the existence of any speech act to extend temporally beyond what could be expected in a non-mediated situation. Second, *searchability* refers to the changes brought about by search and discovery tools that allow easy access to the recorded expressions and the identities that have been established through digital content, such as text, photos, and video content (boyd, 2008). Third, the *replicability* of digital content means that online expressions can be copied from one place to another verbatim such that there is no way to distinguish the 'original' from the 'copy' (boyd, 2008). Finally, *invisible audiences* render it virtually impossible to ascertain all those who might run across an expression made in online settings, such as SNSs (boyd, 2008). This is further complicated by the other three properties, since a piece of digital content may be 'heard' at a different time and place from when and where it was originally shared (boyd, 2008). In brief, it can be harder to decipher and define the situation in which an interaction takes place, especially as the shared content persists beyond the ephemeral moment of sharing. This circumstance differs drastically from those covered in the works of Goffman (1959; 1967; 1971) and Altman (1975; 1977), wherein the focus is primarily on face-to-face interaction.

SNSs make the sharing of digital content increasingly effortless. They provide novel opportunities to connect with other people and to stay in touch even over a distance. In this, they hold vast potential for identity work and self-presentation. Papacharissi (2011) argues that with the development of ICTs individuals gain access to various multimedia tools that enable more controlled and more imaginative performances of identity online. The primarily interpersonal interaction that SNSs foster takes as its foundation norms of everyday interaction adapted to the online setting (Papacharissi, 2011). Also, SNSs both allow for self-expression and provide opportunities for social interaction with other users (Stern, 2007).

boyd (2008) has argued that, to a degree, people have more control online, as they can carefully select what information to put forth to present themselves. Simultaneously, though, scholars have highlighted the constraints and challenges that the networked context imposes for interpersonal boundary regulation: How can individuals gain control over the appropriate flow of information (e.g., Nissenbaum, 2010) as they share digital content about themselves and as others perhaps share information about them too? How can people manage their diverse roles and the multiple facets of their lives (e.g., Farnham & Churchill, 2011) in dealing with the vast social networks they have articulated in SNSs, especially since individuals often do not want certain groups of friends to be able to connect with their other groups of friends (boyd, 2003)? This dialectic of novel challenges and opportunities renders SNSs interesting from the point of view of interpersonal boundary regulation.

Furthermore, self-presentations in SNSs have been found to be closely connected with self-presentations offline: Warkentin et al. (2010) found that when engaging with SNSs, over 90% of their survey participants used their official name, had posted a somewhat identifiable photo to their profile, and had articulated connections to offline acquaintances. This characteristic distinguishes SNSs from many other types of online settings, such as discussion forums, and limits individuals' freedom in devising a desirable self-presentation.

boyd (2010) has discussed the change that networked communication platforms have brought with them in terms of a shift to a situation wherein people's expressions and disclosures are public by default and private only through effort. This is an inversion of what people would typically expect on the basis of their experiences from social interaction that is not digitally mediated. In SNSs, the central question that needs to be pondered can become what it is that an individual does not want to have broadly accessible – that is, when and regarding what one should restrict access to interaction and information. This logic is the opposite of the more familiar circumstance wherein making something public and broadly known requires significant effort.

From the perspective of interpersonal boundary regulation, it is not sufficient to consider solely the challenges that are related to undesirably high levels of exposure. In Altman's terms (1975), interpersonal boundary regulation has failed also when individuals end up with less interaction and fewer connections to others than they desired. I argue that in SNS settings, 'feeling isolated' may materialise either in terms of receiving less attention to one's updates than was sought or in being deprived of access to various types of interactions with others, whether in gaining access to a friend's holiday pictures or in chatting with a colleague. Similarly, 'feeling crowded' can be interpreted both as feeling that too much about oneself is being shared, in terms of either the content or the audience range, and as feeling that one is flooded with updates from others, receiving content in quantities that seem excessive. Conversations on privacy and SNSs tend to focus on the latter, depicting 'too much' access more readily as an issue than 'too little' access. Not only is this unjustifiable in light of Altman's boundary regulation theory, but it also risks casting engagement with SNSs in a problem-oriented light and missing the delicate balancing acts that people perform to achieve contextually desirable degrees of access to social interaction and to the self.

As Tufekci (2008) has pointed out, people set up SNS profiles partially because they want to be seen. Emphasising the withdrawal aspects of boundary regulation can lead to overlooking individuals' motivations for engaging with SNSs and the benefits they may gain from participation. One frame for understanding these benefits is found in the notion of social capital (Putnam, 2000) and, more specifically, that of socio-technical capital (Resnick, 2001) – i.e., productive resources that emerge from the combination of social relationships and information and communication

technology. Socio-technical capital is seen as both an outcome of mediated social interaction and an enabler of future interactions (Resnick, 2001). More concretely, socio-technical capital may, for instance, help people to route information, exchange resources, support one another emotionally, and co-ordinate various types of shared activities. Since engaging with others in the context of SNSs is arguably one way to foster socio-technical capital, participation in social interaction in this context can be seen to have the potential to lead to these benefits. People's willingness to invest effort in regulating interpersonal boundaries in the context of SNSs can be better understood in light of the benefits that they may reap from continuing to engage with these networked communication platforms.

3.2.2 CHALLENGES RELATED TO SHARING IN THE CONTEXT OF SOCIAL NETWORK SERVICES

The beginning of efforts to apply Altman's (1975; 1977) notions of privacy as boundary regulation to networked settings can be traced to 2003, when Palen and Dourish revisited the framework, arguing that online contexts bring with them novel challenges related to limitations of control over participation and identity definition. In their article, Palen and Dourish (2003) discuss these challenges as involving three tensions: First, people have to balance the pursuits of maintaining both a personal life and a public face. One has to 'share' information in order to take part in the networked world, so mere withdrawal is not a solution to privacy concerns. Second, the authors criticise traditional notions of privacy that focus on the individual and fail to account for issues of affiliation and allegiance. They point out the limits of individuals' control over how others perceive them and their actions, highlighting the need to understand boundary regulation as a co-operative process also in the networked domain. Third, the authors discuss tensions related to temporal boundaries that are due to the persistence of data.

The early piece by Palen and Dourish (2003) has been followed by a body of literature that makes efforts to characterise the particularities that the networked context introduces to interpersonal boundary regulation (see, for example, Karr-Wisniewski et al., 2011; Stutzman & Kramer-Duffield, 2010; Stutzman & Hartzog, 2012). Networked technologies reconfigure information flows and also the ways in which people interact with both information and one another (boyd, 2010). Tufekci (2008) has summarised the challenges related to information technology by pointing out that, as spatial and temporal boundaries become obscured and since digital content persists over time, it is harder to decipher whom one may be interacting with and what interactions may occur asynchronously at some point in the future.

Notions of self-presentation have been frequently addressed in studies exploring the online domain (for an overview, see Hogan, 2010). The flexibility of online digital technologies such as SNSs permits interaction among individuals within and across networks, bringing in diverse social ties,

with variable frequency of contact and intimacy (Papacharissi, 2011). These services allow individuals to connect to local and remote circles of members, friends, and acquaintances (Papacharissi, 2011). The social networks individuals maintain online may even be both vaster and looser than their offline counterparts (Gross & Acquisti, 2005). Maintaining a broad social network in an SNS may lead to a sense of having to present oneself and one's social connections consistently with everyone. The challenges related to this tendency to flatten diverse audiences into a single, homogenous group have often been addressed in relation to the concept of context collapse (for a recent overview, see Vitak, 2012). Furthermore, SNSs promote public, one-to-many modes of communication over more private, targeted interpersonal interactions (Vitak, 2012).

As boyd (2003) points out, having to present oneself consistently across connections from the various facets of one's life and having to reveal one's most intimate relations alongside acquaintances, familiar strangers, and past associates is a key challenge that SNSs pose to their users. Sharing content with the diverse audience that one's social network in an SNS may form is challenging because keeping incompatible aspects of one's life separate can become difficult (Donath & boyd, 2004). DiMicco and Millen (2007) depict how people try to avoid unintended 'leakage' between, for instance, corporate and social personae. In a similar vein, Hewitt and Forte (2006) address experiences of loss of control over self-presentation as one addresses broad, unknown audiences that may include peers, supervisors, subordinates, parents, teachers, and mentors. The present work contributes to this growing body of research by addressing the challenges of 'sharing' with multiple groups simultaneously.

Second, further studies have explored self-presentation from the perspective of managing privacy and publicness in SNSs (see, for example, boyd & Marwick, 2011; Karr-Wisniewski et al., 2011; Stutzman & Hartzog, 2012). These studies have typically focused on individuals' efforts to manage the sharing of digital content online. In their analysis of interpersonal-boundary-related practices relevant to SNSs and to the specific interface controls that different SNSs provide for managing these boundaries, Karr-Wisniewski and colleagues (2011) concentrate on the means available to individual users, leaving the co-operative aspects of interpersonal boundary regulation unaddressed. Similarly, Stutzman and Hartzog's (2012) examination of the management of group context in socially mediating technologies is focused on individual efforts. The research presented in this dissertation complements related work by considering the implications of 'sharing' on behalf of others. This consideration is central since content disclosed on behalf of someone else can have a very powerful effect on how others come to perceive that individual: According to the 'warranting' principle (Walther & Parks, 2002), others are more likely to trust information about an individual that the relevant individual cannot easily manipulate. Moreover, especially with respect to information taken to afford

a particularly favourable impression of an individual, others tend to be more willing to believe external sources than that individual's own words (Walther et al., 2009). The present work contributes also by highlighting the co-operative nature of interpersonal boundary regulation efforts.

Third, research on different networked communication platforms has focused primarily on the sharing of manually publicised digital content (see, for example, Besmer & Richter Lipford, 2010; Ellison et al., 2006; Lehmuskallio, 2009; Marwick & boyd, 2011). However, there are also automated sharing mechanisms in place that give those engaging with them a different set of opportunities and challenges. Automated mechanisms, such as the one available for users of the music-focused SNS Last.fm, are typically deployed to share behavioural information – a type of content different from, for example, textual status updates and photos. Automated sharing mechanisms may track people's behaviour and publish it online in a way that does not necessitate active involvement on the part of the user. For instance, on Last.fm, users may allow the sharing mechanism to track their music-listening and publish information on it in their profile in the SNS. The third theme of this dissertation involves 'sharing' via automation. In addressing this theme, I examine how interpersonal boundaries are regulated when sharing does not necessitate separate, intentional acts on the part of the individual about whom content is made public.

Finally, while the framework of boundary regulation originates in considerations of social life in physical settings, these factors are often bypassed in examination of boundary regulation in the context of SNSs. So far, research into SNSs has focused on practices that take place in the services. The tendency has been to examine these actions in isolation from offline activities. For instance, Karr-Wisniewski et al.'s (2011) analysis focuses on the affordances of various SNSs. While there is value in understanding online interaction in its own right, this scope is problematic. The characteristics of networked communication platforms do matter, but I argue that practices of interpersonal boundary regulation need to be considered more broadly. It is necessary to acknowledge that they may be applied in situations beyond online interaction. There is a generally shared understanding that SNSs are used primarily for socialising among people who have pre-existing social ties (see, for example, boyd & Ellison, 2007). This indicates that the social interaction that takes place in SNSs is embedded in a wider fabric of social relationships. It is woven into a stream of interaction that occurs both online and offline, often in ways that overlap. Furthermore, SNSs are now used not just for sharing digital content but also to exchange physical goods (see, for example, Suhonen et al., 2010). Because the use of SNSs is woven tightly into day-to-day life, interpersonal boundary regulation too must be understood through how it is integrated into the entirety of daily life. The close connections between interaction online and offline mean that people are increasingly called to account for their actions online also in offline settings, and vice versa. I argue that it is not enough for

us to understand that online and offline interaction are part of the same whole. We also need to examine the nuanced connections between interactions that occur in different settings. In examining the fourth theme of the dissertation, we begin to address this issue by considering the connections between acts of sharing online and offline.

4 SUMMARY OF THE RESEARCH PROBLEM AND METHODS

Interpersonal boundary regulation is central to everyday life. It serves both achieving contextually desirable degrees of social interaction and sustaining an individual's relationships with self and others (see Chapter 2). I argue that networked communication platforms such as SNSs disrupt some of the premises of interpersonal boundary regulation that people are used to relying on, such as assumptions of time, space, and the ephemeral and clearly defined nature of encounters (see Chapter 3). These disruptions can make it difficult to define and interpret the context of social interaction. This is a challenge that Goffman (1959; 1967) and Altman (1975; 1977) had little reason to address in their works, since both focused on face-to-face interactions. While these differences set the context of SNSs apart from the settings considered in said early works, I argue that interpersonal boundary regulation takes place through co-operative processes also in the context of SNSs. This work investigates in depth four central themes in how interpersonal boundaries are regulated in relation to several types of sharing in the context of SNSs. In so doing, it counterbalances simplistic notions of privacy in networked settings as merely a question of individual control over access to streams of content, and, instead, highlights the ongoing co-operative efforts that 'make the networked world work'. Section 4.1 presents the detailed research questions I address in this dissertation. Section 4.2 describes my overarching research strategy and methodological choices, and Section 4.3 provides details on each of the five studies incorporated in this work.

4.1 RESEARCH QUESTIONS

This dissertation examines how people who engage with SNSs make sense of interpersonal boundaries in the context of SNSs and what kinds of practices they apply for regulating them in this setting. I approach practices of interpersonal boundary regulation in the context of SNSs in detail through four themes: 1) sharing with multiple groups, 2) sharing on behalf of others, 3) sharing via automation, and 4) sharing online and offline. The themes are framed around the emic notion of 'sharing' that is central to how people talk about activities taking place in SNSs. Furthermore, SNS providers, most importantly Facebook, take part in constructing and strengthening the rhetoric of 'sharing'. In this work, instead of treating sharing via SNSs as a monolith, I consider and contrast the sharing of manually selected digital content; automatically tracked and published behavioural information; and,

finally, the sharing of favours and physical objects with the support of a networked communication platform.

The four themes stem from prior literature and observations of technological shifts that were taking place at the time the research was conducted. Initial notions of the themes guided the research in individual studies, but the themes were also further elaborated upon and refined throughout the research process. All consideration of the themes explores interpersonal boundary regulation in the emerging context of SNSs, adding a unique perspective on how interpersonal boundaries are regulated in co-operation with others. For each theme, the enquiry is twofold: First, how do people make sense of the aspect of sharing in question? Second, what kinds of practices do they apply to regulate interpersonal boundaries in the face of the challenges related to that aspect of sharing?

As people explicate their social networks in SNSs, they create novel streams of communication that can collapse formerly highly separated contexts. Social networks articulated in SNSs can span long distances in both time and geography. Because of these tendencies, it may be difficult to maintain boundaries between the individual facets of one's life in the context of SNSs. The study of the first theme addresses these dynamics through the lens of sharing digital content with multiple groups via an SNS:

(1) How do people regulate interpersonal boundaries in a setting wherein multiple groups important to them are simultaneously present, forming a diverse audience for the content that they share?

Second, sharing on behalf of others can arguably be both easier and more problematic in the context of SNSs. Sharing digital content is technically simple and does not require much effort. At the same time, pieces of content that have been shared are persistent, replicable, and easy to search for or spread further. The second theme has to do with the dynamics of sharing on behalf of others in the context of SNSs:

(2) How do people regulate interpersonal boundaries in a setting wherein it is technically easy to share content on behalf of others?

Third, the capacities of networked technologies have opened the way for automated sharing of behaviour information through SNSs. Little is known of how people regulate interpersonal boundaries in the presence of automated sharing. The work on the third theme addresses this gap by examining sharing via automation:

(3) How do people regulate interpersonal boundaries in a setting that encourages them to share behavioural information via an automated sharing mechanism?

Fourth, while social interactions online and offline are inseparably interwoven when SNSs are involved, there is a need for more nuanced understanding of the different ways in which diverse acts of sharing online and offline are coupled. The work on the fourth theme addresses this need by exploring different ways in which interpersonal boundary regulation efforts online and offline are connected:

(4)   How do people regulate interpersonal boundaries in settings wherein sharing online and offline are connected in diverse ways?

On the basis of my research, I argue that interpersonal boundary regulation takes place through co-operative processes also in the context of SNSs, although SNSs have characteristics that disrupt conventional premises of interpersonal boundary regulation. I propose a conceptualisation of interpersonal boundary regulation in the context of SNSs and a typology of the practices that are deployed to regulate interpersonal boundaries in this context. Going beyond identifying the changes that the widespread adoption of SNSs brings about, I illustrate how people regulate interpersonal boundaries in the face of the opportunities and challenges that the four above-mentioned aspects of sharing pose in their everyday lives. As a whole, then, the four themes shed light on how people 'make the networked world work' – that is, how they regulate interpersonal boundaries in the SNS context in order to achieve desired social interactions, sustain interpersonal relationships, and work on their identities.

4.2   RESEARCH STRATEGY AND METHODS

This dissertation examines interpersonal boundary regulation in the context of SNSs through a series of qualitative studies. The aim of this work as a whole is to build a grounded understanding of practices applied to regulate interpersonal boundaries in a networked setting. This aim is pursued through a contextual exploration of how young adults residing in Finland regulate interpersonal boundaries as they engage with various SNSs in the course of their everyday life. The studies uncover accounts of seemingly mundane acts that nonetheless serve the important pursuit of 'making the world work'. This section provides an overview of the research strategy employed in this work.

4.2.1   SUMMARY OF PHILOSOPHICAL STARTING POINTS

I approach practices of interpersonal boundary regulation through the lens of how people make sense of and use SNSs and how they build on and navigate the characteristics of these services in order to regulate interpersonal boundaries. The work is grounded in a conviction that, while different

technologies have different affordances and may allow for, support, encourage, or constrain social interactions differently, they do not dictate sociality. Therefore, I situate this work at the middle ground between social constructionism and technological determinism. In this approach – which is sometimes called social shaping – as summarised by Baym (2010), the consequences of technologies result both from the social capabilities that technological qualities enable and from the ways in which people make use of those affordances. For a detailed overview of the social shaping approach, see the work of MacKenzie and Wajcman (1999).

The core idea of social shaping is captured eloquently in Fischer's (1992, p. 5) account of the social history of the telephone, in which he argues that '[a]s much as people adapt their lives to the changed circumstances created by a new technology, they also adapt that technology to their lives'. My work examines the significance of the broad adoption of SNSs for interpersonal boundary regulation. I approach the transformation that occurs as SNSs gain in popularity as a process that involves both novel technology and people who make choices regarding whether and how they engage with it. Also, while SNSs frame the enquiry, I consider this work to be more a study of how people interact with each other than of how they interact with networked technologies. However, the two are, of course, intimately related in this setting wherein networked technologies mediate social interaction. This work shares the conviction expressed by Baym (2010, p. 48) that, 'in order to connect digital media to social consequences, we need to understand both features of technology and the practices that influence and emerge around technology'.

The research is grounded in an understanding of interpersonal boundary regulation as a co-operative process, as conceptualised in view of the works of Altman (1975), Goffman (e.g., 1959; 1971), and Schwalbe and Mason-Schrock (1996). The main emphasis of each study is on the ways in which individuals regulate interpersonal boundaries as they face challenges related to different aspects of sharing in the course of their everyday life. Importantly, the research is aimed at considering these efforts in terms of both how individuals co-operate with one another and how their interpersonal boundary regulation efforts are shaped by the affordances of the technologies with which they engage. In adopting this approach and addressing privacy as boundary regulation, I challenge both perspectives that focus solely on individual actions to manage privacy and approaches that are limited to considering solely individuals' use of features provided by the technology in question. In this connection, I approach participants in the studies as socially situated individuals who are connected to others and who need to co-operate with others in order to regulate access to social interaction, to sustain social relations, and to negotiate over identities.

Another central premise of this work is that social life online and offline are parts of the same social reality. In taking this as a starting point of the research, I counter the tendency to treat the online and offline as separate

realities, one of which is considered virtual and the other real. However, the emphasis of the work is not on arguing this point. Instead, my research interest lies in shedding light on how social interactions that take place in online and offline settings are interwoven in the fabric of day-to-day life, along with how these connections differ, depending on the activities and technologies in question.

4.2.2 THE EXPLORATORY INTERPRETATIVE RESEARCH APPROACH

I approach the overarching research topic, interpersonal boundary regulation in the context of SNSs, with a series of studies. The studies shed light on how people who engage with SNSs react to four distinct aspects of sharing and how they regulate interpersonal boundaries as they face various challenges related to sharing via SNSs. At the time of the studies, the case technologies had been introduced to the everyday life of young adults in Finland relatively recently. There were no readily available models to rely on in building an understanding of how interpersonal boundaries are regulated in this emergent context. Driven by the exploratory nature of my research questions, I adopted a qualitative research approach that allowed for building a grounded understanding of the phenomenon under study.

This work is exploratory and interpretive in nature. The aim is to understand people's practices and the meanings they associated with them, in context. The interpretative research tradition is grounded in the philosophical stances of hermeneutics and phenomenology (Boland, 1985). According to this tradition, reality is a social product and can only be understood through the social actors who construct and make sense of the reality (Orlikowski & Baroudi, 1991). Accordingly, it is necessary to conduct enquiry in co-operation with those whose practices and associated meanings are being studied.

As an overarching research strategy, conducting a series of studies allowed for exploring the topic in relation to multiple, quite different SNSs. There are important benefits to considering multiple case technologies (Yin, 1994) instead of focusing the entire enquiry on only the most dominant services. First, a consideration of multiple services aids in teasing apart what is unique to each service and which characteristics are more commonly important when one considers SNSs. Second, different services and slightly different user communities allow for addressing different themes strategically through edge cases that help to highlight the issues in view of each research question in particular. Studying the use of a specialised SNS or the practices of a specific community may be the most effective way to get to the core of a certain theme. For instance, the music-centric Last.fm, examined in Study III, provided an effective context for understanding people's experiences of automated sharing, whilst studying first-year students of information technology, a group who countered the hype

surrounding SNSs, facilitated the articulation of how technology preferences can be used for interpersonal boundary regulation.

The research for this work was conducted at a time when SNSs were still relatively novel. Consequently, participants in the various sub-studies were in the process of making sense of the affordances of SNSs and figuring out how to integrate these technologies into their everyday practices. I argue that, because of this circumstance, participants were more disposed to reflect on the meanings they could and should attach to these technologies than they could have been had engagement with SNSs already grown to be as firmly rooted in cultural practices as, for instance, use of the telephone and letters. In other words, this work captures aspects of domestication of SNSs. Domestication of technology is a perspective that considers the processes at play when new technologies are 'tamed' – that is, when they become embedded in day-to-day life. For a thorough introduction to the technology-domestication approach, see the work of Hirsch and Silverstone (2004).

This work is aimed at depicting practices of interpersonal boundary regulation at a historical moment when SNSs still seem both exciting and challenging – that is, before they have been domesticated and become so ordinary as to be invisible in the everyday life of the young adults residing in Finland. All five studies were aimed at giving voice to participants' perspectives by relying on qualitative interviews as the primary research material. The semi-structured interview protocols allowed for conducting the interviews in a flexible manner. This work makes no claims of being an ethnography, but it does share the goal of ethnographic research, as stated by Boellstroff et al. (2012*)*, of creating an understanding of a cultural context in which human action takes place. For guiding of the interviews on the basis of a grounded understanding of the phenomena under study and for strengthening of the analyses with further research material, the primary interview materials were in some cases complemented with online observation (Study I) and participant observation (Study V), along with involvement in the design process of the service under study in the case of Study IV. Participant observation (in Study V) was documented with written field notes (Emerson et al., 1995) containing descriptions of the practices that individuals shared and the meanings they associated with these practices (Hammersley & Atkinson, 2007), along with observations of participants' material surroundings, behaviour, and discussions relevant to the topic under study.

The participants in all studies were active, somewhat experienced users of the case technologies in question. All participants were young adults residing in Finland. The choice to recruit participants who shared these characteristics was based on the expectation that active and young people would be likely to have enough experience of SNSs and consider them important enough for their social lives that they would be in a position to reflect on the challenges and social consequences of adopting SNSs. In the case of studies II, IV, and V, the selection of participants was also driven by

convenience, as all three studies were conducted as part of a broader research project that was aimed at developing social media and studying their use in campus settings. This meant that it was relatively easy to recruit participants for the studies addressed here from the student body of the university that was the site of the broader research project. Furthermore, prior research on SNS use practices has been focused mainly on youth and young adults in the US. As the studies incorporated in this work were conducted in a different societal context, in Finland, repeating elements of participant recruitment allows for more effectively contrasting the findings against those from prior work.

The studies incorporated in this work rely on both in-depth one-on-one interviews and focus groups. Among the key features of in-depth individual interviews are that they are intended to combine structure with flexibility; that they are interactive in nature; that the researcher uses a range of probes and other techniques to achieve depth of answers in terms of penetration, exploration, and explanation; and that they are generative in the sense that new knowledge or thoughts are likely, at some stage, to be created (Legard et al., 2003). According to Finch and Lewis (2003), focus groups (see also Smithson, 2000) differ from individual interviews especially in that their group context creates a process wherein research material is generated by interaction between group participants, not just in interaction with the researcher. Furthermore, the above-mentioned authors state that participants in focus groups not only present their own views and experience but also hear from other people. The process in which participants ask questions of each other, seek clarification, comment on what they have heard, and prompt others to reveal more is productive for generation of research material that reveals more of different participants' frames of reference on the subject under study than would be likely in individual interviews (Finch & Lewis, 2003).

Alongside being asked to answer direct questions, participants were invited to respond to provocative statements and reflect on scenarios related to sharing. The various probes were used to trigger debate on differing interpretations and controversies related to the themes under study. Beyond the use of probes, the interviews were, in general, conducted in a manner aimed at making it easy for the participants to discuss their thoughts and deeds in context. For instance, in Study I, participants were invited to log on to Facebook during the interview so that they could use the service itself as a prop for demonstrating the topics under discussion. Similarly, the interviews in Study IV were structured around the participants' exchange experiences so as to help them discuss their thoughts on the basis of concrete examples rather than in the abstract.

The analysis processes applied after the gathering of research material were characterised by the use of a grounded approach that still leveraged existing theoretical concepts when this was possible. Concepts from prior literature were used as interpretive anchors, although the analyses processes

were focused primarily on examining emic notions (see, for example, Miles & Huberman, 1994) stemming from the participants' speech. Participants' accounts in the interviews were presumed to depict their meaning-making surrounding the topics under study. As the focus of this work is on the practices people apply, participants' accounts of the work they did to regulate interpersonal boundaries were taken to reflect not only their meaning-making but also their practices.

The commitment to give voice to participants' perspective was crucial not just in the process of interviewing but also in the analysis process. In the analyses, efforts were made to categorise findings in an open-ended, reflective manner instead of fitting participants' accounts into predetermined analytical categories. For instance, while this work proceeds from the premise that social life online and offline are inseparable parts of the same whole, it is necessary to respect that a separation between 'online' and 'real life' may still feature in the participants' everyday thinking and in interview discussions. In line with the commitment to give voice to the participants' experiences and views, to the degree that participants distinguish between interactions online and offline, this distinction has to be taken seriously as an aspect of the participants' experience of life in a networked world. This is crucial also because such a distinction is likely to be real in its consequences. From the standpoint of this enquiry specifically, the consequences of the distinction may, for instance, be reflected in the practices of interpersonal boundary regulation that participants recognised as possible courses of action.

4.2.3   REMARKS ON ETHICS

The basic principles shared by the main policies and accepted documents on principles of research ethics and ethical treatment of people include human dignity, autonomy, protection, safety, maximisation of benefits, and minimisation of harms (Markham & Buchanan, 2012). A key guiding principle is that, when making ethics decisions, researchers must balance the rights of subjects with the social benefits of research and researchers' right to conduct research. The guidelines for internet research presented by the Association of Internet Researchers Ethics Working Committee (Markham & Buchanan, 2012) advocate a process-oriented approach to ethics, emphasising the importance of addressing and resolving ethics issues as they arise throughout the research process. The guidelines also recommend a case-based approach, highlighting the importance of attending to the specific needs of each research process contextually.

All five studies incorporated in this work are primarily interview-based studies. In each study, participants were informed of the voluntary nature of their participation in the study and of their right to forego answering any questions they chose to without needing to explain why. The aims of the research and the main components of the interview in question were

described to participants so as to ensure their informed consent to take part in the study. Also explicated was their right to discontinue participation at any point, should they wish to do so. At the end of the interviews, participants were given the opportunity to comment on the study and ask questions pertaining to it.

All research material has been treated in confidence and with respect for anonymity. The quotes and examples pulled from individual studies reproduced in publications and accompanying presentations are given without identifying characteristics. Some demographic information, such as age and gender, is provided to contextualise the quotations where appropriate and possible without risk to the anonymity of the participants.

The benefits of this research are found primarily on the broader societal level. The aim is that the findings from this work can inform both further research endeavours and the future development of technologies and policies related to SNSs and interpersonal interaction in the networked context. Next to these potential benefits, the interviews could in some cases benefit the participants as an opportunity to reflect on interpersonal boundary regulation in the context of SNSs and give them an opportunity to think through the tensions they had experienced in this context. The potential risks related to the studies were minimised by providing the participants with enough information to allow them to make an informed choice of whether or not to participate, by showing them respect throughout their participation in the study, and by treating the resulting research material confidentially and with anonymity.

Finally, the efforts made in this work to give room for the participants' voices in accounting for their experiences and everyday activities were a choice driven not only by research goals but importantly also by an ethical consideration. In examining the everyday practices young adults engage in for regulation of interpersonal boundaries as they engage with SNSs, this work produces knowledge that both makes visible the challenges SNS users are tackling and can serve their reflective understandings of how their personal experiences are set in a broader landscape of how the widespread adoption of SNSs is shaping sociality in our networked age.

4.2.4   LIMITATIONS AND REFLECTION ON THE AUTHOR'S POSITION

While the explorative studies provide a grounded depiction of interpersonal boundary regulation in the context of SNSs, it is necessary to discuss the limitations of this work. First, all studies incorporated into this dissertation were conducted in Finland's Helsinki Metropolitan Area in 2007–2011. The participants were young adults, primarily university students. They were active users of SNSs, with the exception of those participating in Study V who were purposely undermining or refusing to participate in SNSs and, instead, using their preference for a less popular technology as a prop for identity work. Because of this selection of participants, the work does not consider or

give voice to the perspective of those who refuse to use networked technologies altogether or those who for some reason beyond their own choice are excluded from the opportunity to engage with SNSs.

Second, relying on participants' accounts of their boundary regulation practices means that the findings are necessarily restricted to depicting the participants' expressed understanding of their actions at best, rather than their actions themselves. Even with respect to studies I, IV, and V, which include observational components, only very limited claims can be made about the behaviour that occurs in everyday life. The reliance on participants' personal accounts in individual interviews and their shared reflections in focus groups has limitations. It may be difficult for people to explicate their day-to-day practices, and in doing so, they are producing a more reflective account of their actions than they are likely to produce when navigating their everyday lives. However, as the practices under study are not in all cases observable and are strongly related to the meanings attached to the choices people make, the research problem could not be sufficiently addressed by means of observation either. Therefore, while analysis of logs of SNS usage could have revealed interesting patterns of behaviour, they could not have explained the reasoning behind the behaviour observed or the meanings attached to that behaviour. This is why analyses of so-called big data could not have resolved the methodological challenges of addressing the research problem at hand. Similarly, surveys or experimental methods would not have allowed for the type of interpretative exploration I deemed necessary for shedding light on the four aspects of sharing that are examined in this work.

Third, the speech produced in an interview setting is necessarily an outcome of the participants' interaction with the interviewer (and with other participants in the case of focus-group interviews), not any kind of naturally occurring description of how they engage with SNSs and other people in their context. Given that the accounts of experiences with SNSs are produced in an interview setting, they are likely to be reflective and rationalising in nature. Regardless of these limitations, this work represents a valuable effort to give voice to the participants' accounts of how they make the networked world work and proposes a conceptualisation of interpersonal boundary regulation that makes sense of these accounts.

Finally, a remark on my position as the author of this work is in order. As Orlikowski and Baroudi (1991, p. 15) have stated, 'the researcher can never assume a value-neutral stance, and is always implicated in the phenomena being studied'. Beyond the effect I and my co-authors have had in shaping the research material as interviewers, it is necessary to note the fact that, as a young adult residing (primarily) in Finland and as someone who uses SNSs, I hold a position in conducting the research that has not been that of someone who studies a cultural context as an outsider. On the contrary, my personal experiences of the phenomena under study have necessarily informed the research process. I have made conscious efforts to recognise and be aware of my own understandings and assumptions in order to give voice to the

perspectives expressed by the participants. Wherever this is possible, I have also used these personal understandings to benefit the research process – for instance, by leveraging them to relate to the participants' experiences and to understand the context of their accounts. Furthermore, the social exchange service Kassi was originally developed in the research project that provided a frame for this work; therefore, I have been following the development and growth of the service from early on and even participating in discussions of design choices surrounding it. However, even in the case of Study IV, emphasis was placed on analysing the participants' experiences, not mine. Moreover, the fact that the studies have been conducted in co-operation with colleagues has provided ample opportunities to reflect on the justifications of choices and interpretations made throughout the research process.

4.3 THE SUB STUDIES

As has been noted above, the dissertation incorporates research reported upon in five articles. In this subsection of the work, I present in brief the methodological details of these studies, along with the case technologies examined in each. The original articles include more specific discussions of the particular research questions, methods, and analysis processes of each study. The central findings as to interpersonal boundary regulation in the context of SNSs will be elaborated on in Chapter 5.

4.3.1 STUDY I: MANAGEMENT OF GROUP CO-PRESENCE ON FACEBOOK

Study I is a qualitative study that took the globally popular SNS Facebook as a case technology for examination of multiple group affiliations and group co-presence in an SNS setting. The study was conducted in the autumn of 2007 in Finland's Helsinki Metropolitan Area. At the time of the study, the participants' main uses of Facebook included sharing status updates and photos, making (semi-)public 'Wall' posts, sending private messages, and engaging with various playful third-party applications. It is worth reiterating that Facebook and its uses have changed a great deal since the study was conducted. For instance, the privacy settings available to users were much more rudimentary then than they are today. Furthermore, dedicated functions for selective sharing had yet to be introduced.

The experiences of two groups of active Facebook users were examined through online observation and on-site face-to-face semi-structured one-on-one interviews. The groups were university students and young professionals. Both were composed of young adults living in Finland. The students ($n = 10$) were recruited from the medical school of a Finnish university. The young professionals ($n = 10$) were all employees of a large IT company based in the Helsinki Metropolitan Area. At the time of the study, Facebook was still a

relatively new phenomenon in Finland and the participants too were in the process of making sense of the service and the ways in which it could become a part of their everyday lives. All participants reported using Facebook daily or almost daily.

Research material was elicited on the group memberships that participants fostered in Facebook and on the participants' perceptions of group co-presence. In this connection, the Facebook use of all 20 participants (10 female and 10 male) was first observed over a three-week period. Online observation was conducted to enumerate groups to which each participant explicitly belonged in the Facebook service and also to gain understanding of how the participants engaged with Facebook. Online observation was followed by a round of semi-structured interviews with 10 of the participants (four females and six males), five from each group. The interviews lasted approximately an hour each. They were conducted and transcribed in Finnish. The transcripts form the key research material of Study I. The quotations presented in the original publication are translations.

The interviews focused on participants' personal network and group memberships in Facebook, their practices related to using Facebook for interpersonal communication, their thoughts on privacy settings, and the possible social tensions and conflicts related to the service they had experienced. The simultaneous presence of multiple groups was raised explicitly in the discussion only at the final stage of the interviews, as the aim was to see first whether and how participants would discuss groups and group co-presence in relation to Facebook in their own words. The interviews were carried out in front of a computer screen so that the participants could log in to their Facebook accounts and use various aspects of the service to demonstrate and facilitate their answers to the interview questions. Another prop that was used to aid in the discussion in the interviews was a visualisation of the participants' personal network in the Facebook service (produced with an application called the Friend Wheel).

The analytical approach of Study I was theory-based: theoretical concepts guided the gathering of research material, though the material directed the empirical analysis and interpretation. Theoretical concepts did not dictate the categories used for description and classification of the content of the interview transcripts. The relationship between theoretical and empirical elements in this study is, therefore, best described as iterative, since theoretical and empirical observations fed into one another. The first step of the analysis was to chart to how many groups participants explicitly belonged to in Facebook. This descriptive analysis was based on observations of the participants' Facebook profiles. The next step was an interpretative analysis process in which the interview transcripts were coded in an iterative fashion. The interview transcripts were analysed for the insight they could provide into the participants' thoughts and experiences in relation to group co-presence and its possible challenges. Finally, the transcripts were coded also for remarks on how participants dealt with group co-presence and the

problems it might pose. These coded remarks were then categorised, to form a depiction of the practices people apply to deal with group co-presence.

4.3.2 STUDY II: INTERPERSONAL MANAGEMENT OF DISCLOSURE IN SOCIAL NETWORK SERVICES

Study II is a qualitative study that examined SNS users' perceptions of control over online disclosure and their practices of interpersonal boundary regulation in SNSs. The study was conducted in the Helsinki Metropolitan Area during the 2009–2010 academic year. Initially, it was designed to consider young adults' engagement with SNSs as a whole, without focusing on a specific SNS. However, participants brought into the discussion primarily their experiences of Facebook and, to a lesser degree, of the more professionally focused LinkedIn. At the time of the study, Facebook had introduced more fine-grained privacy settings and tools for selective sharing. The main uses of Facebook were similar to those identified in Study I. Participants used LinkedIn mainly for professional networking and profile maintenance.

The participants in the study were young adults who were enrolled at a multidisciplinary institution of higher education in the Helsinki Metropolitan Area. In total, 27 participants (10 females and 17 males), from two distinct groups, were recruited to take part in individual and focus-group interviews: undergraduates in an engineering degree programme and graduate students of industrial arts and design. Most participants from the graduate programme were international students.

Two rounds of one-on-one interviews (n = 11 and n = 13, respectively) were conducted to capture participants' personal experiences of sharing of digital content in SNSs, their explicit strategies for interpersonal boundary regulation, and the reasoning behind their boundary regulation efforts. Both rounds of interviews were semi-structured. Each presented participants with a different set of questions that were designed to elicit accounts of participants' experiences and thoughts on controlling online disclosure and regulating interpersonal boundaries. The individual interviews were followed with five meetings of focus groups, with 18 participants in all. These were conducted to trigger debate on the differing interpretations and controversies related to interpersonal boundary regulation. The reasoning was that these elements might easily remain implicit in interviews of individuals whereas the focus-group setting would facilitate eliciting debate on them. The focus groups were probed with provocative claims and also example scenarios of situations that could challenge interpersonal boundary regulation. The probes were created on the basis of concerns about interpersonal boundary regulation identified from the personal interviews and of cases covered in the press or reported informally to the team working on the study. In all, the research material consisted of 24 one-on-one interviews and five focus-group interviews. Six participants took part in all three phases of the study. Both

the one-on-one interviews and the focus-group interviews lasted no more than an hour each. The interviews were conducted and transcribed in Finnish or, in some cases, in English. The quotations presented in the original publication are, accordingly, for the most part translations from the original, Finnish-language transcripts.

Since the purpose of Study II was to both systematise and deepen the understanding of interpersonal disclosure management, analysis focused especially on participants' concerns and practices related to regulation of interpersonal boundaries. Special attention was paid to how the participants discussed people's capability to share content on behalf of others and their resulting mutual dependence in terms of sharing via SNSs. The interview transcripts were, first, open-coded for concerns related to interpersonal boundary regulation. Upon the identification of an expectation of mutual mindfulness of others' self-presentation, this finding was explored further. That pursuit led to identification of concerns linked to fractures in expectations related to showing mutual consideration. Since the study was informed by prior research, key findings from earlier studies served as loose interpretive anchors in later phases of analysis. Though some of the research material was longitudinal, with several participants interviewed on multiple occasions during the 2009–2010 academic year, the study was not designed to map, for instance, how participants' perceptions of the topics studied changed over the course of the study. Moreover, as depictions of such changes did not emerge in open-coding of the interview transcripts, the decision was made to forego the opportunity for longitudinal analysis and to focus instead on the central themes the participants had addressed in the interviews.

4.3.3 STUDY III: PROFILE WORK IN A MUSIC-FOCUSED SOCIAL NETWORK SERVICE

Study III is a qualitative study exploring strategic self-presentation in the music-focused SNS Last.fm, which can be set to publish the music-listening information of the user automatically. The study was conducted in 2009–2010 in Finland to examine the experience of sharing behaviour information in an SNS setting via an automated mechanism. Last.fm provides a range of features that support discovering new music and networking with other users. While the service can be employed for diverse uses, Study III focused specifically on its capabilities for automated sharing of information on music-listening behaviour. Individuals engaging with Last.fm can choose to share information on the music they listen to by using a feature called the Scrobbler. The Scrobbler tracks and publishes information on any music listened to on connected devices. This information includes the names of all audio files that users have played. This allows users to showcase in their profiles what they have been listening to.

Twelve young adults (seven females and five males) were recruited to take part in the study. All participants resided in Finland and were active Last.fm users who had installed the Scrobbler and were sharing behavioural information on Last.fm.

The research material consists of accounts of sharing behavioural information via an automated sharing mechanism. It was elicited with in-depth, semi-structured individual interviews. In the interviews, provocative statements were applied to open a dialogue with the participants. Follow-up questions were then asked in order to pursue interesting paths of discussion while allowing the participants to lead the conversation. The length of the interviews ranged from 30 minutes to one hour and 50 minutes. The interviews were conducted and transcribed in Finnish. The quotations presented in the original publication are translations from the original Finnish transcripts.

The resulting research material was analysed with interpretative methods. The analysis was focused on the users' personal explanations for their feelings and for their ways of using Last.fm and the Scrobbler. In the analysis, themes were formed from the interview transcripts around various contradictions that were present in the participants' accounts of how they made sense of Last.fm and automated sharing.

4.3.4 STUDY IV: INDEBTEDNESS AND RECIPROCITY IN LOCAL ONLINE EXCHANGE

Study IV is a qualitative study examining conceptions of reciprocity and indebtedness in relation to local online exchange. A qualitative approach was chosen, to build a rich and grounded understanding of how norms of exchange and reciprocity are interpreted and applied in the context of local online exchange, and of ways to reduce uneasiness about indebtedness in indirect exchange processes. While not directly to do with interpersonal boundary regulation, the findings of the study address the 'sharing online and offline' theme by depicting how people negotiate access to social interaction in online-initiated exchange processes that almost always require face-to-face encounters in order to be completed. The study was conducted in the Helsinki Metropolitan Area in the spring and summer of 2011.

The study took Kassi, an online gift-exchange system, as its case technology. Kassi was originally designed to support sharing of goods and services in geographically local communities. Kassi users have uniquely identifiable profiles on the site, and the main content on Kassi's front page is a stream of user-supplied offers and requests for both non-monetary and monetary exchanges. Each user can post new listings to the stream and also browse the stream, make searches, and interact with content created by other users. In fact, Kassi's interface directs users to post and/or browse offers and requests. Users are free to offer and/or request as many favours, services, and items as they like.

Kassi differs from the SNSs considered in studies I–III in that the interpersonal connections articulated in user profiles stem from engagement in exchange processes with other Kassi users. When an individual reviews an exchange process, the resulting review, visible in his or her exchange partner's user profile, is accompanied by a link back to his or her own user profile. Thus, while there are publicly articulated connections that can be viewed and traversed by others, these connections are largely a by-product of exchange activities, not a valued end of their own.

The purpose of Kassi is to aid people in the course of day-to-day life by enabling them to help each other in any way they see fit – by sharing information or goods, applying their special skills, or easing the burden of time-consuming tasks. When a user finds a listing that features something of interest, he or she can contact the person who posted the listing; then, once the two have agreed to make the exchange, they can discuss logistics with Kassi messages or by e-mail, text message, or telephone. An exchange takes place when an item or favour is successfully transferred between any two users. The service is designed to support direct communication, allowing all forms of exchange without implying any particular type of interaction, such as negotiation or donation. Typical activities in the Kassi community under study included selling textbooks, searching for housing, and offering favours to others. A favour can be, for example, walking someone else's dog or helping to move heavy pieces of furniture. For our study, Kassi serves as an example of a system that breaks the online/offline dichotomy, since few exchanges can be completed solely online.

Eleven active, experienced users of Kassi were interviewed for the study. They were all individuals who had given and/or received goods or services to/from other Kassi users at least once. Six participants were male and five female. Most of the participants (n =7) were technology students in the 21–27 age range who had been introduced to Kassi through academic-study-related activities. The exceptions were two students from other campuses and a considerably older employee of the university. Finally, we interviewed one student from another university who had found Kassi through a search engine.

The primary research material consists of the 11 semi-structured individual interviews. The interviews focused on participants' views and feelings linked to exchange processes in Kassi. In each interview, the discussion was centred on specific exchange experiences. The questions covered topics including worries and hopes associated with reciprocity, indebtedness, and fairness. Direct questions about reciprocity (as a specific word) were not asked, except as follow-up questions that were posed if participants raised an issue about reciprocity, exchange, or related concepts. Each interview lasted 30–90 minutes. All interviews were conducted in Finnish, apart from those of two international students, who were interviewed in English. Therefore, most interview excerpts in the original publication are translations from original Finnish-language transcripts.

The analysis approach was grounded in, and driven by, the research material, although the study was framed from the perspective of social exchange theory (see, for example, Blau, 1986; Ekeh, 1974; Homans, 1958), which emphasises the role of interpersonal relationships in trading of socially and/or economically valuable resources. Forty-nine separate exchange experiences were identified from the interview transcripts. Of these, the analysis focused on the 38 exchanges that involved lending or giving away goods ($n = 26$), and doing favours ($n = 12$). This narrower scope was chosen because the research interest was specifically in indirect exchanges. After the interview transcripts were filtered for all instances that were considered to illustrate 1) experiences and perceptions of reciprocity and indebtedness or 2) ways to lessen uneasiness and feelings of indebtedness in exchange processes, the researchers compared these to one another to identify themes that would describe the phenomena. In line with the principle of constant comparison (Glaser & Strauss, 1967), the research material was examined in light of the thematic construct created, which was modified until all of the instances fit under the themes.

4.3.5   STUDY V: IDENTITY WORK AND TECHNOLOGY PREFERENCES

Study V is an in-depth study with a cohort of first-year students and their student community in an IT programme at a Finnish university of technology. The study was conducted throughout the 2008–2009 academic year. Focusing on first-year students in their everyday university setting allowed examining everyday practices through which technology preferences and identity work are interwoven. No predetermined case technology had been selected for the study. However, once participants' preference for Internet Relay Chat became salient in the course of the research process, it became a *de facto* case technology. A chat technology that was developed in the late 1980s by a Finnish IT student and became globally popular over time, IRC is designed for more synchronous communication than e-mail or newsgroups. In IRC, people's comments are prefaced by their 'nicks' (short for 'nicknames'). The main activity is chatting with people who are on the same 'channel' – that is, in an established IRC session that brings together a group of IRC users. Channels are often dedicated to a specific group of people or a particular topic. The participants in Study V accessed IRC through a text-based interface. They considered the text-based IRC client to be the 'real' IRC, although software that provides a graphical user interface for accessing IRC exists in parallel.

The student cohort under study consisted of roughly 70 students, most in their late teens and early twenties. The group was predominantly male; only a few female students enrolled in the programme in fall 2008. Research material was elicited by three methods: 1) participant observation among the cohort of first-year students and the student community in which they were embedded, 2) focus groups involving a subset of the group of first-year

students, and 3) two surveys to map the demographics and ICT use tendencies of the first-year students.

Participant observation was conducted (by one of my co-authors) to analyse processes of identity work in everyday interaction among the first-years and within the student community on, in all, 24 occasions in the course of the academic year, including activities arranged by the degree programme's faculty and the student organisation of the degree programme, along with less structured interactions with the students. The observation material consists of written field notes that contain descriptions of the practices that individuals shared and the meanings they associated with these practices but also observations of participants' material surroundings, behaviour, and discussions related to ICTs.

A subset of the first-year students were invited to participate in focus groups, either via a message sent to e-mail lists or in a personal invitation to participate on campus. All told, 14 students took part in the first round and 12 in the second (of whom seven participated solely in the latter round). Seven-hour-long sessions of focus groups, with two to five participants in each, were conducted in two rounds: four at the beginning of the academic year and three toward the end of it. The first round covered student life and related ICTs in general. The second round focused on the use of communication technologies in studying. Participants were invited to debate the meaning of various communication technologies in terms of being a member of the student community. The focus groups were structured with open questions accompanied by visual and textual probes, such as claims about student life at the university and pictures of different communication media. The sessions were recorded and transcribed. All excerpts from the research material presented in the study are translations from the original Finnish-language transcripts and field notes.

Additionally, two surveys were conducted to map the demographics and ICT use tendencies of the first-year students: one early in the first term and the other near the end of the first term. In addition to the demographics, the first ($n = 55$) survey included questions on how often the participants use particular communication media. The second survey ($n = 25$) focused more specifically on the importance of specific ICTs in studying and student activities.

The main focus in the analysis was placed on the focus-group material and field notes. These were analysed through an iterative process in which Schwalbe and Mason-Schrock's (1996) conceptualisation of identity work was used as a conceptual anchor for categorisation of the research material by theme. Although the research process entailed longitudinal aspects, with several participants interviewed on multiple occasions during the 2008–2009 academic year, the study was not designed specifically with longitudinal analyses in mind. Each round of focus-group meetings presented participants with a different set of questions, with the aim of eliciting accounts of participants' experiences and thoughts associated with

various aspects of technology preferences and everyday life in the community. The survey data were used solely for descriptive analysis, in which they were leveraged to support the primary, qualitative analysis.

5 FINDINGS

The introduction of SNSs to daily life does not eliminate the need for interpersonal boundary regulation. The characteristics of networked settings present people with novel challenges that require them to come up with interpersonal boundary regulation practices suitable for meeting the requirements of these new settings. Despite such disruptions to conventional ways of regulating boundaries, interpersonal boundary regulation is best understood as a co-operative process also in the context of SNSs. In the following sections of this work, I review my main findings on practices of interpersonal boundary regulation in the context of SNSs. After an overview of what interpersonal boundary regulation in this context is like, I consider the four themes of this work in detail: 1) people may share digital content with multiple groups at once (see Section 5.2), 2) people may share digital content on behalf of others (see Section 5.3), 3) sharing of behavioural information can be achieved via automated mechanisms (see Section 5.4), and 4) sharing online and offline are connected in multiple ways (see Section 5.5).

5.1 DIFFERENT TYPES OF PRACTICES FOR REGULATING INTERPERSONAL BOUNDARIES

Co-operative acts of interpersonal boundary regulation take place on two interrelated levels: First, interpersonal boundaries are regulated with diverse practices in social interaction that is mediated, enabled, constrained, and otherwise shaped by the networked context of SNSs. Second, making and communicating decisions over which services to adopt, and how to prioritise them, can itself function as a means of regulating interpersonal and intergroup boundaries.

5.1.1 A TYPOLOGY OF PRACTICES OF INTERPERSONAL BOUNDARY REGULATION IN THE CONTEXT OF SOCIAL NETWORK SERVICES

The socio-technical practices for regulating interpersonal boundaries via social interaction that takes place in SNS settings are the main focus of this work. These practices are shaped by what users of particular services are enabled and encouraged to do, just as much as by what they are constrained from doing by characteristics of the services in question. Yet, I argue, users' agency is restricted neither to adjusting the privacy settings provided within an SNS nor to selecting from among the structured choices for 'sharing' that services propose to their users in their user interfaces. Interpersonal

boundary regulation practices are not limited to action taken online. Instead, efforts to regulate interpersonal boundaries in online and offline interactions may be connected in several ways (see Section 5.5 especially). I propose that the space of different (possible) types of interpersonal boundary regulation practices can be mapped out with a typology that encompasses three broad dimensions (presented originally in Study II).

First, practices can be either *individual* or *collaborative*. The former are those practices that people apply on their own, such as using the features of a service to share selectively and trying otherwise to ensure that information flows in an appropriate manner. Collaborative practices, on the other hand, are ones that individuals engage in explicitly together with others. These include behaviours such as asking for approval before disclosing content on behalf of others, explicitly negotiating social norms regarding sharing, and interpreting the content shared by others benevolently. The key is that collaborative practices typically address challenges that would be difficult if not actually impossible for an individual to tackle. At the same time, it is important to bear in mind that, while individuals can apply practices for regulating interpersonal boundaries on their own, ultimately the success of their boundary regulation efforts always relies on others' support for proposed boundaries. According to the warranting principle, when evaluating an individual, others are prone to give more weight to information that individual cannot manipulate than to self-descriptions supplied by him or her (Walther & Parks, 2002). Thus, what others say about an individual can shape powerfully how she or he will be perceived. Moreover, even the greatest efforts an individual makes to put forth a favourable self-presentation are unlikely to succeed unless others either provide information that supports his or her claims or, at least, leaves these claims unchallenged. In sum, there is continuous and often subtle co-operation and negotiation that occurs through contesting or supporting of others' claims. Next to this, individuals co-operate and negotiate also more overtly in co-ordinating efforts to regulate boundaries together. In this typology, practices involving the latter type of co-operation are categorised as collaborative.

Second, there are *preventive* and *corrective* practices. Preventive practices are attempts to prohibit problematic content from being shared, or even from being created in the first place. These practices include all manners of foresight related not only to achieving one's self-presentational goals and desirable degrees of social interaction but also to showing consideration for others' efforts. Corrective practices are geared toward repair work. Applied when something in the boundary regulation process has already broken down, they entail actions such as deleting content or asking others to take down content that one would rather not have available online.

Third, there are both *mental* and *behavioural* practices (as argued originally in Study I). These labels are debatable, since it is hard to distinguish 'thinking' from 'doing'. Indeed, one could argue that mental

practices are just as much learned and acculturated behaviours as behavioural practices are; they are simply less visible. The point with this dimension of the typology, though, is to highlight that some practices in boundary regulation are focused on adopting a mindset that helps one feel comfortable and reassured in engaging with SNSs, while others involve more readily observable action, such as making changes to one's privacy settings, using wordings and tones that limit access to meaning, or regulating what one does in offline settings to control what can later be shared online.

These dimensions may overlap. While it can be difficult, and at times is not even meaningful, to draw a hard line between different types of practices, I argue that these divisions can be analytically helpful for identifying different approaches to boundary regulation, for exploring what types of practices for boundary regulation could exist, and for synthesising findings from the emerging literature on interpersonal boundary regulation in the context of SNSs.

Some practices are established directly from the design of SNSs. Others largely bypass the technologies, either because the challenge that is being addressed is not confined to what happens in a given SNS or because the aim is to overcome restrictions that a service forces upon its users. Such subversion can be related to, for example, preventive practices – for instance, when efforts are made to avoid situations that would be difficult or impossible to manage – or to corrective practices, wherein people deem boundary repair more effectively achieved via routes alternative to those provided by the service in question.

Practices for interpersonal boundary regulation are not necessarily pondered actively. Rather than as conscious strategies that are actively and intentionally applied to achieve specific outcomes, they may be better understood as behaviours that render those engaging in them comfortable and that may be of assistance in boundary regulation. The practices identified in this work were often integrated so fully into the everyday lives of participants that they could be employed without particular reflection. More active and conscious efforts to regulate interpersonal boundaries are, presumably, made when a failure in boundary regulation has occurred and there is some turbulence to be dealt with (Petronio, 2002). While it is in the tumultuous moments that interpersonal boundary regulation is likely to be most readily observable, the continuous everyday acts that regulate interpersonal boundaries are at least as important. Sections 5.2–5.5 discuss such acts in detail through the four themes related to 'sharing' that are at the core of this work.

5.1.2 USE OF TECHNOLOGY PREFERENCES FOR INTERPERSONAL BOUNDARY REGULATION

Next to the types of practices presented above, the seemingly simple act of choosing to use a particular service, communicating that choice to others, or

explicating a preference for a particular service even while adopting a range of services can serve to regulate interpersonal and intergroup boundaries. It is important to understand how individuals choose to present themselves on particular platforms instead of others and how expressions of these media choices come to be utilised in identity work and boundary regulation in everyday social interaction, both at the individual level and at the level of communities. Central issues include how people use technologies; how they talk about them; and, ultimately, how they harness some of the technologies in day-to-day life to serve identity work. In this way, technology preferences and expressions thereof can be understood as practices of interpersonal boundary regulation that may be either individual or, as in the case of Study V, collaborative.

I argue that the IT students in Study V resisted mainstream SNSs and expressed a preference for Internet Relay Chat as an effort that served identity work. They used the preference for IRC to claim their identity as members of their student community and to distinguish their community positively from others. Considering technology preferences and the ways in which they are expressed in everyday interaction facilitates teasing out the ways in which technology choices can be used to regulate interpersonal boundaries. It is not sufficient to focus on what services or devices people choose to adopt, since the practices of using technology preferences in identity work may be subtle. Findings from Study V show that the participants used a variety of services but expressed a preference only for IRC.

In a somewhat similar although less pronounced way, the mere act of engaging in local online exchange via the Kassi service was, to some participants in Study IV, in and of itself an act of fostering ecological, charitable, or community-oriented values, and, as such, a claim to be a person who is in favour of those values. An additional example from related research is boyd's (2011b) analysis of how teens from academic, prestigious backgrounds quickly adopted Facebook while youth from deprived socio-economic circumstances continued to use the previously popular SNS MySpace even after Facebook was made broadly available. In her analysis of the social class distinction between Facebook and MySpace, boyd illustrates digital environments being shaped by race and class in similar ways to tastes and physical spaces. She argues that teens' differing preferences for MySpace and Facebook were not a matter of simple consumer choice but reflected a reproduction of social categories prevalent in everyday life at schools across the US.

Beyond the choice to use a particular technology, identity work is done in adopting and valuing particular ways of use, as seen in the practices of embracing text-based interfaces and condemning graphical user interfaces observed in Study V. In choosing to vouch for IRC, participants of Study V made claims to identity as members of their student community, as members of their degree programme, and as aspiring IT professionals. This was done,

first, by means of adopting active daily use of IRC. This demonstrated possession of the kind of computer expertise that the community in question values. Furthermore, identity work was done in expression of a preference for the medium both explicitly in discussions and through use of IRC jargon, inside jokes, and addressing of other community members by their 'nicks' even in face-to-face interaction. Positively sanctioned manners of use and expressions of preference serve people in their quest for social belongingness and in distinguishing their communities positively from others.

I argue that ICTs are used for boundary regulation not only as platforms for identity work and self-presentation but also as social expressions of identity in themselves. Individuals build profiles in SNSs, but they can also construct group identity with others through the aid of technology preferences. Choices as to which ICTs to use and which to eschew can constitute meaningful communication. In a similar vein, Satchell and Dourish (2009) have argued as well as Baumer et al. (2013) for the importance of analysing non-use as a meaningful, nuanced practice that may be driven by a host of motivations and justifications. An example of this is the way in which participants in Study V undermined or even outright refused SNS use while adopting IRC and valuing specific ways of using it vocally. Participants' strong investment in technology preferences and the fact that their preferences countered mainstream media choices brought readily into focus the ongoing process through which the association between identity work and technology preferences is managed. This process takes place in socially meaningful interaction within and between communities. I argue from the results of Study V that individuals' technology preferences are driven, at least in part, by the need to identify with groups and feel affirmed in one's claims to both personal and social identity. Both of these are central outcomes of successful interpersonal boundary regulation.

5.2   SHARING WITH MULTIPLE GROUPS

Social network services may bring about *group co-presence*, a situation in which many groups important to an individual are simultaneously present in one context and their presence is salient for the individual. SNSs provide socio-technical conditions that enable the visual and digital co-presence of multiple groups to which an individual performatively belongs, by manifesting his or her belongingness to others, and with which he or she cognitively identifies. Group co-presence makes it difficult to keep traditionally separate social spheres apart from one another.

Facebook invites its users to articulate all of their social connections on the site. The resulting social network may lead to a sense of having to present oneself and one's social connections consistently with everyone from the various facets of one's life. This experienced requirement is a key challenge that SNSs pose to their users (boyd, 2003). At the time of Study I, group

co-presence in Facebook meant, for example, that a user's personal news feed (the stream of user-supplied content featured in the main view on the site) included items pertaining to many groups or their members. It also meant that the diverse members of the user's personal network were able to view the actions in which the user engaged on the site.

Practices of interpersonal boundary regulation in the SNS context broadly encompass decisions over what to share, when, and with whom – and, in some cases, choices about what to do in the first place. Altman's original boundary regulation framework (1975) focuses mainly on what kinds of practices are applied over time and in various situations, as the desired level of access to interaction fluctuates. Here, the issue becomes how interpersonal boundaries are regulated in a context wherein one cannot necessarily define rigorously to whom access to interaction is provided or denied, and when (or whether) these audiences choose to interact with the content that is made available to them.

5.2.1 THE CHALLENGES OF GROUP CO-PRESENCE

From a social psychological point of view, there is nothing unusual in individuals being members of varied groups or in the fact that they may act in different roles, depending on the setting and with whom they are interacting (e.g., Hoffman, 1988; Skevington & Baker, 1989). Early research on social identities (e.g., Tajfel, 1972) pointed out that in all complex societies, an individual belongs to numerous social groups, the importance of which varies. Different group memberships and roles need not be in conflict. In addition to belonging to a work community, one may well be an active member of both a football team and a golf club, or one might, in the course of everyday life, act in the role of a mother, a computer scientist, and the president of a neighbourhood association. Furthermore, even if these loyalties are contradictory, people usually cope with such conflicts by adjusting the expressed hierarchical positions of their identities as a function of the situation at hand or via rationalisation, by accepting some degree of contradiction among their identities (Hoffman, 1988).

It is, however, unusual for one to need to act in all of one's roles at once, though, even before the rise of SNSs, multiple contexts have collided at times. An example of this is a situation wherein the boundary between work and home life shows 'leaks' no matter one's efforts to keep the two segregated (Nippert-Eng, 1996). Spatial and temporal boundaries do not structure SNSs and physical spaces in the same way. In the context of SNSs, these boundaries that used to make it easier to keep certain groups separate are no longer as reliable in supporting boundary regulation. Keeping incompatible aspects of one's life separate becomes difficult (Donath & boyd, 2004) because of the tendency of SNSs to flatten diverse audiences to one homogenous group and to promote public, one-to-many modes of communication in preference to more private, targeted interpersonal

interactions (Vitak, 2012). This context collapse is problematic because people often do not want certain groups of friends to be able to connect with others of their groups of friends (boyd, 2003). The persistence of digital content and the breadth of the social networks that people articulate and maintain online may pose novel challenges also in terms of temporal group co-presence, as the contacts in one's explicated social network follow one through life's transitions.

In the past few years, this theme has attracted increasing attention within the scholarly community, often in conjunction with the idea of context collapse (see, for example, boyd, 2008; Vitak, 2012; Vitak et al., 2012). Said body of literature has emerged in parallel with the research presented in this dissertation. Findings from studies of context collapse and the results from Study I are very consistent: both indicate that articulating and sustaining multifaceted social networks in SNSs presents challenges for regulation of interpersonal boundaries and maintaining appropriate information flow. The unique contribution of Study I and its notion of group co-presence lies in addressing these challenges in terms of groups and group identification specifically.

Research on context collapse has often leveraged analytical notions from the field of communication, by, for instance, focusing especially on audiences and disclosures. Study I complements this work by adopting theoretical elements from social psychology and thereby articulating how the challenges related to sharing content with multiple groups at once are related not only to interpersonal relationships but also to multiple social identities. According to Skevington and Baker (1989), studying multiple identities is not simply a matter of deciding why and in which social situation one particular social identification rather than another should be salient. It is better characterised as a matter of understanding how multiple group memberships evolve and coexist simultaneously, and how individuals assign meaning to them as parts of the larger society. In other words, group co-presence can be considered in terms of interpersonal boundary regulation wherein individuals contextually regulate access to individual aspects of their self, making efforts to manage social interaction, social relationships, and their identities in meaningful ways.

The findings from Study I demonstrate that groups were salient for the participating Facebook users both in terms of groups that they explicitly and visibly belonged to within the service and in terms of implicit groups – that is, the different categories in the participants' personal social networks of which the participants were, or had formerly been, members. All participants in Study I were members of at least some explicit and implicit groups on Facebook, although the number and types of these memberships varied. This finding supports my argument that SNSs may bring about group co-presence, making it difficult to keep traditionally separate social groups apart from one another. Group co-presence in networked settings poses a challenge to interpersonal boundary regulation: it may be difficult, or at

times downright impossible, to provide access to interaction in nuanced ways, especially with respect to who gains access to the pieces of digital content one discloses; how recipients interpret the content they see; and how that affects, for instance, whether one's self-presentational claims gain support from others. The connection between users' self-presentations in SNSs and offline is a close one; i.e., SNSs are a highly warranted setting (Warkentin et al., 2010). Taken together with group co-presence, this characteristic implies that Facebook users not only must be socially accountable for their online self-presentation in offline settings too but also have to reconcile possible discrepancies between their self-presentations in individual facets of life. Outside the context of SNSs, such a need is less likely to arise on an everyday basis.

The simultaneous revealing of personal information to both distant acquaintances and one's most intimate friends is not the kernel of the problem of group co-presence. Social relations are complex not just in their hierarchies of proximity. There are situations in which the challenge lies in interacting simultaneously with different groups that the individual may consider equally close to him- or herself. Participants in Study I reported few social tensions related to group co-presence *per se*. Their expressed concerns about Facebook were focused mainly on information security and fear of unintentionally revealing something private or shameful about themselves to, for example, their bosses or less well-known acquaintances. The social tensions participants mentioned were typically related to other individuals, such as former significant others, with whom the participants did not wish to be in contact anymore. However, even at the time of Study I, group co-presence was arguably unproblematic only insofar as it was *made* unproblematic. Participants framed Facebook as a friendly, non-threatening setting for sharing of digital content. They claimed that the service was not to be taken 'too seriously', thus downplaying the potential for conflict and difficulties. This framing was effective in that participants had yet to experience boundary regulation challenges personally and, consequently, had a hard time imagining what such issues could look like in their own life. At that time, the participants also still treated Facebook as a somewhat separate sphere of interaction. Some argued that expectations from non-mediated, non-networked contexts were best left aside in joining the service: 'If you join in, you accept the risks.' A further finding of this research, although one not explicitly discussed in the publication on Study I, is that the framing of the activities related to SNSs was another way to regulate interpersonal boundaries. It served the pursuit of smooth social interaction by guiding and supporting participants' actions in the Facebook service and in relation to it.

The analysis of Study I led to identification of six preventive practices that participants were using to prevent anticipated tensions that could lead to conflictive and identity-threatening situations. I argue that these proactive, preventive practices were a key reason for so few tensions being perceived amid conditions that had potential to cause a great deal of interpersonal

turbulence. The behavioural and mental practices identified in Study I are presented in detail in subsections 5.2.2 and 5.2.3.

5.2.2 BEHAVIOURAL PRACTICES FOR DEALING WITH GROUP CO-PRESENCE

First, Study I revealed that self-censorship was a commonplace tactic for circumventing challenges related to sharing content with multiple groups. Participants reasoned that if they chose not to share content at all, they would not need to worry about who might gain access to it inadvertently or how it might be misinterpreted. While self-censorship is an effective way to regulate access to digital content, it comes with the cost of potentially hindering the expressive potential of SNSs and thus undermining the benefits of using them. However, many participants in studies I and II considered it the best option available when one is engaging with SNSs that do not support selective sharing in a feasible way. Participants preferred opting for self-censorship when they felt unsure about whether or not to disclose something.

Alongside self-censorship, other behavioural practices include varied tactics of selective sharing and audience segmentation. The second practice identified in Study I leveraged Facebook's functionality: Some participants had figured out ways to divide the platform into effectively separate spaces for interaction, thereby fostering separation between specific facets of their social life. This was done, for example, by making the home page of an explicit group 'closed', meaning that only members of that group could retrieve the page and access its contents. Third, another practice that relied on Facebook's features was careful selection of suitable channels for different sorts of communications. An example of this is alternating between private messages sent to a friend's Facebook inbox and public or semi-public messages posted to that friend's Wall. Some broadened this practice to communication channels beyond Facebook, mentioning e-mail and the telephone as media that allowed them to choose which communications belonged to the socially shared realm of Facebook and which were better taken care of via more exclusive paths. By the time of Study II, Facebook was offering increased functionality for sharing content group-wise. For instance, it allowed users to make status updates that were accessible to only a portion of the personal network they had articulated in the service. While participants criticised these new features for their complexity and for the burdensomeness of using them effectively, some were nonetheless making an effort to keep their audiences on the platform separate with the aid of these tools.

Using different SNSs for separate purposes or with different sets of people is another way to tackle issues related to complex network composition. Inklings of this were apparent from the interviews of Study I, but such practices were more pronounced by the time of Study II. A common example

is how many participants sought to draw a line between using Facebook for more casual purposes among friends and deploying LinkedIn for fostering more formal self-presentation and sustaining a professional network. Related research (Farnham & Churchill, 2011; Stutzman & Hartzog, 2012) has identified creation and maintaining of multiple profiles within a single service as another practice that is used in this vein. This practice too relies on the technological affordances of SNSs, although it is somewhat more subversive, in that those designing and maintaining these services do not necessarily expect or approve of such user behaviour.

5.2.3 MENTAL PRACTICES FOR DEALING WITH GROUP CO-PRESENCE

The mental practices identified for dealing with group co-presence can be best understood as approaches or mindsets participants adopted that made it easier for them to cope with group co-presence. The first mental practice identified was shifting one's mindset toward more inclusive categories and, thereby, broader in-group identities. Conceptualising groups on a level that dismisses the finer intergroup distinctions within one's social network can facilitate dealing with group co-presence.

Some participants decided to consider all Facebook users to be a single group or community, preferring to keep their profile open and freely accessible to everyone on the site. This degree of publicness was Facebook's default option at the time of Study I. It was not yet possible to make one's Facebook profile publicly accessible to everyone on the Web. Those who considered 'the Facebook community' in these very broad terms explained that they, then, shared only pieces of content that they felt anyone could see without that being a problem for them. As illustrated here and pointed out in the original publication on Study I, this practice is closely related to self-censorship and risks a path to interaction in SNSs in a manner in line with the 'least common denominator'. The intimacy of disclosures is likely to suffer when individuals choose to share only content that they deem so risk-free that it does not really matter who sees it. Hogan (2010) has since addressed the issue more elaborately, in proposing a theory of 'the lowest common denominator', the minimum that is normatively acceptable in the social setting at hand.

Other participants took a more restrictive approach even as they broadened group boundaries. Their solution was to treat their entire personal network as an in-group, excluding all other Facebook users from seeing the content they were sharing. This boundary carves off a much smaller audience, albeit one that can still be quite multifaceted. Participants explained that the benefit of this mindset was in the sense of control it gave them. As all users get to decide who belongs to their Facebook audience by choosing whom to accept as a Facebook friend, people get to act as 'filters of their personal networks', as one participant put it. In a similar vein, in their

broader analysis of how the controls provided in the interfaces of individual SNSs affect the kinds of mechanisms for boundary regulation that users can apply, Karr-Wisniewski and colleagues (2011) point out that, since SNSs articulate one's network structure unlike any other online or offline environment, users have a new transparency to manage in terms of network boundaries. In short, observations from Study I and related research highlight that mindsets on sharing and behavioural choices over network composition go hand in hand, serving the overarching endeavour of regulating interpersonal boundaries.

Another important aspect of mental practices involves trust both in terms of relying on others' discretion in what they share and how they interact with the content that has been shared with them and in terms of adopting a responsible mindset toward others, trying to be considerate of others' boundary regulation efforts. In both studies I and II, trust emerged as an important emic notion in the interview materials. Participants relied on shared, although often unspoken, understandings of appropriate behaviour more than they did on 'action' – that is, behavioural practices for dealing with group co-presence. It is noteworthy, however, that mental practices that direct considerations of what to share and what to censor are closely related to the behavioural practice of self-censorship. When group co-presence was discussed in 2007 in Study I, participants were aware of how multifaceted their social networks in the Facebook service were, yet they were confident that interpersonal boundary regulation in the context of SNSs could be tackled effectively if only everyone proved worthy of others' trust. This assumption went almost completely unquestioned, since, at the time, the challenges that could ensue from group co-presence were still hard to imagine vividly, on account of scarcity of precedent. No-one reported having experienced such challenges personally, apart from issues that were easily circumvented as minor hurdles.

By the time Study II was conducted, during the 2009–2010 academic year, this pebble in the shoe had grown to feel like a boulder: the challenges of group co-presence and context collapse were more commonly recognised and, therefore, taken more seriously. In participants' accounts, preventive practices were accompanied by increased efforts to apply corrective practices. Facebook use was also more firmly rooted in the fabric of everyday life, with the expectation being that the same rules of decorum should apply both online and offline. One's responsibility for both oneself and others, along with acknowledging the importance of being able to rely on others acting responsibly, was emphasised even more than at the time of Study I. All participants in Study II reported that it was or would be burdensome to control disclosure in SNSs very rigorously. Individuals differed, though, in how much effort they were willing to invest to deal with group co-presence and to regulate interpersonal boundaries more broadly. Regardless of how much personal effort they reported investing in regulation of interpersonal boundaries, all participants recounted cutting themselves slack at least

occasionally and opting to rely on others instead. These tendencies are to be expected when one considers Goffman's (1959; 1967; 1971) argument of the co-operative nature of encounters; however, it seems that the characteristics of SNSs may render people more aware of the ongoing work that is needed to sustain everyone's self-presentation and to achieve comfortable encounters.

5.3   SHARING ON BEHALF OF OTHERS

The technological characteristics of SNSs disrupt sharing on behalf of others by amplifying what can be done and what the resulting consequences could be. Before we address this disruption and the practices people apply to deal with it, it is worth noting that full control over interpersonal boundaries and over what is disclosed about oneself, or the groups with which one identifies, has never been a reasonable expectation in everyday life. The idea that people make the interactional world work through joint effort was central already in the works of both Goffman (1959; 1967; 1971) and Altman (1975; 1977): Self-presentations are effective only insofar as others accept and support them. As people negotiate over desirable degrees of interaction, it is typically not up to a sole individual to dictate how much interaction is the 'right' amount in any given situation. Moreover, Petronio's work (2002) on private information demonstrates the importance of shared boundaries and shared efforts in maintaining and repairing them.

As a consequence of the dynamics of the networked context, interpersonal boundary regulation necessitates co-operation. Interpersonal boundary regulation in this context is best understood to be co-operative on two levels: First and foremost, co-operation becomes manifest in that, to maintain a boundary or to make a successful claim to identity, individuals need others to affirm their actions and to support the definition of themselves that they are putting forward. This is especially central in the context of SNSs, which tends to be highly warranted in terms of acquaintances (Warkentin et al., 2010). The presence of acquaintances who can observe and call out attempts at deceitful self-presentation constrains deception powerfully, presumably because people seek to avoid 'getting caught' by friends and family (Warkentin et al., 2010). Arguably, there are fewer attempts to lie in such circumstances also because deception is less likely to be successful. If others do not support an individual's self-presentational claims, they are unlikely to be considered credible. As noted above, this is especially because an individual's own words are trusted less than external sources when the information provided seems to favour a particularly positive impression of the individual (Walther et al., 2009). Second, in response to the need to deal with content disclosed by others and with one's power to share on behalf of others, co-operation to regulate interpersonal boundaries takes place also on a more explicit level, in negotiations on what to share, with whom, and under what conditions.

5.3.1 NOVEL CAPACITIES AND CONSEQUENCES OF SHARING ON BEHAVIOR OF OTHERS

BEHALF OF OTHERS

With SNSs, people can share content on behalf of others or recontextualise content that others have shared, casting the initial disclosures in a new light. Members of increasingly large and diverse social networks can give and gain access to digital content nearly effortlessly and with only minor economic cost (although there are exceptions to this – see, for example, Wyche et al. 2013). Once online, pieces of information can persist potentially endlessly. They can be easily spread in ways that break conventional contextual boundaries, and they may be replicated outside their original context. Because parts of the tasks related to sharing information and experiences with others are allocated to the mechanisms SNSs provide, 'news' – that is, personal updates of various sorts – may travel 'too fast' or to unintended destinations, reaching unexpected audiences or violating assumptions of how, when, and where it is appropriate for information to flow.

Furthermore, the diversity and size of networks make it hard to predict what the consequences of a seemingly innocuous disclosure may be for others. Predicting the effects of one's disclosure on another SNS user's boundary regulation efforts can be difficult and, at times, practically impossible. For example, one of the participants in Study II was a foreign student who felt somewhat caught in a conflict between the social norms of appropriateness in Finnish culture and those in his culture of origin in Asia. Photos that his fellow students had posted on Facebook after an informal student event were a source of concern for older members of his family back home, although among the Finnish student community there was nothing unusual or offensive about the images.

Another recurrent challenge was the regulation of boundaries between professional and personal life. Since most of the participants in studies I and II were students, these tensions were often expected to complicate things in the near future, as graduation was getting nearer. They were discussed as something that might force changes to how the individuals were engaging with SNSs. Some participants had already experienced challenges in regulating professional and personal boundaries in SNSs. For example, another participant in Study II recounted how, upon being accepted to the study programme, she had wanted to tell the news to her boss in person in order to avoid any kind of confusion as to what her new position as a student would mean for her role in the workplace. She had, however, needed to be quick to remove congratulatory messages from her Facebook Wall in order to retain the opportunity to share the news face-to-face. Those congratulating her probably had not realised that this piece of positive news was something that she would not want to have publicised via Facebook. After all, it is not obvious that it might be inappropriate or problematic to congratulate someone for a fine achievement.

The introduction of SNSs to the fabric of everyday life leads to new complexities in interpersonal boundary regulation because of the

characteristics of SNSs, including persistence, replicability, searchability, and invisible audiences (boyd, 2008). These characteristics affect how others' actions may reflect on an individual. Sometimes these effects may occur in ways that others cannot even fathom, since a piece of content shared through an SNS has the potential to reach everyone in that individual's personal network in that service (and beyond), not just the mutual friends of said individual and the person doing the sharing. People are unlikely to have a full understanding of everyone in a friend's network in an SNS. Even the closest of friends are likely neither to share all group memberships nor to know all members of each other's extended families, not to mention more distant acquaintances. These dynamics make individuals dependent on one another when it comes to regulating interpersonal boundaries, both in terms of managing a self-presentation and with respect to other acts of balancing levels of access to interaction and information over time. It can be difficult to interpret the potential consequences of any given act of sharing digital content, because of the diversity and size of social networks articulated in SNSs. This tendency is amplified by the fact that the information shared in SNSs accumulates over time.

In SNSs and interpersonal boundary regulation, the power over how an individual is presented is shared between that individual and others in complex ways. Others can share content on behalf of a person, but they hold an important role also in terms of how they interpret the content that is shared with them. Users of SNSs cannot fully control what others share about them in these services, nor can they comprehensively manage how others may interpret, recontextualise, or otherwise utilise content that has been shared with them.

5.3.2 SUPPORTING OTHERS' INTERPERSONAL BOUNDARY REGULATION EFFORTS

To regulate interpersonal boundaries effectively, individuals need others to affirm their actions and to support their definition of themselves and of the situation in which they operate. Others can contest such boundary regulation efforts, either on purpose or accidentally. Either way, contesting a claim to identity creates a need for further negotiation. The acts of co-operation that fall into this category are not always intuitively perceived as co-operation: The participants in Study II typically did not discuss being polite and considerate of others as a form of co-operation, yet their accounts made clear that interacting in these ways in SNSs was driven, in part, by the wish to avoid undermining others and to steer away from conflict.

When engaging with SNSs, participants tended to avoid conflict and embarrassment. They wanted to sustain interactions with which everyone could feel comfortable. In pursuit of this goal, 'censoring' content that was deemed potentially problematic was a popular way to avoid trouble and maintain a reputation of trustworthiness. Within individual SNSs (the

participants in studies I and II were discussing mainly Facebook), adjusting privacy settings was a common way to limit the spread of content one wanted to share just as much as content that one expected or worried that others might share. Furthermore, along with choosing not to post content, participants applied diverse practices of selective sharing in order to be considerate of others' interpersonal boundary regulation efforts.

Many of the practices of selective sharing were similar to those that individuals applied when making decisions on what to share when presenting themselves to a potentially multifaceted audience (see Section 5.2). Individual-level behavioural practices of selective sharing that were applied to mitigate issues related to sharing on behalf of others included, for example, sharing content group-wise and using different services for different aspects of one's social activities, to make it less likely that others would, unwittingly, challenge one's boundary regulation efforts. For instance, some participants had strict practices of using Facebook for informal, leisurely interaction whereas they reserved the more professionally differentiated SNS LinkedIn for professional self-presentation and strategic networking. The use of two distinct services allowed them to maintain social networks that had been articulated on the basis of different principles and to share content in each service accordingly. Even when participants did not attempt to set up interpersonal boundaries technically by using the functions offered by the SNSs, there were other means to limit access. These included carefully selecting one's words and 'tone' so as to limit access to deeper meaning while still allowing access to the same content. Reporting on similar practices among youth in the US, boyd and Marwick (2011) have discussed these tactics as social steganography. By this, the authors refer to hiding things in plain sight by sharing content that only those 'in the know' are supposed to be able to interpret correctly. This practice was seen also in the Finnish context examined in Study II.

Instead of discussing co-operation explicitly, participants introduced the notion of trust in the interviews and focus groups of Study II. Trust plays a key role in co-operative regulation of interpersonal boundaries. Individuals rely on others to act with their best interests in mind and to be considerate of them. This trust encompasses both what others choose to share and how they interpret the content that is shared with them. Studies I and II illustrate that management of interpersonal boundaries is based largely on expectations of others' attentiveness to one's self-presentation. Participants' accounts reveal a strong reliance on unspoken expectations of reciprocal attentiveness. Trusting others to be considerate of one's boundary regulation efforts, and trying to be trustworthy in return, was a common approach to interpersonal boundary regulation. This approach holds echoes of Goffman's (1971) observation of how traffic is arranged such that collision and mutual obstruction are systematically avoided by means of self-accepted restrictions on movement. In both cases, reliance on a shared code provides a safe pattern of operation. While individuals could use this approach to guide their

actions, it was most prominently a calming mindset that reassured them that there was no need to 'stress out' by trying to regulate boundaries on their own.

Trusting that others will do their share in sustaining interaction with which everyone involved can feel comfortable is one of the prerequisites for continued participation in SNSs. While reporting on many more challenges than were elucidated in Study I, participants in Study II continued to make efforts to frame SNSs as a friendly and non-threatening context for social interaction. They seemed to be aware of the efforts necessary to make social interaction 'work' not just for themselves but for others. Participants expected others to respect the interpersonal boundaries they tried to maintain. In turn, they made efforts to be similarly considerate to others. It was taken almost for granted that sharing online is based on trust in others' co-operation in managing boundaries, a shared norm of boundary regulation in the context of SNSs among the participants. While participants reported feeling committed to behaving in line with this expectation themselves, they, reciprocally, did not worry much about anyone violating their boundaries on purpose. Furthermore, participants expressed trust that others would not draw serious conclusions about them if, against expectations, something that called their self-presentation into question were ever to be published via an SNS.

Placing others' trust at risk was nearly unimaginable to the participants in Study II. Doing so on purpose was deemed unacceptable. The idea of purposefully causing conflict or challenging others' claims seemed strange or even laughable to the participants. They considered violation of the expectation of considerateness to reflect more on the person sharing inappropriately about others than on those whose self-presentation claims the shared content challenges. The idea was that, when noticed, efforts to violate another user's self-presentation call into question primarily the violator's reputation as a trustworthy person who abides by SNS usage norms.

Prior research on how people manage self-presentation and regulate interpersonal boundaries in the context of SNSs places emphasis on the individual and his or her efforts to maintain a self-presentation and regulate interpersonal boundaries (see, e.g., Stutzman & Hartzog, 2012; Karr-Wisniewski et al., 2011). Both studies I and II show users of SNSs to be worried about not only what others may share in relation to them but also whether they themselves may, inadvertently, share something about others that is deemed inappropriate and inconsiderate. Participants reported considering how the content published will be interpreted and by whom, while also pondering whether the content they were sharing might inadvertently cause challenges for a friend. Participants' efforts to co-operate included considerate acts of sharing, discreet self-censorship, and benevolent interpretation.

While there seemed to be a strong sense of a shared code of conduct, few participants mentioned having ever explicitly discussed with their friends the 'rules of thumb' that should be applied in sharing digital content. Even when the individuals involved were willing to take others into account and were striving to live up to the expectations of trustworthiness directed at them, it could be hard or even impossible to avoid unintended boundary violations. Blunders in interpersonal boundary regulation seemed to derive from the difficulty of estimating how those in others' multifaceted networks would interpret something. Individuals are unlikely to have a comprehensive understanding of the people in others' networks and the ways in which they may react to various types of content concerning mutual acquaintances.

5.3.3 CO-OPERATING ACTIVELY TO REGULATE INTERPERSONAL BOUNDARIES

Participants conveyed a need to deal both with content disclosed by others and with one's power to share on behalf of others. In response, co-operation to regulate interpersonal boundaries took place not only via actions supporting others' efforts but also via explicit negotiation of what to share, with whom, and under what conditions. This explicit co-operation was more readily recognised and discussed as co-operation by the participants too. While such co-operation was evident from Study II, it seemed to be less commonplace than were subtle acts supporting others' individual efforts. It is noteworthy that, although the user interface of Facebook featured a variety of tools for selective sharing targeted at individual users, explicitly co-operative practices were largely unsupported by the SNS at the time of the study in 2009–2010.

Participants in Study II reported talking with their friends occasionally about what type of content it is appropriate to share through SNSs. Some stated that they ask for approval before sharing content that features others, such as photos of them. Participants were generally in agreement that if a friend asked to have a picture or other piece of content removed from an SNS, these requests should be addressed swiftly. In the co-operative practices, participants preferred prevention over correction, although preventive practices had known weaknesses. Preventing blunders could be very hard, on account of the difficulty in anticipating the consequences that sharing a piece of content might have for others.

Corrective practices too, such as deleting comments, removing tags, asking another person to delete a piece of content, or reporting inappropriate content to Facebook, were considered problematic. These practices run the risk of being socially infeasible or ineffective, and, what is more, they can be counterproductive. First, corrective practices are socially awkward, and therefore 'costly', to apply, since they challenge the interpretation of the SNS context as easygoing and non-problematic. Since trust and trustworthiness play such important roles in the regulation of interpersonal boundaries,

corrective strategies are problematic from a relational perspective: Requesting repair work from others almost by nature points out that others have failed to live up to the trust placed in them.

Finally, some participants reported dealing with anticipated challenges related to online disclosures by regulating their offline behaviour. This was done to limit pre-emptively what others could share in SNSs. For example, some recalled having refused to have their picture taken at a party, relying on the logic that if no potentially problematic photos were taken in the first place, there would be no need to worry about whether or with whom such photos might be shared later on. As a counterpoint to this practice, some participants talked about the possibility of taking photos or having pictures taken purposefully so that they could be shared on Facebook. When one considers how people regulate interpersonal boundaries when SNSs are involved, it is important to bear in mind the key notion of Altman's boundary regulation framework (1975), that the aim of regulation is to achieve the desired degree of interaction and exposure. In the context of SNSs too, efforts are made not just to restrict access but also to provide it. After all, connecting with others and sharing digital content with them are central aspects of what SNSs are designed and used for. Moreover, it is through these elements of SNS use that the social capital of those involved can be boosted.

5.4   SHARING VIA AUTOMATION

Profiles in SNSs are typically easy to acquire and quick to set up. However, maintaining one is not necessarily a simple and effortless matter. It can feel especially challenging when the main content featured in the profile is behavioural information that is captured and shared by an automated sharing mechanism. Study III shows how participants engaging with the music-focused SNS Last.fm tackled challenges related to maintaining a profile that contained primarily behaviour-related information, on their music-listening. The findings shed light on how individuals try to ensure that such profiles are aligned with how they want to present themselves.

The original publication on Study III proposes the concept of profile work to describe users' experience and action in SNSs as they make efforts to maintain and manage public profiles. Profile work is depicted as a continuous, strategic process that is guided by individuals' interpretations of their behaviour and that of others. In examination of the experience of maintaining a profile on Last.fm, several practices for regulating one's profile were identified. While the original study was not framed in terms of interpersonal boundary regulation, the findings depict how interpersonal boundaries are regulated in the presence of an automated sharing mechanism.

5.4.1 CHALLENGES OF AUTOMATED SHARING

The promise of services that provide automated sharing mechanisms is that, once installed and in use, they will make sharing data that depict one's behaviour so effortless that day-to-day use will necessitate nearly no involvement on the part of the individual. In addition to Last.fm, where individuals can share behavioural information on their listening, systems that support (or have previously supported) the sharing of behavioural data include, among others, Scoopinion[4], a news recommendation service that originally allowed users to share information about their online reading behaviour in a radically transparent way, and location-focused services, such as the now-defunct Google Latitude[5], that invite users to stream information on their physical location in real time. Automated sharing mechanisms can be useful tools for identity work and impression management, but they may also challenge the boundaries people try to maintain. Sharing via such automated mechanisms is often presented as 'frictionless sharing'. This depiction highlights the technological effortlessness of sharing digital content, typically behavioural information. The metaphor, however, leaves unaddressed the social friction related to such sharing.

Study III indicates that the necessity of regulating interpersonal boundaries does not vanish when automated sharing mechanisms are introduced. Participants had chosen to share information on the music they listen to in their Last.fm profiles. This was achieved by employing a separately downloadable feature called the Scrobbler. The Scrobbler tracks which audio files are played on connected devices and publishes information on any music listened to on these devices, including the names of all audio files played. While participants were willingly using the Scrobbler to publish information about their music-listening in real time in their profiles, sharing via the automated mechanism was not without its challenges. Participants' accounts indicate that a lot of work can go into regulating what is being shared also when sharing takes place via an automated mechanism.

In the case of sharing via automation too, refusing use altogether would be one option to overcome challenges related to online sharing. The participants, however, did not simply opt out from sharing content that they might not want to make fully and publicly available. Since they deemed using Last.fm meaningful, they sought finer-grained solutions instead. The practices they applied were adapted to the challenges particular to automated sharing involving the Scrobbler. On the whole, they could regulate what was being shared by either disabling the sharing mechanism or intentionally behaving differently in order to produce data that they felt comfortable sharing. This showcases an irony of automation: a mechanism that was designed to make sharing digital content effortless ends up imposing novel

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[4] See https://www.scoopinion.com/ (accessed on 18 November 2013).

[5] See https://latitude.google.com/latitude (accessed on 24 April 2013).

types of work on those adopting it. The need for impression management may even undo the potential benefits of automation.

Sharing behavioural data via automation highlights how self-presentation via SNSs may include conscious efforts to strategise over what to share and how to achieve the self-presentation one strives for. At the same time, interpersonal boundary regulation in the presence of automated sharing mechanisms encompasses decisions that go beyond choices over sharing and affect, instead, how people choose to behave when they know that their behaviour is being tracked and information about it will be publicised. As certain behaviours, such as music-listening, can be made public by default, interpersonal boundary regulation needs to take place not only as people choose what to tell others about what they have been up to but also in deciding what they will do to begin with. In other words, automated sharing mechanisms may guide those engaging with them to change behaviours that are seemingly unrelated to online sharing. This can be problematic especially if the goals of the 'primary' behaviour, such as music-listening, conflict with the self-presentational goals that are pursued through engagement with the SNS in question. Accounts of participants in Study III indicate that when they were maintaining a profile on Last.fm, the goal of music-listening was not only to satisfy their cravings for music but also to work on the image they were giving to others in the form of the music-listening information published in their profiles.

5.4.2 REGULATING AUTOMATED SHARING FOR SELF-PRESENTATION PURPOSES

Four practices of regulation of interpersonal boundaries were identified in Study III. First, some participants reported switching the Scrobbler on and off strategically. They explained that this allowed them to listen to a song without sharing information on the listening activity for others to observe and potentially criticise. One participant described resorting to this practice when she wanted to listen to something that she thought of as embarrassing. Another explained that she had sometimes switched the Scrobbler off in order not to 'pollute' the list of recently played tracks in her profile. She had not wanted to add less meaningful content, as the list had consisted of songs that she felt were ideal for representing her music tastes.

Second, resetting one's entire user profile on Last.fm was a practice that enabled users to get a fresh start in the service. Resetting the profile was perceived as a very weighty course of action. Only two participants in Study III reported having resorted to it. The challenge this practice addressed, the persistence of data in one's profile, is not specific to automated sharing. A similar challenge could arise in relation to manual sharing. For instance, creating a new profile might be the most effective way to clean the slate for individuals who have shared vast amounts of content over time that they later on no longer wish to showcase in their profiles. However, manual

sharing mechanisms are often coupled with the ability to update one's profile in ways that enable, for instance, indicating a change in the music genres one prefers. In contrast, with respect to automated sharing on Last.fm, it may be a long time before any changes in one's music-listening become visible in the aggregated statistics generated from one's tracked listening behaviour. Participants in Study III expressed criticism for Last.fm's lack of support in the event of changes in music tastes.

Third, a practice addressed in Study III as 'the dilution effect' refers to listening to 'good' music to hide or at least dilute the fact that one had also been listening to 'embarrassing' tracks. This practice allowed for more flexibility in one's listening, and one participant even claimed that her profile was so versatile that any song could easily be diluted in her listening statistics.

Fourth, 'boosting charts artificially' refers to the practice of playing songs while not listening to them. This was seen as a simple way to increase the number of tracks visible in one's profile. Participants held in high regard profiles that contained ample behavioural data, arguably because data quantity functions as a cue of a trustworthy profile. The finding of the enhanced credibility of profiles that are made up of large quantities of behavioural data is in line with the core idea of warranting, as outlined by Walther and Parks (2002). As described above, there is a sense that the behavioural data in question are more, although not fully, immune to manipulation by the person to whom they refer. In other words, it seems less likely for a person to maintain a false performance over extended periods of music-listening, simply because of the massive effort this would entail. Indicating one's music tastes by publicising data on one's own listening can similarly be understood as an assessment signal. In distinguishing assessment signals from conventional signals, Donath (1999) describes the former as costly to put forth and refers to the cost of sending such a signal as directly related to the trait that one wants to advertise. Streaming data of one's listening behaviour to an SNS profile matches this description, whereas typing a description of one's music tastes in a text field in one's profile (as can be done in, for instance, Facebook) would constitute a conventional signal.

It is interesting to note that some participants in Study III did, indeed, find ways to manipulate the allegedly credible behavioural data published in their Last.fm profiles. Boosting charts artificially was done also to ensure that one's favourite musicians would retain their positions as those whose songs the individual had been listening to the most. Similarly, in the case of changes in favourite artists and genres, artificial boosting was deployed to shorten the time it required to get one's profile in line with one's new tastes.

In summary, several interpersonal boundary regulation practices were identified in Study III. When one considers interpersonal boundary regulation in relation to automated sharing, an analytical distinction can be drawn between two types of practices: First, there are interpersonal

boundary regulation practices that regulate what is publicised. Second, efforts are made to regulate how one behaves in order to control what kind of data, consequently, will be available for sharing. In a simple example, one can disable Last.fm's sharing mechanism or try to find a loophole that allows for 'gaming the system' in some way that is productive for self-presentational efforts. Alternatively, however, one could choose to behave differently in order to produce the kind of behavioural data that could be publicised without a sense of discomfort or embarrassment. In this way, automated sharing may prompt people to engage in interpersonal boundary regulation practices that affect their chosen courses of action more deeply than is typical in the presence of manual sharing mechanisms.

5.4.3   OVERCOMING TECHNOLOGICAL SHORTCOMINGS

As is discussed above and in the original publication on Study III, users apply boundary regulation practices to conceal behaviour that they consider embarrassing or in conflict with the self-presentation they are trying to put forth. Some even found ways of systematically and purposefully manipulating the behaviour data that were being published. However, further reflection on the findings points to interpersonal boundary regulation practices that are understood more accurately as attempts to overcome constraints of the technological system than as acts of concealing or boosting behaviours strategically by 'fooling' or 'gaming' the system.

Study III evidences that boundary regulation practices are applied also in order to correct shortcomings of automated sharing mechanisms. These shortcomings include technological failures to capture behaviour. Another issue is the system's inability to verify who is listening to the music that is being tracked. It might be the person to whose profile the information is streamed, but it could well be someone else too, or a group of people. Or there might be no-one listening at all, as in the case of forgetting to switch off the music player when one leaves the room.

Participants boosted charts artificially not only to produce data that would support the self-presentation they were trying to put forth but also to cover for the shortcomings of the system. In a highly illustrative example, one of the participants explained that when he listens to LPs, he might set the computer to play the same tracks on mute in MP3 format in order to make his Last.fm profile match his music-listening behaviour as closely as possible. At first glance, this tactic may seem like fooling the system. After all, no-one hears the songs that the digital music player is playing. However, the behaviour is better interpreted as overcoming the limitations of technology: the owner of the profile *is* listening to the music, even if the Scrobbler has no way of capturing listening that takes place with non-digital formats. The example highlights also the importance some participants attached to self-presentation via their Last.fm profile. It takes intentional effort to apply such a practice.

It can be seductive to think that automated sharing mechanisms could capture the 'actual' behaviour of people 'as it happens' and simply mediate said data for others to peruse via SNSs. Disappointing as this may be, automated mechanisms do not succeed in said task of mediating a full and flawless representation of an individual's behaviour. They reach only what the technological set-up allows them to reach. The imperfection of technology and the importance participants assigned to communicating their 'real' behaviour seemed to guide participants to go to some effort to ensure that their behaviour is recorded as fully and truthfully as possible. In conclusion, people engage in interpersonal boundary regulation not only when the sharing mechanism risks publishing content that they do not want to have in their profiles but also when the sharing mechanism fails to publish content that it should capture and that people would like to present in their profiles. Some of the participants were manipulating data to achieve a self-presentation they found more truthful, not necessarily one that was strategic. This highlights one of the key ideas of the interpersonal boundary regulation framework: people make efforts not just to conceal information but also to reveal it.

5.5 SHARING ONLINE AND OFFLINE

As the use of SNSs is woven tightly into the fabric of everyday life, interactions offline constrain, enable, and support certain kinds of self-presentation efforts online, and vice versa. The idea that interpersonal boundary regulation in the context of SNSs is not limited to action that takes place online is a core thought that runs through this work. Boundary regulation in different situations forms a whole that sustains social relations and self-presentation over time. At the same time, specific interpersonal boundary regulation practices are adapted to each setting and situation. Therefore, they may differ as people transition from one service to another and from an online to offline milieu. In the following subsections (5.5.1, 5.5.2, and 5.5.3), I illustrate with three examples how interactions online and offline are connected in different SNSs, depending on their features and on the activities for which they are deployed. In doing so, I discuss several ways in which interpersonal boundary regulation spans interaction online and offline. First, referring to Study IV, I discuss negotiations over reciprocity and indebtedness as one aspect of interpersonal boundary regulation in relation to local online exchange. Second, drawing on Study V, I illustrate how downplaying SNSs and expressing a preference for another communication technology may serve identity work that takes place both online and offline. Third, returning briefly to studies I–III, I discuss how considerations of what to share in SNSs, such as Facebook and Last.fm, are reflected in actions that are taken offline both before and after the potential act of sharing in an SNS.

5.5.1 REGULATING ACCESS TO SOCIAL INTERACTION IN LOCAL ONLINE EXCHANGE

As noted above, Study IV focused on Kassi, a local gift-exchange system that supports the exchange of goods and services in geographically local communities. When people engage in exchange activities via Kassi, they initiate exchange processes that typically have to be completed in a face-to-face encounter. The participation in local online exchange analysed in Study IV was situated in the local community of a university. Most exchanges discussed in the research material took place between exchange partners who had not met one another before the activity. Kassi differs from more commonly used SNSs, such as Facebook and Last.fm, in that while Kassi users do have persistent profiles in the service, the profiles play a less important role in shaping the interactions related to the service. Moreover, the interpersonal ties articulated in Kassi user profiles result from connecting with other Kassi users through exchange processes. Thus, these connections are largely a by-product of exchange activities, not a valued end of their own. Over time, however, the reputation harnessed to these profiles via signs of successful exchange activity and positive feedback from previous exchange partners may matter, for instance, in how willing others are to engage with the individual in question.

As most of the activities on the site are organised around the offers and requests people have posted, these form the core digital content that structures the interaction. The study examined how active, experienced users of Kassi experienced exchange processes and how they were dealing with issues related to reciprocity and indebtedness. Since the exchange partners are typically not familiar with one another initially, encounters may feel risky and socially challenging. This can leave participants very self-conscious and encourage them to make efforts to give as good a first impression as possible. In comparison to those SNSs wherein people focus mostly on regulating interpersonal boundaries with pre-existing social ties, Kassi usage is more heavily centred on regulating interactions with new contacts in one's local community. In co-ordinating exchange processes with previously unfamiliar members of their local community, participants encountered boundary regulation challenges that were related especially to the outermost function of interpersonal boundary regulation, the regulation of social interaction.

A further element shaping the challenges of interpersonal boundary regulation identified in Study IV is that few participants had experiences of local online exchange processes before joining Kassi. Therefore, they did not necessarily have a clear sense of what would be expected of them in an exchange encounter or what the interaction with an exchange partner 'should' be like. Study IV indicates that feelings of indebtedness stem from both exchange outcomes and the efforts participants undertake during exchange processes. Participants' experiences with issues of practice and procedure were critical to their overall perceptions of whether an exchange process was successful. Furthermore, their consequent desire to keep

participating in exchange activities in the community seemed to be affected by how comfortable they felt about their initial exchange experiences.

According to Study IV, interpersonal boundary regulation efforts observed in relation to Kassi use are pronouncedly about negotiating access to interaction and, via it, to resources that are valuable at least to the recipient. The main aim of the participants in Study IV was to find a fair balance in terms of how much effort each exchange partner invests in reaching successful outcomes through a satisfactory, and preferably pleasant, process. Participants tried, for instance, to figure out what the 'right' ways to contact another person were in each set of circumstances and how best to express gratitude and reciprocate appropriately. Participants wanted to reciprocate with others and with the community. Moreover, they were averse to remaining indebted after an exchange process. Five user behaviours that lessen the negative feelings of indebtedness were identified. These can be understood as practices that regulate interpersonal boundaries in that they facilitate performing as a 'good member' of the community and aid in achieving comfortable encounters wherein one avoids being considered a freeloader.

First, although Study IV examined non-monetary Kassi exchanges, including free gifts and offers as well as lending and borrowing, many participants reported having offered small tokens of appreciation to their exchange partners. The point of these offers was to show gratitude and appreciation, not to function as compensation for the contribution one's exchange partner had made. A typical way of doing this was to offer a small gift or a little cash for coffee after receiving a favour from another person, be it some help with a task or the opportunity to borrow an item. Some participants considered providing positive feedback to their exchange partner publicly on the site to be a way of showing this kind of appreciation.

Second, even though the original ideas driving the design of Kassi were related to supporting generalised exchange within a community, it was not always obvious to the participants that they could receive something from one person at one time and reciprocate by helping out someone else at another time. Some of the participants explained how once they had understood and accepted the indirect nature of generalised exchange, participation in Kassi exchanges became easier for them. This shift in mindset is similar to some of the mental practices discussed above in relation to Facebook: A helpful way to think about participation in sharing activities – whether involving digital content in Facebook or physical goods via Kassi – may change the experience of participation. This might be the case even when one changes nothing observable in how one engages with the community.

Third, participants discussed the importance of establishing a shared understanding of the exchange. Managing others' expectations by carefully framing the offers and requests one posts was deemed important. In addition to preventing misunderstandings in general, this practice allowed for pre-

emptive boundary regulation: if the expectations had been clarified in prior online interaction, there was less to worry about when the time came for the face-to-face encounter. This behavioural practice is a clear example of how boundary regulation efforts online can serve to facilitate forthcoming face-to-face interactions.

Fourth, participants were striving to minimise the efforts needed in exchange processes, for instance, by considering carefully which media are appropriate and suitable at various moments and by reflecting on what type of interaction would be welcomed. When interpersonal boundary regulation failed during an exchange process, participants were troubled. They felt uncomfortable if co-ordinating an exchange turned out to require more effort on their part than they had originally intended – that is, if they ended up with more interaction because of the exchange than they had sought. This was especially evident if the person in question was the one providing goods or a service and the person receiving the item or the favour was not making active efforts to complete the exchange. For example, one participant's experience taught her to be stricter about clarifying what she is or is not willing to do for others. Although the exchange providing this lesson was completed successfully, the participant disapproved of being left to make the practical efforts the exchange necessitated, especially since she was giving away the item in question at no cost. This violated not only expectations of how much time and effort would be necessary for completion of the exchange but also expectations of fairness and reciprocity, and maybe even the participant's sense of herself as someone who is fair but not willing to be mistreated by others.

Fifth, bartering and exchanging for a third party allowed side-stepping any direct sense of indebtedness. This practice allowed people to act as brokers in exchange processes, letting them avoid asking for something for themselves. Furthermore, barter for a third party could in some cases allow individuals to avoid face-to-face encounters, enabling them to participate in exchange activities online without needing to risk the awkwardness of meeting up with a previously unfamiliar person from the neighbourhood.

The user behaviours identified in Study IV were devised to facilitate the face-to-face encounters that are integral to successful exchanges in the local community. While these behaviours can alleviate uncomfortable feelings of indebtedness, they also serve to provide exchange partners with gratifying experiences and a sense of being appreciated. All of them are examples of boundary regulation efforts taking place in interaction processes that necessitate both online interaction and offline encounters. There is typically little expectation of an ongoing social relationship with an exchange partner, since the interactions that Kassi facilitates are focused on completion of an exchange. This means that the needs for interpersonal boundary regulation are somewhat different in terms of self-presentation and negotiation of access to interaction than in the cases explored in studies I–III. I conclude that when it comes to local online exchange in a service such as Kassi,

interpersonal boundary regulation has to do mainly with regulating access to interaction and maintaining a fluent social situation that does not challenge the identity claims of its participants.

5.5.2 REGULATING COMMUNITY BOUNDARIES WITH TECHNOLOGY CHOICES

Revisiting Study V, the core finding can be described to be that expressing a preference for Internet Relay Chat, a text-based chat technology developed relatively early, was a means of identity work for the participants. Expressions of preferring IRC and undermining SNSs and other communication technologies that were very popular at the time of the study served both the participants' individual-level sense of belonging to their student community and their student community's distinctness from other social groups. Expressions of preference took place through both technology usage and communication in offline encounters. The study illustrates how boundary regulation spans the hypothetical online/offline divide as a technology preference is expressed in various everyday interactions that take place within and between communities.

Beyond the choice to use a particular technology, participants did identity work by adopting and valuing particular ways of use, such as embracing text-based interfaces and condemning graphical user interfaces. This was an effective way to make a distinction, since most networked communication technologies nowadays rely on graphical user interfaces. In choosing to embrace IRC, the participants made claims to identity as members of their student community, as students of their degree programme, and as aspiring IT professionals. This was done, first, by means of adopting IRC in active daily use, thus demonstrating that one has the kind of computer expertise that the community values. Furthermore, identity work was done by expressing a preference for the medium both overtly in discussions and through everyday practices such as using IRC jargon, making inside jokes, and addressing other community members by their IRC nicknames even in non-mediated interactions.

The dynamics identified that are relevant in the shaping of technology preferences were similar to those at play when individuals make consumption and lifestyles choices as to what to eat, what to wear, and what types of music to nominate as their favourites. Yet technology preferences are not just another tool for identity work: ICTs are used for identity work both as platforms for self-presentation and as social expressions of identity. Individuals not only build their profiles in SNSs but can also construct their group identity with others with the aid of technology preferences. The participants in Study V are a most illustrative example of this in how they adopted IRC and vouched vocally for specific ways of using it.

The study highlights the range of everyday practices through which identity work takes place as a group process. This focus can aid one in

understanding how individuals, as members of communities that are dear to them, come to prefer some information technologies to others and how these preferences can be used as props for identity work. A fundamental element of this process is the preferences for particular technologies being expressed not solely by the use of those technologies or by expression of said preference via those technologies but also in the course of daily face-to-face encounters.

5.5.3   SELF-OBSERVATION WITH FACEBOOK AND LAST.FM

Finally, I argue that the participants in studies I–V felt socially accountable for their self-presentation efforts both online and offline. This experience of accountability is not very surprising if one considers how closely the social networks articulated in SNSs reflect aspects of people's social networks in general, and how highly warranted they are (Warkentin et al., 2010). For instance, presenting oneself in one way on Facebook or Last.fm and very differently in everyday interactions in the workplace, on the university campus, or at home would be likely to lead others to question what one is up to. On Facebook and Last.fm, where sharing content is tied to sustaining relationships that persist over time, it becomes necessary for many to build a profile that sufficiently matches the identity claims they wish to make offline in various face-to-face interactions.

In revisiting studies I–III from the angle of sharing online and offline, the core issue is that the SNS context may reconfigure the relationship between 'doing' and 'telling'. Sharing content in SNSs may potentially push people both toward more consciously crafted self-presentation and toward changing their 'primary' behaviour for the sake of online self-presentation. This is partially because services such as Facebook and Last.fm allow or even force people to work on their self-presentation and reflect upon it through concretely mouldable, persistent, and (to some degree) public profiles. Online profiles are not simply representations of people. They are also used to work on people's sense of self, because of the opportunities for feedback and reflection that they provide.

Sections 5.1, 5.2, and 5.3 focused on how the ways in which SNSs reconfigure the context for interpersonal boundary regulation affect how people relate to others and what kinds of efforts they undertake to put forth desirable self-presentations and to achieve the desired extent of interaction. However, as was pointed out long ago by Goffman (1959), the process of self-presentation involves both self and others. It is important to consider how the technological reconfiguration shapes how people relate to themselves. Social network services provide people with new ways to work on their identities and interact with themselves. Online profiles and the digital traces that are aggregated to them provide a continuous, persistent basis for self-reflection.

Constructing an online profile and updating it over time offers individuals an opportunity to reflect on their self-presentation and to work on their

identities. The increased opportunities for self-reflection might be most obvious in relation to automated sharing of behavioural information. This is because automated mechanisms that track and share this information can make patterns of behaviour visible in novel ways. Since the individuals whose behaviour is tracked can view their own actions in aggregate, they may notice and reflect on patterns that they had not necessarily recognised otherwise. When behavioural information is shared automatically, the role of reflecting on one's profile and interpreting others' reactions may be emphasised. Also, the significance of reacting to one's observations may be amplified. People may either change how they use the SNS in question or change the way they go about the activity about which information is being shared. In the case of manual sharing, sharing content online may be more obviously an act of identity work. Articulating one's social relationships and forming a profile by sharing manually selected digital content can be interpreted as actively writing oneself and communities relevant to one into being (boyd, 2006); that is, they can be considered acts of self-presentation.

Automated sharing especially and, to a lesser degree, manual sharing can provide new visibility to one's behaviour in aggregate. In view of this, sharing can be meaningful both as an opportunity to present oneself to others and as a tool to work on one's identity and drive behaviour change. The persistence of digital content and its resulting accumulation may also allow for reflecting upon change over time. For instance, returning to significant moments in one's life by revisiting the digital traces that have been captured or produced in the past can provide individuals with new personal insights. Altman (1975) discussed self-observation as something that takes place in solitude. People appear to leverage both solitude and isolation to contemplate who they are currently and what they want to become (Pedersen, 1997). In the networked context, self-reflection and identity work happens, arguably, in a more public setting. However, while the content that is shared with others via SNSs may be widely available, it is still possible to peruse in solitude the content that one has shared over time either manually or via automated mechanisms.

6 DISCUSSION

Although the broad adoption of SNSs in everyday use is not without consequence for interpersonal boundary regulation, interpersonal boundaries are regulated through a co-operative process also in the context of SNSs. The findings of this work are in line with Baym and boyd's (2012) remark that it would be a crude and misleading simplification to claim that everything is different in a networked world. Building on their prior work (boyd, 2011a; Baym, 2010), Baym and boyd (2012, p. 320) state that old practices continue to thrive in new media, although 'social media blur boundaries between presence and absence, time and space, control and freedom, personal and mass communication, private and public, and virtual and real, affecting how old patterns should be understood and raising new challenges and opportunities for people engaging others through new technologies'. The context of SNSs presents people with novel challenges that necessitate adapting interpersonal boundary regulation practices such that these match them suitably: Digital content that has been shared online has potential to persist over time and spread far beyond the original setting of disclosure. The diverse and broad social networks that people articulate and sustain in SNSs make it easier and less costly to reach large sets of people quickly, sometimes unintentionally. These characteristics of SNSs, among others, reconfigure central premises of interpersonal boundary regulation on which people are used to relying, especially by making it harder to define the limits of any given social interaction.

6.1 SUMMARY OF THE MAIN FINDINGS

The foregoing sections presented findings as to how people regulate interpersonal boundaries in SNS settings wherein they may share content with multiple groups at once, others may share content on their behalf, sharing can be achieved via automated mechanisms, and sharing online and offline are connected in multiple ways.

A central finding of this work is that interpersonal boundary regulation takes place on two interrelated levels: First, making and communicating decisions about which services to adopt, and how to prioritise them, can function as a means of regulating interpersonal and intergroup boundaries. Second, interpersonal boundaries are regulated with diverse practices that are applied as people engage with SNSs. The SNS user's agency to regulate interpersonal boundaries is restricted neither to adjusting the privacy settings provided within an SNS nor to selecting from among the choices services propose to their users in the user interface. Interpersonal boundary regulation spans interaction online and offline as a holistic endeavour. In this

research, the continuous and subtle co-operation that takes place through supporting of others' boundary regulation efforts manifested itself in the emphasis participants placed on trust and being considerate. Participants co-operated also more explicitly in co-ordinating efforts to regulate boundaries together. This is seen, for instance, in agreeing on shared codes of conduct pertaining to what to share.

The present work proposes a typology of practices for regulating interpersonal boundaries. First, practices can be either individual or collaborative. Second, there are preventive and corrective practices. Third, both mental and behavioural practices can be seen. As noted above, the best labelling for the final two categories is debatable, since one could argue that mental practices are learned and acculturated behaviours just as much as behavioural practices are but simply less visible than their counterparts. The point with this dimension, though, is to highlight that some practices of boundary regulation are focused on adoption of a mindset that helps one feel comfortable and reassured in engaging with SNSs, while others involve more readily observable action. Some practices build directly on the design of SNSs. Others largely bypass the technologies, circumventing their limitations by achieving boundary regulation in ways that do not rely on the use of SNSs. Such practices were applied either when the boundary regulation challenge that was addressed was not confined to what was happening in a given SNS or when the aim was, in fact, to overcome issues arising from the features of a particular service. According to my findings, people do not necessarily ponder the practices they employ. Practices may even be understood better as behaviours that make those engaging in them feel comfortable than as active strategies intentionally applied for reaching specific outcomes.

The key issue arising in relation to the first theme mentioned above, sharing with multiple groups, is that people need to find ways to regulate interpersonal boundaries also when they cannot define the interaction situation precisely. In the context of SNSs, it is not necessarily clear to whom access to interaction is provided, or whether or when these audiences actually interact with the content that is made available to them. The findings from Study I demonstrate that participants were aware of the presence of different types of groups on Facebook. Participants reported few social tensions related to group co-presence *per se*. However, even at the time of Study I, group co-presence was arguably unproblematic only insofar as it was made unproblematic with the aid of both behavioural and mental practices. Already in Study I, participants emphasised the importance of being able to trust in others' discretion and of being trustworthy in return.

Examination of the second theme, sharing on behalf of others, highlights how interpersonal boundary regulation is best understood to be co-operative on two levels: First, co-operation is manifested in that maintaining a boundary or making a successful claim to identity requires that others affirm one's actions and support the definition of oneself that is put forward. Second, in response to the need to deal with content disclosed by others and

with one's power to share on behalf of others, co-operation to regulate interpersonal boundaries takes place also via explicit negotiation of what to share, with whom, and under what conditions. Participants reported reckoning on how and by whom the content that they shared would be viewed and interpreted. Some pondered whether the content they were sharing might inadvertently create challenges for a friend. Participants' efforts to co-operate included considerate acts of sharing, discretion in self-censorship, and benevolent interpretation.

The main finding with respect to the third theme, sharing via automation, is that, although automated sharing mechanisms are supposed to make sharing increasingly effortless, much work can go into regulating what is being shared via such a mechanism. Sharing behavioural data via automation highlights how self-presentation may include conscious efforts to strategise over what to share and how to achieve the self-presentation one strives for. Furthermore, interpersonal boundary regulation in the presence of automated sharing mechanisms entails decisions that extend beyond choices over sharing *per se* and affect, instead, how participants behave in the first place. When one examines interpersonal boundary regulation in the presence of automated sharing, an analytical distinction can be made between two types of boundary regulation practices: First, there are interpersonal boundary regulation practices that regulate what is publicised. Second, as a special case of the latter, there are efforts to regulate what to do and, consequently, what kind of data will be available for sharing later on. Participants engaged in interpersonal boundary regulation not only when the sharing mechanism risked publicity of content that they did not want to have in their profiles but also when the sharing mechanism failed to publicise content that it should have and that participants wanted to have in their profiles.

Finally, with the fourth theme I addressed various ways in which sharing online and offline are connected. First, when it came to local online exchange, interpersonal boundary regulation efforts appeared to be focused mainly on the 'outermost' function of the endeavour – that is, on regulating access to social interaction and achieving smooth encounters. There was little expectation of forming ongoing relationships. Second, in the case of IT students' preference for IRC, technology choices were communicated in everyday interaction, also offline, as a means of identity work. This served both the individuals' sense of membership in their student community and the community's distinctness from other social groups. Third, on Facebook and Last.fm, content sharing was more explicitly tied to sustaining relationships that persist over time. Efforts were made to build a profile that matched the identity claims made offline well enough. In conclusion, the participants in studies I–V considered themselves socially accountable for their self-presentation efforts both online and offline, although the connection between online and offline interactions differed among the

individual studies and with the particular services and user communities on which they focused.

6.2 REFLECTIONS ON THE MAIN FINDINGS

The original contribution of this dissertation lies in illustrating interpersonal boundary regulation practices that young adults apply in the context of SNSs and depicting how efforts to regulate interpersonal boundaries are inherently co-operative even when participants do not always readily describe them as such. The preceding sections in Chapter 5 discuss in detail various practices people apply to address challenges related to four central aspects of sharing: 1) sharing with multiple groups, 2) sharing on behalf of others, 3) sharing via automation, and 4) sharing online and offline. In tandem with examining how people regulate interpersonal boundaries in relation to the challenges posed under each of the four themes, I have proposed a typology of practices of interpersonal boundary regulation. While particular practices are always context-dependent and, accordingly, constantly in flux, this typology helps both researchers and designers to consider the range of practices, of many types, that may be at play in the context of SNSs.

Studies I and II have exemplified how the capabilities to share with multiple groups at once and to share content on behalf of others can feel challenging, as these disrupt conventional notions of well-defined social encounters. In face-to-face settings, it is typically easy to decipher who is participating in an encounter and how said people are reacting to the claims and disclosures made. In such settings, time and space provide a clear context that makes it easier to have a sense also of who the other people are who could observe the interaction, even if they do not take part in it. When content is shared in SNSs, the interactional context is not equally well-defined. This is a central way in which social interaction in SNS settings differs dramatically from the encounters and interactions that Goffman (e.g., 1959; 1967) and Altman (e.g., 1975; 1977) addressed in their work. On the other hand, SNSs differ from many other online technologies in that the connection between users' self-presentations there and offline is tight (Warkentin et al., 2010). Taken together with group co-presence and, more broadly, context collapse, this means not only that Facebook users have to be socially accountable in offline settings for their online self-presentation but also that the SNS context pushes them to reconcile possible discrepancies between their self-presentations in individual facets of their lives. The studies incorporated into this dissertation reveal that people continue to undertake efforts to regulate interpersonal boundaries despite the difficulties posed by a less clearly defined social setting. Efforts to overcome the difficulties stemming from the inadequate definition of interactional context encompass varied practices. Perhaps the most noteworthy finding is the participants' strong emphasis on the need to trust others and act in a trustworthy manner

in return. I conclude that the reliance on mutual consideration is a central building block for successful boundary regulation in the context of SNSs.

The social networks one's friends have articulated in SNSs typically consist of diverse groups of people, many of whom one may never have met. These unfamiliar friends of friends may not share an understanding of what is appropriate in terms of online sharing or social life in general. This seems to be the case especially when social networks span cultural and generational boundaries. The example of the international student at a Finnish university illustrates how users may experience tensions as different cultures relevant to them are mixed in an SNS. Local cultures get mixed both with one another and with the overall culture championed by the service in terms of which kinds of self-presentation are expected and what types of content are seen as appropriate. Furthermore, as SNSs foster group co-presence, sharing something on behalf of a friend can often be equated with sharing it with everyone in that friend's personal network. Relying on trust and implicit assumptions of shared understandings leaves people in a vulnerable position since individuals tend to lack a comprehensive understanding of others' networks. A further complication is that social norms as to what is appropriate can be very local while the platforms on which the sharing of digital content takes place span quite different social spheres, sometimes around the globe.

Many participants in studies I and II considered self-censorship an effective practice for avoiding boundary turbulence. One downside of the practice of self-censorship is that when individuals refrain from engaging with others through shared content in SNSs, they run the risk of missing out on the benefits of participation. The use of social media can help people to build, maintain, and benefit from social relationships (Jung et al., 2013) – that is, to accrue social capital. The benefits of engaging with SNSs can be conceptualised theoretically in terms of social capital conversion (Jung et al., 2013). If individuals refuse to disclose their needs in an SNS, they are less likely to be able to extract valued resources from their social networks to match those needs. Future work could consider in more detail the implications that various types of boundary regulation practices may have for building, fostering, and benefiting from social capital.

Furthermore, self-censorship can fall short of fulfilling the hopes people invest in it when they trust that by choosing not to share content online they can avoid all problems related to online sharing. Even if individuals were to be successful in sharing only content that is in line with how they wish to present themselves, others could still undermine these efforts by contradicting or challenging the claims those individuals make. This risk is especially important since, when the situation involves assessing the credibility of an impression of an individual, people tend to trust external sources more than that individual's own statements (Walther et al., 2009). The situation is further complicated by the diverse ways in which activities in SNSs are connected with social interactions that are not digitally mediated.

In order to create a credible self-presentation, people have to make consistent claims across interaction situations, both online and offline. Furthermore, in such cases as local online exchange, efforts made online affect the encounters that take place face-to-face. These, for their part, influence future interaction online. The regulation of interpersonal boundaries in the context of SNSs is not limited to solely what happens in the services; it reaches far beyond, to both everyday situations and special occasions.

The above-mentioned challenges related to 'sharing' highlight the need for co-operation on the level of ongoing considerateness but also in terms of more readily observable acts of co-operation. Diverse explicitly co-operative practices were identified in Study II, including agreeing on shared codes of conduct and asking others to remove content they had shared. However, the findings indicate that it was not intuitive for the participants to discuss their efforts to regulate boundaries in terms of co-operation. It would be a mistake, however, to equate the scarcity of explicitly co-operative boundary regulation practices with a lack of awareness of the need for mutual considerateness. Importantly, this work shows that mutual considerateness is seen to be key for smooth engagement with SNSs and that people make efforts to regulate interpersonal boundaries for the sake of both themselves and others. This considerateness was manifested both at the level of what people share and that of how they treat and interpret the pieces of content that are shared with them. These observations highlight the importance of complementing perspectives of privacy management that focus on individual control with consideration for the co-operative work people undertake to meet their boundary regulation needs and those of others.

Goffman's (1959; 1967) dramaturgical perspective facilitates making sense of people's struggles in applying co-operative and corrective practices to regulate interpersonal boundaries. The paradox of 'face work' (Goffman, 1967) is that, although it is omnipresent in everyday encounters, people seem to make every effort to ensure that this work does not need to be acknowledged explicitly. The findings of this research indicate that people would indeed prefer interpersonal boundary regulation to happen in an unnoticeable way. As van Zoonen (2013) has argued, the cultural climate in Western societies prioritises authenticity. According to van Zoonen, authenticity is an ascribed rather than an innate or essential quality: it is part of a negotiation, not an easily and objectively observable 'fact'. This work indicates that drawing attention to one's self-presentation efforts breaks the cherished illusion of effortless authenticity, something that both Study II and Study III cast as a key aspect of successful presence in an SNS. I argue that this goes some way to explaining why it may feel so embarrassing to ask someone to remove a piece of content he or she has posted on Facebook. Such a request violates the pursuit of self-presentation both because the individual is, thereby, forced to own up to making intentional efforts to sustain a self-presentation and because the request cannot be made without,

even if only implicitly, indicating that the friend in question has failed to live up to the requirements of the rule of considerateness. The young, educated, and relatively technologically savvy adults who participated in the studies forming part of this work were averse to both of these acts. There can, however, be dramatic differences in how people perceive and react to such issues, depending, for instance, on their social and societal context. At the time of this writing, Facebook allows its users simply to untag themselves from a photo someone else has shared on the site and also to control the content about them that will be featured in their profile, without the need for social interaction. This agency regarding one's profile, however, does not allow a user to remove content from the site altogether. Therefore, while users today can certainly resolve some challenges more independently than was possible before, the need for co-operation remains, in terms of agreeing on shared codes of conduct and of making the occasional, perhaps mutually embarrassing request to have a piece of content removed.

This work teases apart differences related to what is being shared via SNSs. Along with deliberate acts of sharing digital content manually, as explored in studies I and II, the work sheds light on the challenges related to automated sharing. Study III reveals that individuals make efforts to regulate boundaries in the presence of automated sharing not just to conceal or emphasise aspects of their behaviour strategically but also to overcome shortcomings of the automated sharing mechanism with which they are engaging. Sharing behavioural information via an automated mechanism may further blur the already porous boundary between doing something and telling others about it. It is, of course, not unprecedented to be able to observe behaviour that is not explicitly intended for making claims to identity. For instance, the importance of ungovernable aspects of an individual's expressive behaviour, the cues given, was central to Goffman's (1959) original understanding of self-presentation. Goffman points out that others may actively use these unintended cues to check on the validity of the claims the individual is making. This process of interpretation is, to some degree, comparable to the one that takes place when Last.fm users interpret the behavioural data visible in others' profiles. However, the introduction of sharing of behavioural information in real time brings about a drastic change from manual sharing mechanisms. This change is largely due to the immediacy of automated sharing.

In the case of manual sharing, individuals engaging in acts of sharing have to take the separate step of sharing content in an SNS. Knowing that one's behaviour is being tracked and shared in real time in a digital form that is persistent, accumulates over time, and has the potential to reach broad audiences may drive behavioural change. Some participants had found ways to manipulate the behaviour data that came to represent their music tastes. For others, acting in line with the self-presentation one wants to put forth may seem preferable to going to the effort of trying to manipulate the self-presentation. For instance, when listening to music became equated with

sharing information about listening to music, some participants in Study III felt a need to change what they were listening to, so that they would not produce information that they did not want to share in their profile. However, changing one's 'primary' behaviour is not solely a matter of automation; behaviour offline may be changed also on account of concerns associated with manual sharing. This can take place, for instance, when people refuse to have their picture taken at a party, so as to ensure that there will be no photos that others might share online. Here, however, it is noteworthy that no participants reported having stopped going to parties; they were simply making efforts to avoid documentation.

According to this research, people prefer to treat problematic situations with as little explicit attention as possible not only when it comes to the sharing of digital content but also when they are exchanging physical goods or favours. This type of sharing typically necessitates face-to-face encounters in addition to communicating online. Instead of confronting their exchange partners directly about tensions related to an ongoing exchange process, participants in Study IV tried to learn from challenging experiences in order to avoid similar difficulties arising in the future. I conclude that addressing difficulties within an exchange process can feel uncomfortable, since it also necessarily questions the seeming effortlessness of the exchange activity and the social interactions related to it. Participants in Study IV made efforts to avoid conflict in completing exchanges via Kassi, even when the exchange processes were not always unfolding as smoothly as they had hoped. The findings indicate that as participants gained experience of what worked and what helped them participate comfortably, they used that knowledge to guide further engagement in exchange processes in their local community via Kassi. This work indicates that boundary regulation efforts online and offline are connected not just as parts of the same overarching pursuit; practices applied in different settings also inform one another. While this was not the objective of the research presented here, future work could investigate exchange processes more deeply by employing the social capital framework (see, e.g., Putnam, 2000; Resnick, 2001). This theoretical lens could facilitate more nuanced analysis of how the norms of (generalised) reciprocity enter actions and how participants switch between different forms of capital in the course of local online exchange processes.

Finally, SNSs proliferate and evolve continuously. For instance, while this work was being conducted, Facebook changed tremendously. Its popularity has reached an unprecedented scale. Individual features have been introduced, changed, and removed. Even the scholarly definition of what constitutes an SNS has been updated since I began the research for this work. Taken together, these changes illustrate how those conducting research on SNSs are aiming at a moving target. Yet some ideas remain relevant for scholars no matter which specific services and features are in vogue at any given time. It is likely that, as technologies keep changing, practices of interpersonal boundary regulation will adapt. The typology of practices that

this work proposes can aid in navigating these changes. Furthermore, the general characteristics of interpersonal boundary regulation as a co-operative process will probably endure over time. For instance, between the time of Study I and Study II alone, Facebook's privacy settings and sharing tools had undergone a whole range of significant changes and updates, yet participants in both studies prioritised trust and mutual considerateness as effective means to cope with the boundary regulation challenges they faced in engaging with SNSs.

The broader conceptual contribution of this work is to exemplify that interpersonal boundary regulation can be a useful theoretical lens for understanding privacy and sociality in the networked world. In emphasising that boundary regulation is a process that affects both allocation and restriction of access to social interaction, the framework assists in striking a balance between dystopian reflections on the death of privacy in a networked world and utopian discourses surrounding the effortlessness and ease of sharing online. The boundary regulation framework tackles this dialectic effectively. It provides tools for understanding how the networked context can pose simultaneously both novel challenges and opportunities for achieving smooth social interactions and sustained meaningful relationships to others and to oneself.

In connecting Altman's (1975) boundary regulation framework to Goffman's (1959) dramaturgical approach to self-presentation and Schwalbe and Mason-Schrock's (1996) notion of identity work, this work adds nuance to theory on interpersonal boundary regulation in terms of its core functions related to interpersonal relationships and self-identity. In summary, SNSs provide individuals with tools to share various types of content with multiple groups, on behalf of others, via automation, and in ways that are connected to social interaction offline. In doing so, they may lead to a situation wherein the performative nature of social life becomes more visible than is desirable. Increased awareness of the work that goes into achieving smooth social interaction and sustaining meaningful relationships to others and to oneself may feel uncomfortable because it challenges the smoothness of the performance and the illusion of effortless authenticity that the boundary regulation efforts constituting the work are supposed to sustain.

6.3 LIMITATIONS OF THE WORK

The findings presented in this work emerge from qualitative, interpretive interview-based studies. The findings depict the experiences and practices of young, mainly highly educated adults who reside in Finland and who (with the exception of participants in Study V) engage actively with SNSs. Given the culturally bound nature of the work, the broader contribution is intended to be strictly conceptual. This work does not make any claims about SNS users in general or as to the types of interpersonal boundary regulation

practices that may be popular among them. Such claims would not be warranted by the studies in question. Also, making such claims is not the aim of this work.

While Study II hints at tensions related to generational and cultural differences in how people make sense of and use SNSs, this work does not scrutinise the topic in depth. Furthermore, while no gender differences were observed in the studies, it is necessary to point out that this work has not applied gender as a systematic analytical lens. It is important not to mistake this absence of arguments on gender differences for an argument of the non-existence of differences. This work cannot speak to the possible differences in how people self-identifying as members of different genders regulate interpersonal boundaries. Furthermore, this work focuses on the co-operative aspects of *interpersonal* boundary regulation. Accordingly, it does not cover issues of intergroup boundaries in depth, although parts of Study V shed light on this aspect of boundary regulation.

An important choice I made in delineating the scope of this research was to focus on the continuous mundane work of regulating interpersonal boundaries instead of exploring the less frequent but more dramatic moments wherein boundary regulation has failed. While interpersonal boundary regulation is most readily observable in the tumultuous moments in which there is a crack in the surface of the seeming harmony and effortlessness of the workings of social life, I argue that the small everyday acts of interpersonal boundary regulation that sustain this seeming harmony are at least equally important for achieving the main functions of boundary regulation. The dissertation project set out to explore some of those efforts and the sense-making that accompanies them. With the explorative and interpretative nature of the work taken into account, the pursuit has succeeded well in identifying different types of practices and providing contextual insight regarding how they are applied in the face of challenges related to four central aspects of sharing. However, the challenge remains for future work to capture behavioural evidence of the use of various practices and of their relative popularity. Alternative methods, such as surveys accompanied by appropriate statistical techniques, could be incorporated to pursue the latter objective. Also, it remains to be examined how helpful the proposed typology of practices can be in the study of interpersonal boundary regulation in different cultural, societal, or technological settings. By considering a larger number of participants, from more diverse backgrounds, future research in this domain could depict a wider range of experiences, perspectives, and practices. With respect to Study III specifically, it would be advantageous to study Last.fm users who refuse to use the Scrobbler in comparison to other samples.

The proposed typology can help researchers to explore and map boundary regulation practices and also to discuss their findings in a manner that facilitates synthesis across studies and over time. However, the typology is limited in that it does not actually address change over time. Since SNSs and

social norms related to them are in constant flux, it is not clear how stable the practices in interpersonal boundary regulation are. Therefore, future work should take into consideration that, firstly, technologies and norms change, and secondly, that individual SNS users' learning as they gain experience may affect the practices that are chosen for regulation of interpersonal boundaries.

Finally, Lessig (1999) claims that there are four types of forces that shape the functioning of social systems: law, economy, social norms, and architecture. In the case of networked technologies, Lessig uses the term 'architecture' to refer to the code of which digital constructs are composed. In the time during which the sub-studies forming part of this dissertation were conducted, all four forces were actively at play in shaping SNSs. Business models for a new industry were being formed, new additions to SNS technologies were being developed, legislators were making efforts to keep up with these developments, and social norms pertaining to the use of SNSs were evolving as the services began to grow roots in the everyday life of increasingly many people. The findings presented in this dissertation should be considered in this broader context, even though the scope of my enquiry was limited specifically to SNS users' points of view and their practices of regulating interpersonal boundaries in this particular networked setting.

6.4 TOPICS FOR FUTURE RESEARCH

This work opens a path for further examination of interpersonal boundary regulation in the networked world. As SNSs and their role in everyday life continue to evolve, the conceptualisation of interpersonal boundary regulation and the typology of related practices can serve as tools for future enquiry. There are several topics ripe for future study that can be proposed in light of the present work.

First, Altman's (1975) conceptualisation of privacy as boundary regulation applies not just to individuals but also to groups. The present work focuses on the co-operative aspects of interpersonal boundary regulation, so emphasis has been placed on the boundary regulation efforts individuals undertake in relating to other individuals and groups. Additionally, Study V touched on boundary regulation on the intergroup level. An in-depth examination of group privacy in the networked context and the practices groups apply to regulate boundaries would be a valuable scholarly contribution. One interesting direction for pursuit of this line of enquiry might be to examine hospitality exchange services, such as Couchsurfing.org[6] and Airbnb[7], in order to shed light on how households consisting of multiple

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[6] https://www.couchsurfing.org/ (accessed on 18 November 2013).

[7] https://www.airbnb.com/ (accessed on 18 November 2013).

people regulate access to their shared domestic spaces and to the social interaction that takes place in them.

Second, carrying forward the theme of how networked technologies are tied to physical spaces, the study of interpersonal boundary regulation could add enriching insight to prior work on the long-term effects of ubiquitous surveillance in domestic spaces (Oulasvirta et al., 2012). As efforts to design 'smart spaces' continue, the need to update our notions of boundary regulation in physical spaces increases. For instance, understanding people's efforts to manage boundaries, even in the presence of ubiquitous surveillance, is necessary if one is to evaluate properly the possible consequences of introducing pervasive networked technologies to domestic spaces.

Third, this work does not consider questions of mobility specifically. However, networked technologies permeate our everyday life also in the form of mobile technologies, such as smartphones and tablets. It seems likely that people will engage with SNSs increasingly while 'on the go', accessing them via a plethora of devices. Mobile devices are used for interpersonal interactions of all sorts, from formal to mundane or intimate. However, these devices are also appliances that service providers use for harvesting data of consumers. Both aspects give rise to important sets of questions regarding privacy in our networked age. Next to being an interesting focus for the study of interpersonal boundary regulation in its own right, the domain of mobile use may be, additionally, fruitful ground for a closer examination of how the interpersonal and organisational aspects of privacy are connected.

Fourth, vast opportunities exist for further enquiry into how SNSs are linked with self-reflection and how they could be used as drivers of behaviour change. As the findings from studies I–III indicate, the accumulation of persistent data may support self-reflection and provide novel insights into one's behaviour over time in both manual and automated sharing scenarios. I argue that there is interesting potential for supporting self-observation and identity work by giving people better access to data on their online behaviour. On a related note, little is known of the mundane practices of shared use of SNS accounts (with the exception of an emergent body of work on password sharing; see, for example, Inglesant & Sasse, 2010; Kaye, 2011). Questions of shared use are, however, of central importance in relation to the continued efforts to deploy networked technologies for behaviour-tracking and showcasing of behavioural data. For instance, although this was not evidenced in Study III, an individual could have multiple Last.fm profiles in parallel, or several people could share a single Last.fm account and, therefore, a profile. In such cases, it is not straightforward what aspects of whose behaviour exactly are captured by the system and how the resulting data should be interpreted. The limitations of the automated sharing mechanism are evident also when we consider scenarios of people listening to music together and sharing devices. Exploring and critically evaluating opportunities for leveraging users' personal behaviour data could be a fruitful

avenue to pursue for social scientists interested in understanding how and why people engage with data about themselves, especially if such a research endeavour were to be undertaken in relation to the building of novel technologies and visualisations.

6.5 CONCLUDING REMARKS AND IMPLICATIONS FOR SERVICE DESIGN AND POLICY

In popular media and academic texts, writers both celebrate and lament the way that people share online. In its negative valence, 'sharing' is often characterised as narcissistic or equated with loss of privacy. Horror stories abound of sharing leading to lost job opportunities or relationship difficulties, since personal details about one's past are publicly accessible. Furthermore, networked communication platform companies such as Facebook, Twitter, and Google profit enormously from sharing practices. At the same time, SNSs are wildly popular and the people using them find meaningful ways to engage with others via them. Additionally, losses can result also from decisions to refrain from sharing content and interacting with others via SNSs. Instead of weighing such harms and benefits of engaging with SNSs, this dissertation has focused on the everyday practices young adults apply to 'make the networked world work' and on the ways in which they try to make SNSs work for them in this pursuit.

As technologies keep changing, practices of interpersonal boundary regulation are likely to be adapted equally. The practices that rely on the functions of a service are affected by, and even vulnerable to, the continuous change that is typical of SNSs. The differences between practices identified in Study I and Study II are partially explained by how Facebook evolved from 2007 to 2010, both in terms of what the service was like technologically and in the sheer quantity of people using the service and the ways in which they were engaging with others through it. At the time of Study I, tools for selective sharing were scarce. By the time of Study II, the privacy settings and sharing tools of Facebook looked quite different from the earlier version and, importantly, had grown remarkably in complexity and sophistication, to such a degree that many participants found them, in effect, not very supportive of selective sharing, since the tools were too complex to control and use effectively. I argue that it is partially this technological fluctuation and complexity that positions self-censorship and mental practices at the core of interpersonal boundary regulation in the context of SNSs. I do not call on service designers to develop SNSs further; rather, I recommend considering how the changes made can be undertaken in a way that does not discourage participation and that could even support the co-operative efforts people make to keep up with the ever changing technological landscape. It is through such efforts that service design can help people reap the benefits of engaging in social interaction in the context of SNSs.

While participants did not readily discuss interpersonal boundary regulation as explicit co-operation, they did place strong emphasis on being trustworthy and considerate. From their perspective, this was not only something desired of others but also a standard to strive to live up to oneself. People are willing to go to efforts to take others into consideration and are aware of their need to rely on others' consideration too. This is a strong indication of the subtly co-operative nature of interpersonal boundary regulation – something that was discussed even by early theorists of interpersonal boundary regulation but that often goes unacknowledged in ongoing discussions of privacy in the networked world.

This work has gone further, illustrating multiple ways in which interpersonal boundary regulation efforts span social interaction online and offline. My findings call for reconsideration of how privacy is conceptualised in the design of SNSs and in development of related laws and policies. I suggest that the emphasis in design should be on trying to optimise the broader experiences that are related to engaging with SNSs. To do this, one must consider social interaction beyond individual services and across the many online and offline settings in which people come together.

The work proposes a challenging task for designers in inviting them to consider how to support interpersonal boundary regulation efforts beyond the individual level and beyond the immediate technological setting (i.e., the user interface) that a particular service provides. While participants (especially in studies I and II) relied heavily on trust, it was becoming increasingly clear that trust is no silver bullet when it comes to regulating interpersonal boundaries. There are no simple answers for questions such as these: How do you know what others want and trust you to do? How do they know what you expect and hope for from them? The SNS context makes it challenging to predict the potential consequences of one's actions, even when one is willing to make efforts to avoid causing harm to anyone. I do not argue that it would be realistic, or even desirable, to 'design away' the ongoing co-operative work needed for achieving smooth social interaction and sustaining people's relationships to others and themselves. However, I suggest that service designers would benefit from adopting a perspective beyond the individual user in their attempts to provide data-rich and socially meaningful experiences to SNS users. In design of networked platforms for social interaction, it would be important to take into account that the process of interpersonal boundary regulation is not an individual-level affair. Similarly, policymakers are faced with the demanding challenge of envisioning how legislation should take into account the co-operative nature of boundary regulation, instead of framing the management of privacy solely as an issue of individuals' control.

Along with identifying and characterising challenges that designers could try to make it easier for SNS users to cope with, the findings of this work suggest tempting opportunities in design work for networked communication platforms. I argue that considering privacy as boundary regulation can

benefit design efforts aimed at creating and sustaining user communities. Approaching privacy not just in terms of restricting access but also in terms of providing it can open a helpful perspective for considering how to sustain people's willingness to remain open for social interaction, including their willingness to participate in activities mediated and prompted by SNSs. For instance, the practices for achieving smooth exchange processes identified in Study IV not only alleviated uncomfortable feelings of indebtedness but also seemed to serve ongoing participation by providing exchange partners with gratifying experiences and a sense of being appreciated. The boundary regulation framework can help to make consideration of privacy more forward-looking by highlighting the benefits of successful regulation instead of merely pointing out the risks of withdrawal and self-censorship that could be caused by a sense of not being able to reach one's privacy goals.

This work counters the dominant narrative of privacy management as an individual-level endeavour to do with control over information. By considering privacy as interpersonal boundary regulation, the work highlights the holistic endeavour people undertake to negotiate desirable degrees of access to interaction and to come to terms with others and with themselves. The studies incorporated into this work illustrate diverse practices of interpersonal boundary regulation that young adults residing in Finland apply in the course of their networked everyday life. The findings described in this work imply that when the tools and features of a service create constraints in day-to-day life, people may opt to lessen their engagement with the service or to change the way they behave in order to manage what is being shared. To design policies and technologies that are supportive of people's everyday pursuits, we need to understand those pursuits and the reasoning behind them. This work advances social scientific understanding of privacy in a networked world by shedding light on people's everyday practices of interpersonal boundary regulation. At the same time, it can help designers and policymakers to be sensitive to the ongoing work people perform to make the networked world work.

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