13 The Mediation of Ritual Interaction via the Mobile Telephone

Richard S. Ling

Introduction

Consider the impact of mobile communication on sociation, the social impulse. As an amateur or professional sociologist, one might ask what holds society together and how is the social order created and maintained? What is the interaction between the ideational world and our everyday concrete interactions with others and with our physical world? How does ritual—be it in the context of religion or, as is perhaps more often the case, in the context of mundane life—shape our experience of social solidarity, and, the point of the present chapter, how does mediated interaction play into social ritual?

Save mediated interaction, these are the issues that Emile Durkheim focused on in his analysis of ritual in religion and its implications for social solidarity (1995). Durkheim saw ritual including the assembly of a group, a mutual focus, a shared mood, and an entrainment that fosters solidarity. Ritual is also Goffman's subject of study when he considered everyday life (1959; 1963; 1967; 1971). Finally, Randall Collins brings up the same issues in his analysis of interaction ritual chains (1998, 2004). The focus in the work of Durkheim, Goffman, and Collins is, however, on the co-present face-to-face interaction. In the case of Durkheim, much of his examination of ritual derives from his examination of Australian Aboriginal religions. Thus, there is no opportunity for mediated interaction to enter the picture. Goffman made passing references to mediated interaction giving the reader with that turn of mind the sense that the door was left slightly ajar. However, with a single enticing exception and an innuendo in a footnote, he limits himself to the co-present. In spite of this, those working in the area of mediated communication have called on Goffman. Joshua Meyrowitz has applied Goffmanian concepts to broadcast communication (1985). Their application to ICT-based interaction is to be found in the work of Joachim Höflich (2003) and in my own analysis of mobile communication (Ling 2004b).

Collins is quite clear in his exclusion of mediated interaction in the development and maintenance of social solidarity via what he calls interaction ritual chains. Collins

goes beyond the omission of Durkheim and Goffman. Indeed he is explicit in saying that physical co-presence is generally a requisite aspect of ritual interaction.

The issue of social solidarity in mediated interaction has, however, received a new urgency. In the period since Goffman's writing we have witnessed the explosion of mediated interaction. It is a period that has seen the rise of the Internet and the broad acceptance of mobile telephony. Using the context I know best, that of Norway, one sees the explosion of ICTs onto the scene. In 1997 only 7 percent of Norwegians said they were daily users of the Internet. As of 2003 this was up to 42 percent (Vaage 2003). Looking at mobile telephony, we see that more than 66 percent of the calls were to mobile telephones in 2004. An average mobile phone user sent more than two SMS messages per day and some social groups like teen girls sent up to ten per day. This is 30 percent more than in a similar period in the year before (PT 2004).

Beyond the raw statistics, the technologies also play on and play into our social interactions. We use them as we navigate through daily life and their use is a type of marker of our technical competence in the eyes of others. In this chapter I focus on the mobile telephone that is a multidimensional object to be sure. It is, in its physical form, an object that can be read as an indicator of an individual's status or position (Fortunati, Katz, and Riccini 2003). At the same time, it seemingly has a life of its own. Indeed, the mobile phone can seemingly ring, peep, squawk, or play a Beethoven piano concerto without provocation. Finally, the mobile telephone can be used as a portal for interacting with another person. Thus, it takes the individual's attention away from the co-present situation and directs it to other corners of the universe that can be physically or temporally separate.

The development of interactive systems of mediation has given new life to the question of how we achieve and maintain interpersonal interaction. Indeed, it is clear that the rise of mediation systems such as the Internet and mobile telephony has given us new cause to think about the mechanics of social interaction. It is quite possible that the recent interest in, for example, social capital, is motivated by a concern that, in the words of Yeats, ''The center will not hold.'' When considering Internet use, there is an active discussion as to its impact on social interaction. The work of Nie (2001) seems to indicate that excessive use of the Internet is detrimental to social interaction, while the analysis done by Katz and Rice points in the opposite direction (2002). At the same time, work on the mobile telephone seems to indicate that moderate use correlates with an active social life (Ling et al. 2003) and a more closely knit peer group (Reid and Reid 2004; Rheingold 2002).

There is a boundary here that begs to be examined, namely the way in which ritual transcends the co-present and indeed the co-temporal. To what degree do Durkheim's effervescence or Collin's entrainment transcend the here and now? Is it possible that it can be done there and then instead of here and now?

I do not mean to say, however, that co-present rituals are on their way out, nor am I saying that it is either mediated or co-present. It is clear from the historical record and

the focus of those who have examined this that an important aspect of many mediated rituals is corollary co-present interaction. Indeed, much of the discussion in this chapter examines the use of mobile communication in co-present situations. We are not on the edge of an era ruled by simple mediated interaction. We will still meet face-to-face, or in Fortunati's term ''body-to-body'' (2005), and engage in our interactions. In spite of this, mediation is taking a larger portion of the pie. We are doing more and more interacting with others via various types of electronic mediation. We are becoming more adept at its use and we are entrusting the mediated messages, conversations, and interactions with ever more nuanced forms of interpretation and meaning. They help us to maintain our social contacts and they modify, readjust, and displace social interaction. Thus, at this point co-present interaction is the locus of social ritual. It is increasingly being modified by mediated interaction. In addition, we are developing mediated rituals that further play on the understandings that have been built on the co-present sphere.

The Ritual Aspects of Mobile Telephone Use

In the preceding discussion I outline how Durkheim, Goffman, and Collins develop the issues surrounding ritual interaction. I now focus on the application of these issues to the use of mobile telephony. The telephone and specifically the mobile telephone is a significant object in modern society. Its physical form is the focus of comment. Simply knowing the type of mobile phone that others own provides us with insight into their social position and status. We can recognize the teeny bopper with the Nokia, and the advanced business user with the Trio, Blackberry, or the Sony-Ericsson, et cetera. Indeed, the very form of the mobile telephone has become a type of minor cultural icon. The very object itself is not neutral. Its use in co-present situations is symbolically invested and can be seen in terms of its contribution to ritual interaction.

I explore how mediated contact via the mobile telephone can also be seen in the context of ritual interaction. The ways we greet one another over the phone, the ways we relate stories, and the ways we use the telephone to organize our daily life show that, in many respects, ritual interaction can be carried out via interactive media. Further, there are particular forms of interaction and parlance that seem to occur only via the mobile telephone (''Where are you'') that can be seen as mediated ritual interaction. Thus, I am interested in expanding Collins sense of ritual interaction into the area of mediated communication.

Mediated Ritual Interaction in Co-present Situations

The exigencies of mediated interaction play into the way people interact in co-present situations. The mobile telephone has forced this issue upon us. Observations also point to the emphasis of mediated rituals at the expense of the co-present rituals. While

the individuals being observed pay heed to the co-present, the material indicates that the mediated interaction has an equal if not superior place in the minds of the individuals.

Observation   A woman who was casually dressed walked out of the area around the Nationalteater station. She started walking east on Karl Johan Avenue (at this time there is no traffic on the street since it is being renovated.) She walked eastward on the southern sidewalk somewhat slowly and tried to make a call two or three times on her mobile telephone as she walked. None of the calls went through and so she started to text; indeed, her focus was mostly on composing SMS text through the rest of the observation. She continued east, walking near the edge of the curb. A woman on crutches along with two other women walking abreast approached her going west. The woman using the crutches was also quite near the curb and actually somewhat hemmed in by her two friends who were walking to her left. As the woman who was texting and the woman on crutches approached, the ''texting'' woman gave a navigation glance and edged gently to her left and the line of women including the woman on crutches going west also edged slightly to their left. The texting woman and the woman on crutches passed each other with a small but uncomplicated margin. The texting woman next crossed the street at an angle—while continuing eastward and eventually came to the sidewalk on the north side of the street. All the while she continued to attend to the texting on her telephone that was in her right hand.

In this observation the woman balanced between an engrossment in her texting and at the same time a minimal but adequate awareness of her co-present situation. As she composed text on her mobile telephone she also maneuvered past the women on crutches and entourage. The two realms were parallel. While in some ways there was the danger that, in the words of Goffman, her ''heart might not lie where the social occasion requires it to'' (1963, p. 38), she was able to manage both situations. She shows an adroit ability to manage the texting and co-present interaction just as those with whom she interacts show a certain tolerance.

A central feature of this observation is the texting activity of the woman. She was clearly in the process of creating text in an imagined interaction with an unseen interlocutor. Texting is an interaction with another person who is physically as well as temporally remote. The message(s) she created were in all likelihood a part of an ongoing interaction with a friend or family member. Other analysis has shown that the form of language, the linguistic conventions, the use of openings and closings, et cetera, all draw on various pre-existing traditions. The specific phrasings and the way the woman developed her text were in all likelihood the product of earlier interactions as well as being a part of the general genre of SMS (Hård af Segerstaad 2005; Ling 2005; Ling, Julsrud, and Yttri 2005).

The attention afforded by the woman to the mobile telephone is also something that is relatively new in the urban scene. It is rare for persons to walk along the street with

their attention so acutely focused on an artifact. While we might read a map in an unfamiliar city, we do not often, for example, read books or become as completely absorbed in the manipulation of a physical object for such an extended period of time as we walk along the street. However, in the contemporary scene, observations such as the one reported here are far from unique. The observation of the woman texting here is not a rare sighting but rather a common part of the contemporary urban cityscape in Scandinavia. We see that the mobile telephone is not simply another object that we have on our person as we move through the urban sphere. Rather, it is a conduit through which we have physically and often temporally removed contact with others. Given this ability to mediate contact whenever and wherever we find ourselves, we have to pay our interlocutors the proper heed just as we have to pay the proper heed to those with whom we are co-present. In an expansion of Goffman's insight, we have a shared responsibility for maintaining two lines. We have, in effect, two front stages upon which to act.

While the interactions with the mediated partner are less evident to the observer, the interactions with other persons on the street are obvious. The subtle signaling and body language vis-à-vis the crutch lady and her entourage relied on a shared repertoire of signals. As discussed, these are a part of our cultural ballast that have been developed, refined, and re-energized through common use. All the while, the subject engaged in the newer gesture of texting. As with the situations described, she was requesting and being afforded civil inattention as she walked and texted.

The interesting issue here is that the woman's nearly unwavering focus on the composition of text bespoke the entrainment in that activity. She was in the process of maintaining a ritual interaction chain. In both realms the texting woman and the people with whom she interacted were presumably observing the ceremonial aspects in their negotiation of everyday life (Goffman 1967, pp. 55–56). The degree to which she carried this off was determined by her sophistication in texting and the tolerance of the various persons with whom she interacted.

Focused Mediated Ritual

It is important to think of the broader role of mediated interaction, however. First, in the case of traditional rituals, mediated interaction can serve to set the scene beforehand and then allow the reliving of the event later. Indeed, Ito describes how Japanese youth en route to a date use mobile text messages to interact with their boyfriend or girlfriend (Ito 2005). In a similar way, after the date, they start a new texting session with each other that draws out the interaction. Second, the focus on heavily imbued rituals such as a wedding or a funeral is seemingly a step back from the direction pointed out by Goffman. They are not the small, everyday rituals such as telling a joke, relating a story, or exchanging a greeting, or Goffman's "brief rituals one individual performs for and to another, attesting to civility and good will on the

performer's part and the recipient's possession of a small patrimony of sacredness'' (1971, p. 61).

Up to this point I have looked at ritual in co-present situations albeit with a good dose of mediation in the picture. Now I look more directly at the potential for interaction ritual in mediated interaction. Just as Goffman took the basic themes from Durkheim and reapplied them to the microsituations of everyday life, I want to be audacious enough to reapply Collins (along with his Durkheimian and Goffmanian baggage) to mediated interaction. As has been noted, Durkheim did his work before mediated interaction became an issue. In addition, his work with aboriginal tribes took co-presence for granted. Goffman consciously focused only on co-present encounters. Indeed he explicitly excluded mediated encounters or ''face engagements'' from his discussion (Goffman 1963, p. 89 n12). Nonetheless, he recognizes that encounters can be mediated (Goffman 1963, p. 89 n12). Collins, however, is clear in his assertion that ritual interaction chains are possible only in co-present situations. Collins draws his reading of Goffman out of the need for physical co-presence (2004, p. 23). He posits that, as a general rule, it is not possible to have successful social rituals via mediated channels. He discusses the possibility of, for example, a wedding or a funeral that is conducted over the telephone and notes that the lack of feedback would diminish the experience and limit the effervescence of the situation. These, however, are quite fully developed rituals that have their roots and tradition in the co-present world. Indeed there is a slightly absurd nature to those examples of weddings that take place between couples over the phone—or in a case reported by Standage—over the telegraph (Standage 1998).

I am not convinced that physical co-presence is always necessary for a well-developed social interaction. Co-presence is a powerful generator of entrainment and can often be called upon as an ingredient for social interaction. However, I suggest that mediated interaction also has the potential to enhance the ritual dimensions of ~~previous or~~ subsequent co-present interaction. Mediated interaction can draw on the symbols developed and rejuvenated in co-present ritual interaction and revitalize them. Further, ritual interaction can develop in exclusively mediated interactions. Micro-level social rituals can be coined via mediated interaction.

To be fair, Collins considers the degree to which mediation can come into ritual interaction. However, he asserts that in general, ritual interaction is best when done co-presently. I agree with this general assertion but I feel that there also needs to be a more rounded analysis of co-present versus mediated interaction. It is easy to think of examples, and indeed empirical evidence, showing people using mediated ritual forms to do exactly the work of ritual interaction.

We can also see ritual interaction chains in the way that teens negotiate the early portions of a romantic relationship. After meeting and establishing contact and exchanging mobile phone numbers the nascent couple engages in a more or less SMS-based courtship. In this period the form of the interaction is highly scripted in

that the messages are carefully written and edited. This indirect form of interaction is calculated to allow the individuals to carefully work through their utterances and to cover over some of the pitfalls that might weigh heavily in the nascent period of the romance.

Rita (18):   . . . if you meet a guy when you are out, for example, then it is a lot easier to send a message instead of talking like. Somebody you don't really know. It is more relaxed.

Anne (15):   It is easier to tell if you like a person.

Interviewer: Via SMS?

Ida (18):   Then your voice will not either shout or disappear. You need time to think [when constructing your turns].

In addition, the timing of the messages is carefully calibrated. If one answers too quickly, one is perhaps seen as being overeager. If one waits too long, one is not interested. In the era of telephone-based courting there was much thought put into how many times the phone could ring before answering it. Now, each turn in an SMS "conversation" is a new round of the same game. The strategic use of the mobile telephone speaks to the development and use of new ritual forms of interaction here.

There is the assembly of the dyad with a mutual focus and a shared mood. There is an entrainment that "plays on" and "plays into" the evolving solidarity of the couple. In addition, there is the establishment of sacred objects in the form of the SMS texts that are in some cases saved, transcribed, embroidered, and placed into the mythology of the couple.

Another example of mediated ritual integration is seen in play and joking via mobile telephones. Much of mediated communication is associated with this type of interaction. Gag e-mails, emoticons, greetings, and ASCII-based representations (Danet 2001). In this case all the conditions of ritual interaction—baring co-presence—are fulfilled. There is the mutual focus of attention and collective engrossment that results in a type of solidarity. The joking can contribute to the revitalization of group identity and finally the joke can go flat. Indeed in many cases, the specific forms of humor and playfulness trade specifically on the fact that it is mediated.

There are other forms of mediated phatic interaction. There are, for example, various types of locutions that are particular to SMS. As reported elsewhere, Norwegian use of the word *Koz* as a closing in SMS messages is a case in point (Ling 2004c; Prøitz, forthcoming). The word draws on the culturally familiar word *kos* (hug). However, its use in SMS messages as a closing phrase and its peculiar spelling (with a *z* instead of the expected *s*) makes it unique.

Mobile communication technology allows us to exchange mediated greetings regardless of time and place, as seen in the following sequence:

Interviewer: Do you get SMS messages in the middle of the night?

Per (17):   Yeah, one time a friend of mine had a birthday and so I called him at 5 a.m. or something like that.

In this example, Per's spontaneous call—like the shivaree from earlier periods—was probably not appreciated at the time, but it was a celebration of Per's friendship. The call was probably commented on the next time the two met and it may have become a part of the lore surrounding their friendship. Indeed, Per possibly can expect a similar call from his friend on his birthday. In this way the interaction is a type of interaction ritual—sans co-presence—in the sense outlined by Collins. There is mutual, if somewhat groggy, focus of attention and bleary engrossment that results in a type of solidarity, particularly when the episode is discussed later. The interaction also contributes to the revitalization of group identity. The point here is that this form of interaction was facilitated by mobile telephony. Should Per have physically knocked on his friend's door he would have disturbed the whole household. The individualization of communication afforded by the mobile telephone allowed for the form of celebration Per chose.

Another example of this type of mediated interaction is the exchange of SMS-based endearments by lovers who still live with their parents, as in the case of teens, who are only in the formative portion of their relationship or who are in a routinized relationship but are away from one another. This is seen in ''good night'' or ''good morning'' greetings. Examples range from the utilitarian ''G'nite'' (female, 15), or ''Have a good night, hug'' (man, 47), to the rakish ''Do you want to spend the night? Hug'' (female, 17) or ''Good night sex bomb'' (female, 35). For some young couples this an obligatory ritual that is disregarded only at great risk to the relationship.

This is a partial catalogue of the ways that mediated communication can be seen as ritual interaction. There are other analyses of these issues. For example, others have examined the historical development of using ''hello'' as a telephone greeting (Bakke 1996; Fischer 1992, pp. 70–71; Martin 1991, pp. 155–163; Marvin 1988), the specific identification and greeting sequences that are used in telephonic interaction (Saks, Schegloff, and Jefferson 1974; Schegloff and Saks 1973) and children's acquisition of these cultural artifacts (Ling and Helmersen 2000; Veach 1981). Deference is seen in the ways we address one another in telephone greetings (Bakke 1996) but also in the way we use various inflections in our greeting and parting sequences in order to give fuller meaning.

This material indicates that mobile communication can be used to elaborate, embroider, and even engender interaction rituals. I say this with humility, however. As noted, the types of powerful rituals that often serve as the basis of social solidarity are co-present. This said, we should not exclude the possibility that these types of social interactions can be extended to the mediated world.

Conclusion

Returning to the point of departure, this chapter is framed by the broader issue of how ICTs, and in particular mobile communication, play into the development and main-

tenance of social capital. The intention has been to look at the work of Durkheim, Goffman, and Collins to glean insight into how small-group ritual interaction results in symbolically imbued cultural features that in turn provide us with a type of social integration. Thus, the focus here has been in the impulse toward sociation.

At the microsocial level, focused ritual encounters are the basis upon which social solidarity is built. We work through these encounters, be they co-present or mediated, using a repertoire of ritual devices. These encounters can be spontaneous (meeting an old friend on the street), institutionalized (packing the kids off to school), expansive (a lecture to the local PTA), or discreet (a quick wink to an acquaintance you pass in the hallway). And, even though they are often co-present, they can also be mediated. In all these cases we rely on ritual interactions and formulations.

Our interactions often balance between discord and order. We can make clever jokes or come close to doing so but end up embarrassing ourselves. Social encounters are dynamic and indeed perilous. A focused social encounter can become an entrained event from which we draw social integration. But these events come in all sizes and shapes. These are the items upon which the specific social encounter and the more elaborate social solidarity rests. The bonding can be among people in broadly similar circumstances (teens in a school) or it can be bonding based on hierarchical differences (the teachers in the school).

Our common willingness to use these symbolically imbued strategies, facades, manners, rituals, poses, and savoir faire, as well as our indulgences in others' use of these, is central. Indeed, the degree to which a social group is bounded together is seen in the elaboration of these strategies. The ritual interaction can be done ''correctly'' or it can be muddled. We can, in effect, engineer the use of certain social devices but at the same time ''give off'' other unguarded signs that alert others to alternative strategies and different sides to our feelings in a situation. While being perhaps uncomfortable for the persons involved in the situation, these slips provide the situation with its dynamic nature. It is when we slip or when others slip—that is, when we get a peek into Goffman's backstage area—that there is the need for maintenance work. It is also in these situations where there is a threat to the symbolic solidarity of the group that we see the breadth and depth of the social structure.

One type of slip is to have an indeterminate status vis-à-vis the situation. Social interaction is difficult when we are not sure as to the status of the others in the situation. That is, there is a pressure to either be clearly in or clearly outside a social interaction. To be half in or half out is the cause of anxiety since the other partners in the interaction are unclear as to the status of the individual (Goffman 1963, p. 102). The mobile telephone brings out this issue.

Use of the device puts us into a type of social limbo wherein others cannot tell as to our true status. More generally, we must pay attention to our lines of action, even when there are competing lines of activity. In effect, we must let others know what we are up to. We must disclose to them just how much time and energy we can afford

them. Regardless of the other being a beggar on the street or a lover, our status as a social individual means that we need to give the other a sense of how open or closed we are.

Slips are also important in that they threaten to disturb our common sense of the situation. Slips require repair. The greater the slip, or in other words the deeper the engrossment, the greater the need for repair work. This said, disturbances can become normalized as can the strategies for dealing with them. Indeed we have seen this with the adoption of the mobile telephone. On the one hand, we are not as disturbed by the use of the mobile telephone in the public sphere as compared to the time of its introduction (Palen 2002). In addition, users have developed routines that help us to stage-manage their use.

In the case of the telephone, and in particular the mobile telephone, there is the possibility that there is a type of dual situation. Goffman discusses this possibility in *Relations in Public*, albeit from the perspective of the co-present situation as opposed to the telephonic one (1971, pp. 220–221). In this case, Goffman discusses the strategies used to maintain the co-present situation. There is still a telephonic situation that lays claim to the individual's attention. The question becomes which line is to be followed in these situations. Goffman describes how the telephonic line is reduced in importance through the use of various facial gestures indicating to the co-present individual that the telephone conversation is only a temporary digression. However, it is easy to observe exactly the opposite, namely the focus on the telephonic at the expense of the co-present. In this study's example, a woman gave her friend a hug while actually concluding her texting. For that brief period she seemingly set a higher priority on finishing the textual interaction than on giving herself completely over to the co-present interaction. The mobile telephone has expanded the geographical range for telephonic interaction and made it into a more omnipresent social factor.

In sum, I posit that mediated ritual interaction with its attendant elements of mutual focus, collective engrossment, sense of solidarity, symbolic imbuement, and ~~eventual~~ revitalization can be either assisted or freshly minted via mediated social interaction. Mobile communication is a factor in this process that has only recently arrived on the scene. However, it will play into ritual interactions in new and unexpected ways.

References

Bakke, J. W. 1996. Technologies and interpretations: The case of the telephone. *Knowledge and Society* 10: 87–107.

Collins, R. 1998. *The Sociology of Philosophies: A Global Theory of Intellectual Change*. Cambridge: Belknap.

Collins, R. 2004. *Interaction Ritual Chains*. Princeton: Princeton University Press.

Danet, B. 2001. *Cyberpl@y: Communicating Online*. Oxford and New York: Berg.

Durkheim, E. 1995. *The Elementary Forms of Religious Life*. K. E. Fields, trans. Glencoe, Ill.: The Free Press.

Fischer, C. 1992. *America Calling: A Social History of the Telephone to 1940*. Berkeley, Calif.: University of California Press.

Fortunati, L. 2005. Is Body-to-Body Communication Still the Prototype? *The Information Society* 21(1): 53–61.

Fortunati, L., J. E. Katz, and R. Riccini. 2003. *Mediating the Human Body: Technology, Communication and Fashion*. London: Lawrence Erlbaum.

Goffman, E. 1959. *The Presentation of Self in Everyday Life*. New York: Doubleday Anchor Books.

Goffman, E. 1963. *Behavior in Public Places: Notes on the Social Organization of Gatherings*. New York: The Free Press.

Goffman, E. 1967. *Interaction Ritual: Essays on Face-to-Face Behavior*. New York: Pantheon.

Goffman, E. 1971. *Relations in Public: Microstudies of the Public Order*. New York: Harper.

Hård af Segerstaad, Y. 2005. Language use in Swedish mobile text messaging. In Front Stage/Back Stage: Mobile Communication and the Renegotiation of the Social Sphere conference, edited by R. Ling and P. Pederson. Grimstad, Norway.

Höflich, J. 2003. *Mensch, Computer und Kommunikation*. Frankfurt: Peter Lang.

Ito, M. 2005. Mobile phones, Japanese youth and the re-placement of social contact. In *Mobil Communication: Re-negotiation of the Social Sphere*, edited by R. Ling and P. Pedersen. London: Springer.

Katz, J. E., and R. E. Rice. 2002. *Social Consequences of Internet Use*. Cambridge: The MIT Press.

Ling, R. 2003. Mobile communication and social capital in Europe. In *Mobile Democracy: Essays on Society, Self and Politics*, edited by K. Nyíri. Vienna: Passagen Verlag.

Ling, R. 2004a. "Goffman er gud": Thoughts on Goffman's usefulness in the analysis of mobile telephony. In Wireless communication workshop: Inspirations from unusual sources, edited by H. Sawhney and C. Sandvig. Ann Arbor, Michigan: University of Michigan, Department of Communication.

Ling, R. 2004b. *The Mobile Connection: The Cell Phone's Impact on Society*. San Francisco: Morgan Kaufmann.

Ling, R. 2004c. Where is mobile communication causing social change? In *Mobile Communication and Social Change*, edited by S. D. Kim. Seoul, South Korea.

Ling, R., ed. 2004d. *Report of Literature and Data Review, Including Conceptual Framework and Implications for IST*. Brussels: EU.

Ling, R. 2005. The socio-linguistics of SMS: An analysis of SMS use by a random sample of Norwegians. In *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. Pedersen. London: Springer.

Ling, R., and P. Helmersen. 2000. ''It must be necessary, it has to cover a need'': The adoption of mobile telephony among pre-adolescents and adolescents. Paper presented at the Conference on the Social Consequences of Mobile Telephony, Oslo, Norway.

Ling, R., T. Julsrud, and B. Yttri. 2005. Nascent communication genres within SMS and MMS. In *The Inside Text: Social Perspectives on SMS in the Mobile Age*, edited by R. Harper, A. Taylor, and L. Palen. London: Klewer.

Ling, R., B. Yttri, B. Anderson, and D. Diduca. 2002. *E-living Deliverable 6. Family, Gender and Youth: Wave One Analysis*. IST.

Ling, R., B. Yttri, B. Anderson, and D. Diduca. 2003. ''Mobile communication and social capital in Europe. In *Mobile Democracy: Essays on Society, Self, and Politics*, edited by K. Nyri. Vienna: Passagen Verlag.

Martin, M. 1991. *Hello, Central?: Gender, Technology and Culture in the Formation of Telephone Systems*. Montreal: McGill-Queens.

Marvin, C. 1988. *When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century*. New York: Oxford University Press.

Meyrowitz, J. 1985. *No Sense of Place: The Impact of Electronic Media on Social Behavior*. New York: Oxford University Press.

Nie, N. H. 2001. Sociability, interpersonal relations, and the Internet: Reconciling conflicting findings. *American Behavioral Scientist* 45: 420–435.

Palen, L. 2002. Mobile telephony in a connected life. *Communications of the ACM* 45: 78–82.

Prøitz, L. 2006. ''*Cute boys or game boys? The embodiment of femininity and masculinity in young Norwegians' text message love-projects. Fibreculture Journal.* http://journal.fibreculture.org/issue6/issue6_proitz.html.

PT. 2004. *Det Norske Telemarked: 1. halvår 2004*. Post-og Teletilsyn, Oslo.

Reid, D., and F. Reid. 2004. Insights into the social and psychological effects of SMS text messaging. http://www.160characters.org/documents/SocialEffectsOfTextMessaging.pdf.

Rheingold, H. 2002. *Smart Mobs*. Cambridge, Mass.: Perseus.

Saks, H., E. A. Schegloff, and G. Jefferson. 1974. The simplest systematics for the organization of turn-taking for conversations. *Language* 50: 696–735.

Schegloff, E., and H. Saks. 1973. Opening up closings. *Semiotica* 8: 289–327.

Standage, T. 1998. *The Victorian Internet*. London: Weidenfeld and Nicolson.

Vaage, O. 2003. *Mediabruks Undersøkelse*. Oslo: Statistics Norway.

Veach, S. R. 1981. *Children's Telephone Conversations*. Ann Arbor: University Microfilms International.