

➤ Part III

**Emergent Data Collection Methods:  
New Forms of Data Production**



## ➤ Chapter 11

**Studying Mailing Lists: Text, Temporality,  
Interaction, and Materiality at the Intersection  
of E-Mail and the Web**

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**Introduction**

The present chapter considers what it means to talk about mailing lists as an emerging technology and to use them in research. There is nothing very spectacular about mailing lists, and to use them as sites and tools for empirical research may seem like a trivial choice. There is indeed a tendency to look to new or computationally significant technologies to find novelty or a large “impact” of technology on knowledge. Not so very long ago, mailing lists *were* a new thing, and studied as such in the late 1990s. There have been several newer, more complex technologies developed since then, and scholarly attention has tended to follow these developments and has addressed, for example, blogs, podcasts, and social networking. As well as novelty, the scale of technologies also tends to draw attention. New initiatives to provide tools for research, whether under the label of cyberinfrastructure or e-science, have a high profile and carry promises of large-scale and radical innovation. In comparison, mailing lists appear not to be so novel, small, mundane, and nearly invisible, both to users of these lists and to researchers. Yet, it is precisely this aspect of mailing lists that makes them interesting as a scholarly tool. Within a decade, mailing lists have become a known entity to scholars in the Western world, something scholars effectively put to use or deliberately ignore. As a pervasive technology, mailing lists are eminently unnoticeable. And this is precisely why we think they are worthy of further attention, not only in the early phases where they were seen as new, but also at the point where they are part of everyday practices. A technological practice that becomes mundane, that fades into the background, may be as equally important to consider as a cutting-edge technology, not only because the number of users is much greater, but precisely because such taken-for-grantedness signals that these applications have become essential parts of research and everyday practices in infrastructures.

What is there to say about something as ordinary as a mailing list? Following a critical approach to the study of technology, we consider in this chapter how the mailing list is configured, how it is set in contrast to (or associated with) other technologies or aspects



of the web, and how this in turn shapes what we can learn using and studying mailing lists. Rather than emphasizing a definition of a mailing list, we demonstrate in this chapter that the boundaries and definition of the mailing list can fruitfully be taken as an empirical question. Such an approach enables the researcher to apprehend the entwinement of applications, such as mailing lists that have web interfaces and searchable archives, making them at once software and network. By avoiding compartmentalized or generalized conceptualization, we can also encompass in our analysis the way a mailing list can be alternately a mail event, a web-based hypertext or a searchable database. As a form, mailing lists distinguish themselves from other applications through a number of features: they involve e-mail communication, delivered via (semi-) automated software running on mail servers and addressing an audience of subscribers. As we move through the reflections and discussion of this chapter, we will note different ways of defining mailing lists and the consequences of different definitions. By showing the link between these, we seek to address the relation between research methods as forms of social practice, technologies, and mediated settings, paying attention to the characteristics of digital networks (internet, web) that may present particular challenges for social researchers.

### ***Illustrative Cases***

The reflections in this chapter about mailing lists as emerging technologies are related to two larger ethnographic projects on thematically different mailing lists. One is Beaulieu's ethnographic project to investigate women's studies and information and communication technology (ICT), where an analysis of WMST-L became a subproject in the ethnography. This project aimed to explore how ICT is used to enhance research practices, and how ICTs get adapted to suit the needs of this particular field of scholarship. As is detailed later in the chapter, mailing lists were first used as part of an inventory of the resources used in the field, and one of the lists became a "site" of research in its own right. This dual role represents the strengths of mailing lists in serving as an informative tool that provides insight into what is going on in a given area or for a given group of subscribers (peripheral awareness) and also as a site to consider mediated social interactions. The mailing list that became especially important for the project is WMST-L, a women's studies mailing list established in 1991 and based at the University of Maryland College Park. At the time of the study, the list had more than 4,800 subscribers in 47 countries ranging from the United States and Canada to Israel, various countries in Europe, Saudi Arabia, Brazil, Singapore, and Australia. Participants are mainly scholars from the field of women's studies. All communication on the list is in English. Beaulieu subscribed to the list between January 2005 and June 2007, reading it daily and making fieldnotes about it. She further studied the content of e-mails to the list in detail for the month of November 2005.

The second illustrative case is Høybye's study on SCAN-BC-LIST (Scandinavian Breast Cancer Mailing List) (Høybye, Johansen, & Tjørnhøj-Thomsen, 2005) investigating the social interactions that occur in support groups mediated by the internet. The study investigated the social mechanisms and dynamics that make the groups useful in the rehabilitation of cancer patients. By focusing on the stories told on a breast cancer internet mailing list, Høybye investigated how the overwhelming experience of breast cancer and the isolating and mentally debilitating effects of the illness may be counteracted. The list was founded by a Danish breast cancer survivor in 1999 as a closed group for people with



breast cancer, speaking a Scandinavian language to discuss all aspects of life with breast cancer. Participants on the list were mainly women with breast cancer, though a few close relatives to women suffering from breast cancer also joined. Geographically, the majority of participants were living in Denmark, but Norwegian and Swedish women also used the list. Danish women living in other places of the world, like Greenland, Faeroe Islands, France, and Germany, also took part in the list and found it to be a place to communicate the experience of illness in their native language. The mailing list was hosted by the Association of Cancer Online Resources (ACOR), an American-based NGO hosting a large number of cancer related mailing lists. In 2004, the list was closed on ACOR and moved to Yahoo Groups under the new name Scan-bc-listen, due to an internal matter on the list (as will be further elaborated below). Høybye conducted an ethnographic fieldwork on the mailing list for 8 months in 2000, participating in daily list activities of reading and posting. She left the list after the fieldwork but rejoined the list in April 2002 to tell the list about her research findings. Following this, she was invited by the list owner to stay on as a member, but is not actively engaging in the list anymore. At the start of Høybye's ethnographic fieldwork, the mailing list had 39 members, but has since grown to more than 130 subscribers. As in the study of Beaulieu, the mailing list was at the same time both a site for, as well as a tool of research providing a particular insight to the experience of cancer and the social interactions formed in response of this experience.

### Ways of Studying Mailing Lists

There is a large body of work on mailing lists, and rather than attempt to review all this literature, we focus here on conveying a sense of the various approaches to using mailing lists, both in terms of the intellectual framework of these approaches and in the methods used. A number of themes are prominent in accounts of both the promised and sought after outcomes of digitization of work in general, and the use of mailing lists in particular. Views that new technologies lead directly and unproblematically to new insights tend to persist in promissory documents about new technologies ("hype") (Beaulieu & Wouters, 2009). The early association of computerization and efficiency in research is a strong one. It endures (Barjak, 2006) and has been associated with group interactions via e-mail lists by improving the codification of knowledge (Steinmueller, 2000) or access to information (Brown, 2001). This assumption is linked to a view that the interaction between knowledge creation, and technology is a progressivist one, where technology will enable scholars to keep doing what they are already doing, but better and faster. This approach, which focuses on the impact of a technology, has been called the "standard mode" in which information is central, to the exclusion of social relations (Kling, McKim, & King, 2003). Yet, as we will see, the interaction is more complex. By embracing the importance of social relations in the study of technology, we can better understand how technologies come to be used, and remain open to two-way influences of practices and technology and to the possibility that new practices may be arising.

Many studies of mailing lists set out to test various claims about the possibilities offered by technologies, a strategy that is common in technology studies (VKS, 2007). Based on surveys or detailed analysis of contribution patterns, these studies have variously focused on the possibility of bridging gaps between center and periphery in scientific

communities (Matzat, 2001; Barjak, 2006); on the idea that e-mail can facilitate collaboration over distances and across national boundaries (Sooryamoorthy & Shrum, 2007); or on the possibility of bridging gaps between lay people and scientists (Hine, 2002). Scholarship that sets out to examine such claims is not so unusual, as this is one of the dominant forms of writing about internet culture. In this work, technologies have been characterized as potentially flattening communication hierarchies enabling access to those previously excluded. Such expectations were not always confirmed: Hine found in a participant-observer study that rather than overcoming boundaries, discursive practices were used to recreate boundaries between specialists and outsiders (Hine, 2002).

Other scholars have studied in a detailed manner the contributions to lists in terms of features of participant identity, analyzing the gender of subscribers and of contributors, length and frequency of contributions (Sierpe, 2000), and patterns of use and subscription (Brown, 2001). This work especially emphasized the liberatory or nonhierarchical potential of lists presumably embedded in the technology. The potential for all subscribers to have equal access to public debate and interaction on the list signaled, for some, a new kind of discursive space where the absence of (gendered) bodies (Korenman & Wyatt, 1996; Sierpe, 2000) and the possibility of emerging voices (Korenman, 1999; Guy, 2000) were especially highlighted.

Other work has characterized the functions that mailing lists can play, from sustaining communities (Marshall, 2004) to serving information needs (Talja, Savolainen, & Maula, 2004), or in the way mailing lists might be shifting distinctions between formal and informal communication in science (Walsh, 1996; Barjak, 2006).

Also noteworthy in this work is that mailing lists have been labeled a tool, a technology, and an application. Mailing lists could justifiably be labeled as one or the other, or as all of these. While this may at first seem confusing, we think it is important to maintain openness to the richness and multiplicity of what the mailing list might be and what it might mean for scholarly practices. Mailing lists are part of larger technical systems, like internet protocols and telecom media, which themselves are embedded in social and institutional contexts, qualifying them as infrastructures. In what follows, we share our own conceptualizations of mailing lists. An important aspect of our work is that it does not present the web and computer-mediated communication as impoverished or purely textual media (Steinmueller, 2000). It rather seeks to highlight the innovative and productive aspects of e-mail and of the web as infrastructure for shaping research practices as social actions. As a consequence of this conceptualization of digital and networked technologies, the embedding of interactions is very important for the present analysis.

### **Time, Timing, Cycles, and Mailing Lists**

Though the content of mailing lists is continuously shaped by the social life of the list, it is at the same time positioned in time and retained as archived material, searchable, and accessible even years past its production. For some projects, the archival time will be more appropriate while for others, the way time and timing are experienced and shaped in relation to the mailing list will be more important. It is nevertheless important to realize the diversity of temporalities at play around these technologies. With mailing lists and other

technologies where “time stamps” offer a valuable source of information for researchers, this view of time can easily dominate, because of its automated form and seemingly objective quality. We are keen to see this temporal understanding of mailing lists denaturalized and enriched with attention to other aspects. The dominant understanding that sees time in mailing lists as chunks of chronologically ordered, individual pieces of writing is one approach, but as we have discussed, there are other very significant temporal aspects. These include continuous interactions between participants and technology, lived experience in social time, and the temporality that is shaped by the writing in which we engage as researchers.

Several aspects of mailing lists can be invaluable sources of insight. Beyond the obvious textuality of messages, other aspects of mailing lists are important in constituting their role and meaning. The intensity and rhythm of responses can be indicative of the importance of particular topics or of the prominence of specific posters. Such aspects are furthermore not always retrievable in archives of lists. In our work, we have found that there is a great deal of modulation in the rhythms of interactions on mailing lists. Silence as well as floods of messages can be observed.

The mediated environment of mailing lists is, as all social practice, embedded in time. Studying mailing lists therefore needs to include temporality as a key element shaping contents of mailing lists and the kinds of uses they are put to. The temporality of mailing lists operates at different levels in the social network it forms. Time of writing and time of posting, for example, are not necessarily the same. Distribution protocols for lists (i.e., digests) and for infrastructure (i.e., routing) also mean that readers do not all receive the list in the same way—let alone have the same reading practices. This means that the individual’s experience of time intersects in different ways with the collective of the mailing list. These differences can reflect negotiations of boundaries of social space or the fact that individuals may draw back from the list. Attention to such time cycles can, therefore, reveal interesting aspects of participation in a mailing list.

Besides the chronology of the mailing list that can be traced in its archives or in one’s mailbox, there are other aspects of temporality at play. Whether or not we pay attention to these has implications for how we conceptualize mailing lists. If we look at the mailing list as marked by the temporality of linear and singular actions of writing, we tend to embrace a view that we can stand aside and observe the passage of time without attention to context and embodiment, an epistemological approach that is founded on an illusion of disembodiment (Ingold, 2000, p. 196). As we will discuss later, embodiment is an important element in interacting with technologies (Høybye, n.d.), especially if we think about ways of being copresent with our object of study (Beaulieu, 2010).

Such awareness to the changes in time and movement provide useful insights in the social practices of a particular list. While other communication technologies structure social practice as synchronous (as the immediate interaction of posts and responses), the mailing list conversation is structured by the writing of files posted as e-mails that most commonly move on to be saved as files in a mailing list archive. This possibility of working on a post or on a reply to a thread on a mailing list off-line, over time, formulating cohesive argumentation and rewriting passages, forms a distinct social interaction, which sets mailing lists apart from other communication technologies. One woman in Høybye’s study of the SCAN-BC-LIST (Høybye et al., 2005) was an immigrant to Denmark and conveyed in interviews how she found it difficult at times to communicate in Danish and would never send off a post or reply to the list before she had worked thoroughly with her writing and spelling, not to stand out

as the one with the peculiar phrasing or misspelling on the list. Researchers studying mailing lists have to take into account the meaning of such modulation of social time on the list.

Likewise, a geographical spread across time zones may affect the way in which conversation is structured, causing discussions not only to flow asynchronously but also to be delayed. While this is not a unique feature of mailing lists, but applies to most social media, some related structural elements in mailing lists amplify the time gaps. An example of this is the commonly used option to have mailing list posts collected by the LIST SERV and sent off in one daily digest e-mail. Responses to posts received in this way may be substantially delayed with great implications for the discussion on a list.

Paying attention to the temporality of mailing lists, through our own presence in the list for example, opens up important knowledge on the movement of participants in the social network. Time passing is not something we conceive or see, as onlookers, but something we affect (Merleau-Ponty, 1964, p. 421). In becoming able to identify what is socially significant in mailing lists, we need to develop a “feel” for relevance mediated by our own bodily and sensory experience (Hastrup, 1994, p. 227) of the space. Taking part in a mailing list, we develop such a “feel” for the social life and practice in this space that will facilitate our understanding of the timing of responses and the meaning of “silence.”

Members of the SCAN-BC-LIST would often be very active writers when they first joined the list, very engaged in learning from the stories of fellow breast cancer survivors and seeking information and advice supporting their own situation. This intersection of personal and collective temporality was not always parallel, since not everyone joined at the same time. As others have also observed (Sandaune, 2008), the individual constantly evaluates and to a certain extent adjusts the personal and social life of a mailing list. Hereby, members not only assess and adjust to the existing exchanges of a mailing list, but start to contribute as they enter the social life of writing and creatively appropriate the list. On the SCAN-BC-LIST, members would find the list useful for some time, some a few months, and others years and then draw back from the list, as other individual priorities surfaced. Some members would unsubscribe to the list, while others would just stop writing or “become quiet,” as it was described by other group members. Reasons for drawing back but not taking the definite step of unsubscribing were most often phrased as a personal need for knowing that immediate access to the list was possible at a later stage, should one be in need of the contact. Mailing lists are not fixed structures, but projects that entail always-moving and emergent relations, constantly reflecting the lives, interests, and concerns of its members.

This empirical material serves to show that when studying mailing lists, we need to pay attention to time and temporality in different scales. Furthermore, this stresses that our research is always deeply embedded in the temporality of our object of study, which has all kinds of implications not only for our immediate practice but also for our ethical consideration and the presentation of our research. Issues of time can affect ethical issues in two ways, either alleviating concerns for doing harm or else increasing this possibility. For example, there are times when a list may be more vulnerable to what we write about it, because our findings may be taken up in social and political debates (e.g., “science wars”), or because hosts, moderators, and participants to the list may be under scrutiny (institutional reviews or evaluations). Also, given the often considerable amount of time that elapses between the production of data and publication, list membership may have changed significantly. This is not necessarily problematic, since much research will aim to identify structural elements in lists and it may even have the advantage of making it less sensitive to publish about lists,

since individuals may have moved on, thereby alleviating some ethical concerns. But the level of dynamism of lists over time (expected turnover of members, level of stability in hosts) should be noted as an important element to contextualize results.

Furthermore, timing is not only a function of intensity of interaction but can also be deeply meaningful. Silence, apart from drawing back from active conversation, can also be a collective or personal experience of silence. At the SCAN-BC-LIST, silence would follow difficult news of progressive cancer or relapse in a member, or the news of a member's death. Silence on the list resembled holding your breath, before engaging vigorously in writing to support and relieve the member once again inflicted by illness. Silence at other times was experienced by individuals as a response to issues they raised or stories they told that did not conform to mailing list practice. This could be issues that went somewhat off topic, which other members would not assess as related to breast cancer or stories that were somehow perceived as discouraging and did not support the socially desirable story of "fighting breast cancer." Such posts could elicit limited comments, but never really spurred active interaction. This is significant because it shows that not posting is not necessarily a sign that nothing is happening on a mailing list.

In this way, temporality of a mailing list also enacts the authority of the mailing list, as structured by the list administrator or by more unregulated social practices for determining wanted or unwanted discussions. Studying mailing lists by engaging in the social practices of the list will open up an understanding of how the authority of a particular setting is endorsed by its members. While the content of mailing list discussions is most commonly guided by directives given by the list administrator, the daily interaction on mailing lists may negotiate these directives in diverse ways. Below, we shall look more closely at how such interactions function as a form of boundary-keeping in lists.

### **Public/Private and Front/Backstage of Lists**

One of the perennial debates for researchers around mailing lists concerns the perception of communication as simultaneously private and public, in particular related to how ethical concerns are framed in Internet Studies (Sveningsson, 2009). We take up this discussion here to explore ways of understanding audiences and purposes of lists and how presence is established by contributors. We also focus on the "traffic" on lists (flow or over-flow of list e-mails and private e-mails) and on the visibility of both contributors and researchers. We also discuss how mailing list posters modulate their audience and create expectations about public and private discourse on the list.

As we noted in our introduction, it is important to consider the embedding of mailing lists within other modes of communication or other cultural forms. When studying mailing lists, a common approach has been to study list archives (Seale, Ziebland, & Charteris-Black, 2005; Gooden & Winefield, 2007) as providing a full account of the interactions on the list. Some have argued that such archives can be places for ideal or unobtrusive observation on the internet (Paolillo, 1999; Schaap, 2002). Even though the social space of the internet is strongly shaped by textual exchanges in a literal sense (Schaap, 2002), the assumption that the text is a fixed and final product to be collected for further study, and that there is "less to miss" in a text-based world (Thomsen, Straubhaar, & Bolyard, 1998), cuts off insights into other backstage exchanges that interact with and shape the full public

“traffic” of mailing lists. This can be essential to an understanding of how social interaction is produced, negotiated, contested, and reproduced in mailing lists. Several scholars have documented that exchanges of e-mails on lists are often accompanied by bilateral or small group exchanges, either face-to-face, telephone, or e-mail messages addressed to specific users (Hine, 2002; Høybye et al., 2005). This phenomenon qualifies the idea that the archive is a definitive account of interactions, since they provide only a partial perspective, insofar as the archive does not encompass interaction spurred by the list and involving participants, but using other channels. These “backstage,” less public exchanges can contribute important insights into the social dynamics of the mailing list. Such a backstage message can undermine the authority of extremely prominent posters. In other cases, they can provide background to particular debates or explanations as to why certain positions are not forthcoming in a discussion, for example, because they provoked too much controversy in the eyes of participants, eliciting waves of aggressive responses (flaming), or otherwise threatening the functioning of the list.

SCAN-BC-LIST presents itself as a mailing list open to everyone with an interest in breast cancer with the aim of encouraging and supporting breast cancer survivors. Active participants on the list are mainly women with breast cancer, but there are also a few members who are close family members of a cancer survivor, such as husband, mother, or sister. The stories these family members tell are obviously different as they convey their experience of someone else’s illness, but many of the issues they raise, for example, with regard to treatment options and late effects, are very similar. Though included on the list, their integration could not be sustained beyond the point where their family member died from breast cancer. Commonly, family members would inform the list about the death of their family member and, with no further interest in membership, politely leave the list. However, losing his wife to breast cancer, one man on the list decided to stick around. After some weeks, other members politely asked if he would be leaving them soon, to which he replied that he had experienced such support from the list and they were so important to him, that he would like to stay around a bit longer. Responses to this request on the list were mainly empathic but along with the open discussion, a private discussion between the list administrator and other core members evolved around the man’s right to stay on the list. Their point was that the list was not a place for mourning and commemoration, but a place for the living, ongoing struggle with breast cancer. After having discussed the issue privately for some time, the administrator took the issue out in the open on the list, and disclosed that she had decided that he was no longer fit for membership of the list and would be excluded. Some members defied this position and found her to be overruling the social community, since the messages that had been on list were not so openly opposed to his membership. This caused some discussion but only a few women left the list to show their disagreement. In a personal communication to Høybye, the list owner later remarked that “a mailing list is basically not a democracy, despite all the social exchanges.”

This empirical example also shows how social interactions and negotiations of boundaries are not at all times fully displayed in text on the lists, but also have bilateral exchanges, as we discussed above. Such exchanges only become possible to include in research if one is invited into them. This may raise questions about the positioning of the researcher, such as whether material is shared with the researcher as “potential ally” or as “researcher.” The ethics of using such material, which is by definition more private than interactions on list, should be carefully considered. The ethical issue is that informants

might provide us with different kinds of materials at different times, and do so with different kinds of understandings of what we might do with it. The ethnographer needs to be very sensitive to such changes in expectations, for example, whether an e-mail is meant to be a personal communication and, therefore, outside the bounds of what can be used for research. Again, this makes the point that social research on mailing lists should go beyond studies of mailing list archives and engage the social action of particular lists. Such a participatory approach to research demands that the researcher continuously negotiate and reflect on her or his position on the list, such as being included in off-list discussions and negotiations.

The distinction between public and private is also a prominent element in many discussions about the ethics of studying mailing lists. In studies of the internet, that particular distinction has taken the shape of a major divide and has enforced binary thinking in much research. Identifying a setting as either public or private assigns the interactions to different ethical regimes, with implications for practices of researchers (Beaulieu, 2009). The ethical issues are framed in the following way: if a mailing list is identified as public, the researcher's accountability is often deemed minimal, while the study of a setting identified as private may mean that researchers must obtain informed consent from list members—a daunting task. From what we describe above, given that boundaries of mailing lists may not always be clear-cut, it may be difficult to assign them unilaterally to the private or public domain. In our work, we have used the mailing list as a way of performing research ethics, in the concrete sense of being accountable to members. For example, we have used lists to announce our activities and publications (including this chapter!). We see this as one of the ways of instantiating an ethical form of research, in which an ongoing relationship with participants is part of the researcher's accountability. But, being aware that participants often wish to see their own work acknowledged and feel a sense of ownership (Bakardjieva & Feenberg, 2001), we have also contacted individual members to inform them that we were using passages of their messages in our work and to open up an opportunity for discussing this.

Ethnographic presence, as a research strategy, is embedded in a relation of power and dialogue. Hastrup notes that the asymmetrical relationship between the researcher as author and the informant as contributor “is of a peculiarly creative nature, provided it is recognized. The ethnographer's presence, however violent, is in some way the only alternative to silence about the other worlds, because her sharing of this world is a source of authority about its objective reality; no reality can ever be exhaustively apprehended in its own categories” (Hastrup, 1992). Presence on a mailing list becomes, as we argue here, an essential point of knowledge-making and a moral involvement with the field that generates new creativity and anticipation.

Further, this approach has deep ethical implications as we, in this investigation of other social and cultural forms of the mailing list, also may position ourselves in specific “fractional” relations. The practice of research, on the other hand, cannot be without ethical bearing. Ethical considerations are always embedded, as we are at all times positioned in an ethical relation to the world and the Other, which goes beyond the standardized rules of informed consent, etc., that are often expected to alleviate ethical concerns. Rules do not govern personal and disciplinary knowledge interests, and can therefore not be evaluated independently of our individual interests. Further, we cannot rely on ethical rules to ensure that the people participating in research fully realize the implications of their participation. We should be aware that our interests might at times run counter to those of the participants, despite our good intentions and despite the fact that the participants have given informed consent.

### Genres and Types of Lists

We have noted that the textuality of lists is one of their main constitutive elements. As such, they have been approached as structured pieces of text, for example, using threads as units of analysis. While threads can indicate a cluster of exchanges about a topic or question, researchers have also found that a single thread can contain very different kinds of messages (Bodourides, Mavrikakis, & Vasileiadou, 2002). It is also important to recall that a thread is partly sustained by the automated features of e-mail and mailing list archiving systems—a subject heading endures, by default, unless changed by the respondent. On the SCAN-BC-LIST, it was common practice to use headings as active “warning signals” if the post conveyed disturbing news of some kind (e.g., a recurrence of cancer or death of a list member). Headings can therefore be indicators, but not guarantors, of the relevance of a message to the thread or of coherence or interaction between posters.

Lists vary in terms of the models of authorship and audience they support. Many tend to have low levels of traffic and serve mainly for announcements. Often, such lists also have a centralized or designated few users who take on the role of posters to the list—even when this is not necessarily demanded by the set up of the list and any subscriber might post themselves (one-to-many). In such settings, membership of the list is a telling element, since the list is constituted as a medium directed at an audience. Other genres of lists have a much more diverse set of posters and can be characterized as discussion lists rather than announcement lists. Again, the distribution of posters can be skewed toward a small number of very vocal/active posters (few-to-many). In this type of list, it may be relevant to question the various views represented in the interactions, since debates can often make clear, dominant, and dissenting views within groups. It then becomes important to understand how the list fits into a particular setting (Hine, 2002) and who might be included and excluded from discussion.

An example of how mailing lists are situated in particular ways is the case of mailing lists in women’s studies. WMST-L came into focus through initial participation in another mailing list, the NextGeneration, which originated at Utrecht University in the Netherlands. This context for the research is important in that it is through the use of connective research strategies (Hine, 2007) that WMST-L came into focus, and became a subproject in the ethnography. Beaulieu first became aware of NextGeneration (NG) because it had arisen from a summer school held at the department that was the focus of her project. However, wishing to focus on academics’ uses of ICT in this project, NG did not seem like an appropriate object of study. Beaulieu was advised to look at WMST-L by some informants. Not only are the connections between the lists important, but the contrast between the two lists is also revealing. When Beaulieu began reading NG, it struck her as being very concerned with demonstrations and activism, and not much about women’s studies. Carefully examining such value judgments is part of ethnographic enquiry, and she began to try and make explicit what it was about this list that made it unrecognizable as an “academic list.” As part of the interrogation of her personal assumptions underlying this judgment, she sought out what would be a “proper academic list” and subscribed to WMST-L. While the two lists share the label of women’s studies mailing lists and are both vibrant settings, they are also quite dissimilar, and show how a mailing list might be adapted and serve very different visions of women’s studies.

Besides the differences in the topics emphasized, the two lists felt very different. NG is robust, noisy, and inclusive, while WMST-L is very focused. The lists are also supported by

different styles of software, a difference that affects their functionality and the organization of postings on the list. Both lists are used for spreading information (announcements, calls for papers, conferences, and jobs), but support very different kinds of interactions. Interaction on the lists, in the form of responses by other subscribers, makes visible a form of intersubjectivity, and is an aspect of the list that is especially suitable for ethnographic investigation (see Beaulieu, 2004; Hine, 2002). The two lists display different patterns of interactions; whereas NG has dynamics of connection and crystallization that support coalition politics and can sustain a wide diversity of topics, WMST-L encourages dynamics of participation and consolidation. This has implications for the scope of issues that can be supported by the list, and for the persistence of the knowledge generated in the space of the list (also discussed in the next section). The free-roaming, messy, and inclusive mode of NG was part of the reason why it felt nonacademic. This messiness made Beaulieu worry about whether she had a proper object of study, given her brief to study research and ICT.

Beaulieu realized that a properly “disciplined” mailing list was what she had been seeking and had found in WMST-L. Through sustained attention to the practices on the list and an exploration of the various connections and uses made of the list, the entwinement of disciplinarity and efficiency in this women’s studies mailing list drew her attention and became an important subproject to her main fieldwork. Modernist approaches to knowledge, characterized as seeking out appropriate expertise for advice, and faith in instrumentalization, reliability, and predictability (Marshall, 2004, among others, can be found in the WMST-L (Beaulieu, 2005). WMST-L was configured to support modernist values about knowledge and technology. The contrast between the lists showed how mailing lists can take on divergent forms with different effects and status.

### Infrastructures and Mailing Lists

Mailing lists depend on infrastructures to function, and some features of infrastructures constrain what can best be done on the list. To give one example, large-scale infrastructures have a shaping effect on on-list interactions, beyond decisions of individual list moderator or participants. This is because the internet, as a network, is set up to send packets of information with maximum efficiency. This means that the software running on the Internet as a network does not privilege maintenance of the strict order of postings. Rather it privileges a relatively smooth flow of data over the whole network. A clear consequence of this for mailing lists is that internet protocols are not well-suited for discussions in which sequential turn-taking is important.

Also of great significance is the way digital technologies can merge or be distinguished from each other on the internet. We noted in an earlier section that it is important to understand how mailing lists are used distinctly from other technologies, and why, for example, one might wish to circumvent the public stage of the list by sending a personal e-mail. It can be extremely relevant to explore lists beyond what results in the operations supported by listserv software. Such a broader view makes visible the creative and productive work done around the list.

There are also instances where lists are deeply embedded in, rather than distinguished from, other applications. In the case of WMST-L, analysis of the list shows how it sustains

sharing, debating, and spreading of knowledge. However, through the use of web-based technologies, the list also serves a role in the consolidation of knowledge. While a number of elements in WMST-L seem continuous with fairly traditional debates (scholarship versus politics) or display the usual expectations of computerization movements (Hine, 2006), novel forms of interaction are also visible around WMST-L. One of these practices is the consolidation of postings to the list, in order to form a “file,” and making this resource available on a web site related to the list. Such files draw together the material and discussions that have arisen on the list in relation to a particular topic or discussion. The various contributions are brought together so as to constitute a resource, but the contributions are not seamlessly merged, so that the file retains some of the multi-vocality of list interactions.

This is therefore a very potent intersection of web and mailing list applications, where two very different forms reinforce and complement each other. By posting such files on the web as discrete units on a theme, they also become more visible than the list archives and more likely to serve as a resource for research or teaching.

This particular form, files derived from a list and posted to the web, is also interesting in the way it brings together consolidation (an aspect of formal communication) with distributed expertise and individual voices (an aspect of informal communication), in order to create a novel kind of authoritative knowledge that is situated in a discussion (a type of knowledge valued in women’s studies). Furthermore, the files are treated as authoritative without claiming to be definitive. When similar debates arise at different times and subscribers engage in the debate, (rather than respond with a “pointer,” asking the poster to look at the file on the web site), the moderator will add these later threads to the existing file, indicating that they are another episode in the discussion. This practice constitutes a very rich source for analysis of developments in the field<sup>1</sup> and of the history of the list.

In turn, the files are often referred to in discussions on the list, as a resource to be drawn upon or renewed by reviving the discussion. In this respect, the list can be conceptualized as a persistent conversation that is laid on top of the archive, a spot of e-mail interactivity embedded in the web. As such, it is an interesting mix of the traditional modern investment in the archive and a late modern focus on the importance of conversation, communication, and remediation. Constant talk on the list and the related creation of resources supports modernist investments in canons and archives, while a great deal of the visibility and usefulness of these archives is contingent on a particular conversation, enabled by networks. It would be interesting to explore whether this element of contingency, and the subsequent tension with efforts of consolidation, exist in other fields where new practices around ICT are developing.

Such interactions between kinds of applications and their relation to infrastructure highlight the importance of the way mailing lists associate with and distance themselves from other kinds of digital tools, and the work involved in doing so.

### **Social Dynamics in Mailing Lists**

As has been reflected from several perspectives, social life on a mailing list is shaped by ongoing negotiations of positions and boundaries. Multiple elements shape group dynamics and participation in a list can have multiple meanings. It is not the case, for example,

that all subscribers experience this access to a list as membership of a “community.” Certain boundaries affecting social dynamics pertain to a set of “ground rules” outlined by the list owner, while others are more subtle, ongoing discussions of mailing list practice, relevant topics, specific behaviors, etc. When the SCAN-BC-LIST started out in 1999 on the ACOR server, it took the example of the large American breast cancer mailing list hosted with ACOR. The SCAN-BC-LIST owner had been a member of the American list during the initial stages of her own breast cancer treatment and wanted to take up the concept as a model for the Scandinavian list. The limited set of ground rules she set up copied the American example to a great extent and dealt with positioning the list as a space for open, nonreligious, nonpolitical discussion on breast cancer issues. These rules were meant to encourage a sincere discussion in a well-mannered tone of writing.

The founding members of SCAN-BC-LIST, beside the list owner, were women with breast cancer. They had come together through writing in the Guest book on the personal web site of the list owner, a site that she had made to tell her personal story of breast cancer with the hope that the experience could be useful to others in a similar situation. Other women had started commenting on her story in the Guest book at the site, and a small group of five women decided to start up a Scandinavian mailing list for discussing breast cancer. The woman who owned the web site and had experience with the American breast cancer mailing list became the list owner and was also the one doing the work to establish the list on the internet and the ACOR server. She thus gained a key position, but also a position that would not remain uncontested by the other women in the “founding” group who all felt a certain kind of ownership and had a stake in defining the founding history. With time, as the number of members on the list increased, negotiations of the right to define the list’s socially desirable practices became increasingly common.

An example is the incident described above, where the list owner excluded the widowed husband of a former list member. Some members on the list openly disputed this decision, and in a series of posts, raised a discussion challenging of the right of the list owner to make such decisions “on behalf of the group.” The list owner categorically countered such challenges by referring to her “founding” right, stressing that the list was not a community with democratic rights. With time though, the list owner became increasingly fed up with such disputes. Issues of governance can, therefore, be the object of negotiation and tension: who has the right to pose which actions can be contested, especially when such actions have consequences for the list, or when they are undertaken in the name of the list. The breast cancer lists exemplify one way in which such discussions can take place. Other lists differ; for example, NextGeneration uses a consensus model.

As an unrelated major life event occurred in the life of the list owner, she decided it was time for her to move on and invest her time and energy in other matters. She discussed this off the list by e-mail and telephone with several long-time group members before she openly wrote her decision as a post on the list. Her decision to quit the list became a major event in the life of the mailing list and several participants tried to persuade her not to leave. From the discussions on the list, there was a feeling that the list was in need of a new leader.

The other most active member on the mailing list at that point, besides the list owner, was a woman who was part of the “founding” group. She was the most obvious “heir” to the list ownership because of her strong commitment to the discussion on the list. However, for reasons that shall not be discussed here, the list owner did not want to leave the

list to her and transfer the ownership of the list hosted with ACOR. It was therefore agreed between the two women that the list should instead migrate from ACOR to a new space. The new list owner chose Yahoo! Groups as the new host. The list owner explained this plan of migration to the members of the list in a post and described a transition period that allowed members to move their membership to the new list before the old list closed, allowing time for less active members to get the message as well.

The new list started out 5½ years after the start up of SCAN-BC-LIST. The new list carried the new but related name Scan-bc-listen, adding a Danish ending (-en) to the word “list,” and hereby transforming it from an English to a Danish word. This clearly reframed the new list within a more Danish context, which emphasized a tendency building up over the last years on the old list that more Danish women and less women from other Scandinavian countries used the list.

What further occurred in the course of migration and transformation of the list was a repositioning of external boundaries. As explained above, the SCAN-BC-LIST was open to all persons with an interest in breast cancer. The presentation of the mailing list specifically mentioned that persons with a professional interest in breast cancer (physicians, nurses, patient advocates, etc.) were welcome on the list. Scan-bc-listen, however, drew new boundaries and the new list owner decided to present the list as a space open to women who had an experience of breast cancer, hereby excluding further participation of professionals, researchers, and also of men with breast cancer. (Høybye was specifically invited though to join the new list, despite her lack of a personal breast cancer experience due to her long-term involvement with the list.) This is in line with Hine’s observation that discursive practices can be used in boundary making between specialists (women with breast cancer, in this case) and outsiders (Hine, 2002). Yet, lists do not only create boundaries between inside and outside, subscriber and nonsubscriber. As illustrated by this episode, the social landscape of the list itself is highly differentiated, on the basis of “ownership,” commitment over time, and personal history. Mailing lists, therefore, cannot automatically be assumed to represent egalitarian communities. The basis for membership is also something that can shift fairly radically, and in a number of ways, as discussed in this example: through “technical” choices of a server, changes in regulations about list membership, and linguistic presentation of a list’s title. Finally, as we have seen from the episode where events unrelated to the list (in the owner’s life) had a big impact on the list itself, mailing lists have their own dynamics, without being isolated from the other social spheres of subscribers and owners.

## **Conclusion and Future Directions**

We hope to have shown that mailing lists become configured in particular ways in different contexts. As such, this material demonstrates the variety of meanings that a mailing list can have and the number of different ways a mailing list can be used. This richness would be lost if technological determinism guided research, and it would be misguided to consider that mailing lists create automatically or even sustain particular modes of communication, such as pluralistic and participatory spheres. While mailing lists might provide new modes of participation and interaction, it is also the case that technologies do not spontaneously create social relations and do not necessarily carry values with them.

We have also shown, however, that some features of technology do orient users to certain actions (e.g., how the possibility of turn-taking on a mailing list is shaped by packet routing on the internet). Infrastructure and technology are certainly important elements of mailing lists, but they are not the main determinant for their use.

Working with mailing lists has a number of consequences for the researcher and can shift research practices in various ways. First, and perhaps most visibly, mailing lists constitute new sources for empirical investigations. As such, they can be usefully contextualized in a number of ways by the research—whether in terms of other modes of mediated communication, as alternatives to (or in combination with) face-to-face communication, or as a source of information and sociality that has particular or unique features. Mailing lists are also significant in their relation to other technologies and sources: hyperlinks, archives, face-to-face meetings, and related web pages can all intersect with mailing lists. This means that boundaries have to be drawn around the object of study, a necessary part of all social research. Yet, the study of digital tools and settings seems to be accompanied by much concern for this particular issue (Beaulieu, 2004; Hine, 2009). An important question is therefore why does it seem to be more difficult to draw boundaries around an object like a mailing list than around other complex, embedded notions like “a family” or “an election”? One answer might be that objects like mailing lists, because they are mediated, show more clearly that they are linked to other phenomena. Yet, this argument would also apply to other mediated intersections, such as a book, whose footnotes also potentially take the researcher toward other sites of investigation. Another answer would be the status of such objects as emerging research technologies, for which conventions may not yet be stable and in which boundaries may not yet be taken for granted. As a result, there is a lack of common sense or tacit agreement about these objects and about what counts as their proper boundaries. Ideally, though, the question would be posed in productive rather than anxious terms, and would direct researchers to be aware of the multiple ways they constitute their objects and of the consequences of this for their research. If too much worry about whether new technologies can be (part of) objects of study can be paralyzing, too much complacency about what constitutes a mailing list is another danger.

As we discussed in the introduction, for most scholars, mailing lists are probably already part of their practice. Mailing lists are often used as a tool for orientation, when seeking to become familiar with a new field. Researchers often spend time lurking on a list before formally embarking on a project that involves the list. Such lurking shapes our expectations of settings and should be reflected upon as a formative part of research. Furthermore, it is highly likely that researchers involved in projects that do not focus primarily on mailing lists will still encounter them in the course of their research. Mailing lists then serve as tools of peripheral awareness for researchers in the field and their role in orienting research should be noted, even when they are not the main objects of research.

The seeming mundaneness of mailing lists has further consequences. Not only do researchers tend to take them for granted, but they are also widely neglected and undervalued by ICT departments, by administration of universities, and by computer science researchers. It is often assumed that nothing more than a server is needed to run a list. Yet mailing lists can have thousands of subscribers, and while a number of functions such as registration and password support have been developed, there is still the need for human intervention to smooth out problems between users and systems. Many lists also rely on moderators who aim to enhance the functioning or quality of the list by maintaining their

focus and/or limiting the noise on the list. Such labor is rarely recognized, let alone supported and rewarded. Furthermore, university policies about archiving of e-mail or limits to (kinds of) traffic often do not take into account what consequences they might have on uses and users of mailing list.

In the area of visualization research, however, innovative approaches to lists are much more visible. Work on mapping “very large scale conversations” by Warren Sack (2000) and more recent work of the Sociable Media group at MIT (<http://smg.media.mit.edu/>) on visualization of interaction is especially promising. By drawing on the contents and features of mediated interactions, new representations of lists become possible, offering new ways of exploring discussions or of finding patterns of interactions. Such developments have great potential to enhance mailing lists for both users and researchers, and offer interesting avenues for exploring mailing lists and developing new ways of using them. In spite of any innovations that might arise, what remains crucial in using mailing lists for research is to consider their context and specificity. As we have shown, mailing lists vary in the ways they are used, depending on the context in which the list is made to function—from the highly public to the highly restricted—and from the nearly unidirectional to the highly interactive. Furthermore, lists tend to function at the intersection of other technologies such as web sites and e-mail, a trend that is likely to grow as applications are built to allow contributions to flow from one platform to another (e-mail to twitter to blog, etc.). For this reason, the specific configuration of a list must always be taken as an important point of inquiry in any research project. By paying attention to both context and specificity, the mailing list as tool and object of research can be well matched to the problems to be investigated in a research project.

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#### Notes

1. For example, a debate about naming departments and degrees “women’s studies” versus “gender studies” is archived in five instalments, dating from 1994, 1998, 2002, 2005, and 2008, <http://research.umbc.edu/korenman/wmst/womvsgen.html>.