

# **Technosocial Situations: Emergent Structurings of Mobile Email Use<sup>i</sup>**

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The integration of mobile phones into social life is still in its infancy in most parts of the world, triggering a set of sociocultural convulsions as institutions, people, and places adapt to and regulate its use. As is typical with technologies that alter patterns of social life, the keitai has been subjected to an onslaught of criticism for the ways in which it disrupts existing norms of propriety and social boundaries (Matsuda Introduction, this volume). While celebrated as a technology that liberates users from the constraints of place and time, it has equally been reviled as a technology that disrupts the integrity of places and face-to-face social encounters. Sadie Plant (2002: 30) writes that "even a silent mobile can make its presence felt as though it were an addition to a social group, and . . . many people feel that just the knowledge that a call might intervene tends to divert attention from those present at the time."

The case of heavy keitai email users in urban Japan provides one window into the new kinds of social situations (taking a chapter from Goffman, 1963), or more precisely, technosocial situations (adding a chapter from technology studies) emerging with the advent of widespread keitai use. This chapter reports on an ethnographic study of keitai users in the greater Tokyo area, examining new social practices in keitai email communication, and how they are constituting technosocial situations that alter definitions of co-presence and the experience of urban space. The central argument is that keitai participate in the construction of social order as much as they participate in its destabilization. After first presenting the methodological and theoretical framework for this study, this chapter presents three technosocial situations enabled by keitai email: keitai text chat, ambient virtual co-presence, and the augmented flesh meet.<sup>ii</sup>

## **Method and Conceptual Framework**

### *Our Research*

This paper draws from ongoing ethnographic research on mobile phone use and location, centered at Keio Shonan Fujisawa Campus near Tokyo. Our description is grounded in two different sets of data. One is a set of ethnographic interviews conducted by Ito in the winter of 2000 with twenty-four high school and college students about their use of media, including keitai. The central body of data behind this paper is a set of "communication diaries" and interviews collected between July-December 2002 by Okabe and Ito. We aim to collect detailed information on where and when particular forms of mobile communication were used by a diverse set of people. We seek direct observational records in addition to interview data, as it is notoriously difficult to capture the fleeting particularities of mobile communication after the fact. We adapted data collection methods piloted by Rebecca Grinter and Margery Eldridge (2001) where they asked ten teenagers to record the time, content, length, location, and recipient (or sender) of all text messages for seven days. As with interviews, this data collection method still

relies on second-hand accounting, but has the advantage of providing much more detail on usage than can be recalled in a stand-alone interview.

We expanded the communication log to include voice calls and keitai Internet, and more details about the location and context of use. Participants were asked to keep records of every instance of keitai use, including voice, short messages, email, and web use, for a period of two days. They noted the time of the usage, who they were in contact with, whether they received or initiated the contact, where they were, what kind of communication type was used, why they chose that form of communication, who was in the vicinity at the time, if there were any problems associated with the usage, and the content of the communication. After completion of the diaries, we conducted in-depth interviews that covered general attitudes and background information relevant to mobile phone use, and detailed explication of key instances of usage recorded in the diaries. Our study involved seven high school students (aged 16-18), six college students (aged 18-21), two housewives with teenage children (in their forties), and nine professionals (aged 21-51). The gender split was roughly equal, with 11 males and 13 females. 594 instances of communication were collected for the high school and college students and 229 for the adults. The majority of users were in the Tokyo Kanto region. Seven were recruited in the Osaka area in southern Japan to provide some geographic variation.

We turn now to the theoretical and conceptual framework for our analysis.

### *Technosocial Situations and Settings*

Much work on mobile phone use and place has examined how mobile phones operate within particular social settings, particularly in public spaces where their usage is often perceived of as rude or disruptive. Most work in this vein has relied on observations in particular locations, analyzing how usage is keyed to the physical location and situation (Ito and Okabe, Forthcoming; Ling, 2002; Murtagh, 2002; Okabe, this volume; Plant, 2002; Weilenmann & Larsson, 2002). Somewhat less common have been efforts that focus on the settings being constructed by the mobile phone communication itself. Some exceptions are studies that document the particularities of short text message communication (Grinter & Eldridge, 2001; Kasesniemi, 2003; Taylor and Harper, 2003), studies of communication conventions in voice calls (Schegloff, 2002; Weilenmann, 2003) and studies of how workers construct mobile workspaces (Brown & O'Hara, 2003; Laurier, 2002; Schwarz, 2001; Tamaru & Ueno, this volume).

All of these approaches to the problem of mobile communication and place address key aspects of the equation—the local setting and the "networked" setting "assembled" (Laurier, 2002) through mobile practice. The two approaches differ, however, in whether they take an existing, physically localized setting (restaurant, public place) as the social situation to be analyzed, or the networked technosocial setting as primary. The latter type of study hinges on unique methodological and conceptual challenges. First, the researcher must track particular mobile communications across different physical locations. Secondly, the analysis must conceptualize these communications as "located" within a hybrid infrastructure of place and technology. What are as of yet under-theorized are the new kinds of social settings enabled through mobile communication that differ fundamentally from prior settings such as workplace, restaurant, face-to-face interaction, or landline telephony. We believe it is necessary to examine the integration of technology, social practice and place in an integrated "technosocial" framework.

In his review of Erving Goffman's theories of social situation, Joshua Meyrowitz (1985) suggests that the presumed isomorphism between physical space and social situation needs to be questioned when we take into account the influence of electronic media. He sees the work of Goffman and other "situationists"<sup>iii</sup> as presenting the essential insight that social identity and practice are embedded in and contingent on particular social situations. He suggests, however, that these theories fail to take into account how electronic media cross boundaries between situations previously held to be distinct. In particular, he proposes that the information flows enabled by television in the sixties related to the erosion of the boundaries between social identities and positions of man and woman, adult and child, the powerful and not so. This chapter builds on Meyrowitz's key insight that social situations are structured by influences that are outside the boundaries of physically co-present and interpersonal encounters. We retain, however, the analytic focus of situationists like Goffman, examining interpersonal communication, interaction and situation rather than mass communication, information and identity that are Meyrowitz's foci. This focus on interpersonal media leads to a substantially different set of conclusions than those that Meyrowitz suggests.

We propose the term "technosocial situations" as a way of incorporating the insights of theories of practice and social interaction<sup>iv</sup> into a framework that takes into account technologically mediated social orders. As Meyrowitz proposes, more and more, social orders are built through the hybrid relation between physically co-located and electronically mediated information systems. From a somewhat a different perspective, anthropologists have analyzed this dynamic in terms of global or translocal flows (Appadurai, 1996; Clifford, 1997; Gupta and Ferguson, 1992). We believe that it is crucial to remain attentive to the local particulars of setting, context, and situation in the face of these translocal flows if we are to avoid a technical determinist argument that these technologies necessarily lead to a blurring of spatial and social boundaries. Electronic media have effects that break down certain prior social boundaries, as Myerowitz proposes, but they also have effects of constructing and reifying other social boundaries. We draw broadly from approaches in social and cultural studies of technology that see the technical and social as inseparable outcomes of ongoing and historically contextualized practice (for example, Bijker, Hughes, and Pinch, 1987; Callon, 1986; Clarke and Fujimura, 1992; Haraway, 1991; Latour, 1987).

This paper is an effort at presenting examples of concrete technosocial situations that span a range of physical locations but still retain a coherent sense of location, social expectation, and role definition exhibited in Goffman's analyses and other practice-based studies. Our general conclusion is that mobile phones do undermine prior definitions of social situations, but they also define new technosocial situations and new boundaries of identity and place. To say that mobile phones univocally cross boundaries, heighten accessibility, and fragment social life is to see only one side of the dynamic social reconfigurations heralded by mobile communications. Mobile phones create new kinds of bounded places that merge the infrastructures of geography and technology, as well as technosocial practices that merge technical standards and social norms. The remainder of this paper introduces keitai email as a new communicative modality, and then presents three different technosocial situations that are built on keitai email: mobile text chat, ambient virtual co-presence, and the augmented flesh meet.

## *Keitai Email and Youth*

As other chapters in this volume have documented at greater length (Matsuda, Introduction; Okada), mobile messaging has been prevalent among the youth population since the early nineties, when pagers were adopted as a way of sending text messages among high school and college students. Although technology platforms have changed considerably from the days of numeric pagers, current messaging practices and related norms for social behavior are built on this decade-long history. Japanese keitai email use thus represents a degree of social stabilization that may not be as prevalent in areas where text messaging is a more recent development. We use the term keitai email to refer to all types of textual and pictorial transmission via mobile phones. This includes what Japanese refer to as "short mail" or "short messages" and Europeans refer to as "short text messages," as well as the wider variety of email communications enabled by the keitai Internet.

Until recently, youth led the Japanese population in terms of adoption rates, but as of 2002, the gap has largely closed. Even as keitai have become common in all age groups, however, the younger demographic has a higher volume and unique patterns of usage that differentiate them from older users. In contrast to the ¥5613 average monthly payments of the general population, students pay an average of ¥7186 for their monthly bills (IPSe, 2003). Particularly distinctive is usage of keitai email. 95.4% of students describe themselves as keitai email users, in contrast to 75.2% of the general population (VR, 2002). Teens send twice as many emails than twenty-somethings, sending approximately 70 a month in contrast to 30 for the slightly older set (Mobile Communication Research Group, 2002). In contrast to the general population (68.1%), almost all students (91.7%) report that they send over 5 messages a day. They also tend to be more responsive to the email that they receive. Almost all students (92.3%) report that they view a message as soon as they receive it, whereas a slimmer majority of the general population (68.1%) is as responsive. Many older users say that they view a message when convenient to them, or at the end of the day (VR, 2002). Elsewhere we have described some of the unique features of youth populations that make them more avid keitai email users than the older generation. This includes their historical relationship to mobile communications as well as their lack of communication channels and legitimate spaces for assembly with peers and lovers (Ito & Okabe, 2003; see also, Fujimoto, this volume). We now turn to technosocial situations that are beginning to be structured through the exchange of keitai email. These new social conventions are concentrated though not restricted to younger users.

### **Mobile Text Chat**

We begin with our presentation of our ethnographic material with a type of technosocial situation with close analogues in other communications forms, the text-based chat. Here we introduce two examples of mobile text chat conducted between couples, both on private transportation, to highlight the unique qualities of keitai email. We start with one example from our communication diaries of one female college student who carried on a text message conversation while moving between different forms of public transportation. She has just finished work, and makes contact with her boyfriend after she boards the bus. Each time-coded entry is a separate text message.<sup>v</sup>

22:30 (Boards bus)

22:24 (Send) Ugh. I just finished (>\_<). I'm wasted! It was so busy.  
 22:28 (Receive) Whew. Good job. (>\_<)  
 22:30 (Send) I was running around the whole time. Are you okay?  
 22:30 (Only other passenger leaves. Makes voice call. Hangs up after 2 minutes when other passengers board.)  
 22:37 (Send) Gee I wish I could go see fireworks ( ; \_ ; )  
 22:39 (Receive) So let's go together! I asked you!  
 22:40 (Gets off bus and moves to train platform)  
 22:42 (send) sniff sniff sniff ( ; \_ ; ) Can't if I have a meeting! I have to stay late!  
 22:43 (Receive) You can't come if you have to stay late?  
 22:46 (Send) Um, no... I really want to go... ( ; \_ ; )  
 22:47 (Receive) Can't you work it out so you can make it?  
 22:48 (Boards train)  
 22:52 (Send) Oh... I don't know. If I can finish preparing for my presentation the next day. I really want to see you. (>\_<) I am starting to feel bad again. My neck hurts and I feel like I am going to be sick. ( ; \_ ; ) Urg  
 22:57 (Receive) I get to see you tomorrow so I guess I just have to hang in there! (^o^)  
 23:04 (Gets off train)  
 23:05 (Send) Right right. I still have a lot of work tonight. I can't sleep!

In our interview, she describes how her messaging embeds subtle clues that indicate her status and availability for communication keyed to her physical location.

Okabe: You talk about the fireworks for about ten minutes. Is this the kind of thing you usually communicate about over email?

Student: Part of the way through, it becomes just something to keep the conversation going just for the sake of continuing. Around when this fireworks topic comes up. All I wanted to really say was about my work day, but since I still have some time to kill. I didn't really care about the fireworks. Oh, I shouldn't be saying this.

Okabe: So you didn't really want to go.

Student: It isn't exactly a lie, but since I couldn't go, I wrote "Oh, I don't know," kind of grinning.

Okabe: So the important thing was to keep the conversation going.

Student: Yes, that's right. And after I started feeling that this was going on too long, I suddenly changed topic to my physical condition.

This last change of topic that she describes happens just as she is getting ready to get off the train and is an indicator that the conversation should be coming to an end. She has enlisted a companion on her solitary bus ride, successfully filling dead time with small talk, ending it at precisely the moment when she arrived at her destination. Just as with people who are physically co-present, the exchange with her boyfriend is exquisitely coordinated with her crossing the boundaries between different social situations, beginning when she had a free moment to sit and punch keys on her keitai, and ending when she would begin the walk to her home that would

make it harder for her to attend to an active conversation. Like two people who might start a conversation as they run into each other in an elevator, ending it smoothly as one is stepping out, her conversation also has a clear, physically demarcated beginning and end that is socially recognized through implicit conversational cues. Nuanced texting conventions signal the end of a conversation without her ever having to explicitly state, "I need to go now."

Another one of our research subjects, a young businessman, engages in extensive keitai email exchanges with his girlfriend in public transportation, regularly sending long messages (100 characters or more). He describes the social situation created by the convergence of "dead time" in public transportation and the affordances of the keitai Internet. In this case, we did not have access to the full text of the communications, but he described them in his communication diary as "mutterings" and his girlfriend's responses as "mutterings in reply."

Okabe: When you are on the train, are you generally using your keitai?

Businessman: Yes, or just looking at things on my keitai. I like to be doing something. I don't like to think of it as wasted time.

...

Okabe: In terms of the content of your messages, are they pretty lightweight? In your diary, you wrote "mutterings" and "mutterings in reply."

Salaryman: Yes. It really is mostly lightweight, content-free communication, but it can be pretty extensive. Here is one that is 110 characters. I can get pretty deep into things in my messages.

The rhythm of his exchanges with his girlfriend fluctuates between quick status updates and comments and longer monologues that transform situations that would have otherwise been occupied by solitary musings into an intimate interpersonal space. His time on public transportation is occupied with these conversations with his girlfriend and shorter bursts of exchanges with friends and work colleagues coordinating meetings and other details. These are two among many examples of text-chat that we have gathered. Approximately half of the students in our study engaged in this sort of chat-like sequence while in transit.

What is unique about mobile text chat is the way it is keyed to presence in different physical spaces. We observed mobile text chat in diverse settings: homes, classrooms, and in public transportation. Like Internet chat and voice calls, mobile texts chat can be used whenever the two parties decide to engage in a focused "conversation." What is unique to mobile text chat, however, is that it is particularly amenable to filling even small "communication voids," gaps in the day where one is not making interpersonal contact with others, particularly in settings such as public transportation where there are prohibitions on voice calls (see Okabe & Ito, this volume). Mobile text chat can accommodate changes in physical location as well as pauses in conversation as one gets on and off a train, scans a bus schedule, changes channels on the TV, jots down some notes, or answers a question from the teacher. When engaged in a focused set of chat-like exchanges, small pauses are permissible, though longer pauses of over ten or fifteen minutes are generally ended with some allusion to an interruption or an apology. The closest analogue in prior social situations would be the conversations that people have as they share a train ride together or pause at an open office door. These are spontaneous conversations with sudden beginnings and ends, sometimes expanding into a longer and deeper conversation, but with an underlying expectation that the interaction will be brief, a colonization of an in-between space

rather than a planned and extended meeting. The technosocial situation of the "text chat" is a flexible one but one with clear social expectations and rhythms.

### **Ambient Virtual Co-Presence**

Unlike voice calls, which are generally point-to-point and engrossing, messaging can be a way of maintaining ongoing background awareness of others, and of keeping multiple channels of communication open. This is like people that keep IM channels open in the background while they go about their work, but the difference is that the keitai gets carried around just about everywhere for heavy users. The rhythms of keitai messaging fluctuate between what we have characterized as "chat" and a more lightweight awareness of connection with others through the online space. In our interviews with heavy users of keitai, all users reported that they were only in regular contact with approximately 2-5, at most 10, close friends, despite having large numbers of entries in their keitai address books. This is what Ichiro Nakajima, Keiichi Himeno, and Hiroaki Yoshii (1999) describe as a "full-time intimate community" (see both chapters by Matsuda, this volume) and Ichiyo Habuchi (this volume) calls a "tele-cocoon." For people who are heavy keitai email users, there is often a social expectation that these intimates should be available for communication unless they are sleeping or working. Text messages can be returned discreetly during class, on public transportation, or in restaurants, all contexts where voice communication would be inappropriate. Many of the messages that we saw exchanged between this close peer group or between couples included messages that informants described as "insignificant" or "not urgent." Some examples of messages in this category are communications such as "I'm walking up the hill now," "I'm tired," "I guess I'll take a bath now," "just bought a pair of shoes!" "groan, I just woke up with a hangover," or "the episode today sucked today didn't it?"

These messages define a social setting that is substantially different from direct interpersonal interaction characteristic of a voice call, text chat, or face-to-face one-on-one interaction. These messages are predicated on the sense of ambient accessibility, a shared virtual space that is generally available between a few friends or with a loved one. They do not require a deliberate "opening" of a channel of communication, but are based on the expectation that someone is in "earshot." From a technology perspective, this is not a "persistent" space as with an online virtual world that exists independent of specific people logging in (Mynatt et al. 1997). As a technosocial system, however, people experience a sense of a persistent social space constituted through the periodic exchange of text messages. Secondly, these messages define a space of peripheral background awareness that is midway between direct interaction and non-interaction. The analog is sharing a physical space with others that one is not in direct communication with but is peripherally aware of. Many of the emails exchanged present information about one's general status that is similar to the kind of awareness of another that one would have when physically co-located, a sigh or smile or glance that calls attention to the communicator, a way of entering somebody's virtual peripheral vision. This kind of virtual tap on the shoulder may result in a change of situation into a more direct form of interaction such as a chat-like sequence via texting or a voice call, but it might also be ignored if the recipient is not available for focused interaction.

Of particular interest are the logs of one teenage couple in our study, which is a somewhat more intense version of couple communications that we saw in other instances. Their typical pattern is to begin sending a steady stream of email messages to each other after parting

at school. These messages will continue through homework, dinner, television shows, and bath, and would culminate in voice contact in the late evening, lasting for an hour or more. A trail of messages might follow the voice call, ending in a good night exchange and revived again upon waking. On days that they were primarily at home in the evening, they sent 34 and 56 messages to each other. On days that they were out and about the numbers dwindled to 6 and 9. The content of the messages ranged from in-depth chat about relational issues, to coordination of when to make voice contact, to lightweight notification of their current activities and thoughts. In this case, and to a smaller degree for other couples living apart, messaging became a means for experiencing a sense of private contact and co-presence with a loved one even in the face of parental regulatory efforts and their inability to share any private physical space. While keitai have become a vehicle for youths to challenge the power-geometries (Massey, 1994) of places such as the home, the classroom, and the street, they have also created new disciplines and power-geometries, the need to be continuously available to friends and lovers, and the need to always carry a functioning mobile device. These disciplines are accompanied by new sets of social expectations and manners. One teenage interviewee explains:

I am constantly checking my mail with the hopeful expectation that somebody has sent me a message. I always reply right away. With short text messages I reply quickly so that the conversation doesn't stall.

When unable to return a message right away, there is a sense that a social expectation has been violated. When one girl did not notice a message sent in the evening until the next morning, she says that she felt terrible. Three of the students in our diary study reported that they did not feel similar pressure to reply right away. Yet even in these cases, they acknowledged that there was a social expectation that a message should be responded to within about thirty minutes unless one had a legitimate reason, such as being asleep. One describes how he knows he should respond right away, but doesn't really care. Another, who had an atypical pattern of responding with longer, more deliberate messages hours later, said that her friends often chided her for being so slow. In one instance, a student did not receive a reply for a few hours, and his interlocutor excused himself by saying he didn't notice the message. The recipient perceived this as a permissible white lie that got around an onerous social expectation. All students who were asked about responses delayed an hour or more said that they would generally make a quick apology or excuse upon sending the tardy response. These exceptions to the norm of immediate response trace the contours of the technosocial situation as much as do conforming practices.

With couples living apart, there is an even greater sense of importance attached to the ongoing availability via messaging. The underside to the unobtrusive and ubiquitous nature of keitai email is that there are few legitimate excuses for not responding, particularly in the evening hours when one is at home. Five of the ten student couples in our study were in ongoing contact during the times when they were not at school, and all these couples had established practices for indicating their absence from the shared online space. They invariably send a good night email to signal unavailability, and would often send status checks during the day such as "are you awake?" or "are you done with work?" We saw a few cases when they would announce their intention to take a bath, a kind of virtual locking of the door. Him: "Just got home. Think I'll take a bath." Her: "Ya. Me too." Just as mobile workers struggle to maintain boundaries to between their work and personal lives, youths struggle to limit their availability to peers and

intimates. The need to construct and mark these boundaries attests to the status of this ambient virtual peer space as an increasingly structuring and pervasive type of technosocial setting.

### **The Augmented Flesh Meet1**

Those who are not heavy keitai users are often baffled by the sight of Japanese teens congregated at a fast food restaurant, starting at their keitai rather than talking to one another. The assumption is that the virtual connection is detracting from the experience of the face-to-face encounter. What non-users often don't realize is that keitai can be devices for augmenting the experience and properties of physically co-located encounters rather than simply detracting from them. Teens use keitai to bring in the presence of other friends who were not able to make it to the physical gathering, or to access information that is relevant to that particular time and place. The boundaries of a particular physical gathering, or flesh meet, are becoming extended through the use of mobile technologies, before, during, and after the actual encounter.

#### *Before*

Keitai have transformed the experience of arranging meetings in urban space. In the past, landmarks and times were the points that coordinated action and convergence in urban space. People would decide on a particular place and time to meet, and converge at that time and place. We recall hours spent at landmarks such as Hachiko Square in Shibuya or Roppongi crossing, making occasional forays to a payphone to check for messages at home or at a friends' home. Now teens and twenty-somethings often do not set a fixed time and place for a meeting. Rather, they generally agree on a general time and place (Shibuya, Saturday late afternoon), and exchange approximately 5 to 15 messages that progressively narrow in on a precise time and place, two or more points eventually converging in a coordinated dance through the urban jungle. As the meeting time nears, contact via messaging and voice becomes more concentrated, eventually culminating in face-to-face contact. A concrete case will make this dynamic more evident. This case involves a college student "Erin" and her meeting with three other friends in Shibuya to go to a live performance. In the interview, Erin describes the meeting.

At the last event we went to together, 'friend A' and I had decided that we would meet up early for a cup of tea. So I contacted friend A first. Friend S lives kind of on the outskirts of the city, so she isn't always able to come to the shows. I hadn't communicated with her about when we were going. At the last event the three of us did have the conversation that it would be nice if we could all meet up for tea. Friend C isn't a regular at the events, so I wasn't sure if she was coming.

We reconstructed the following sequence of events from the communication log and interview:

Email sent from home to friend A:

11:30 Around what time are you going to Shibuya today?

Email received at home from friend A:

11:56 About 3.

Email sent from home to friend A:  
12:00 Ok, I'll get in touch when I'm there.

Email received at station to friend A:  
13:56 I'll be at Shibuya in about 10 minutes.

Email sent from train to friend A:  
15:00 Me too around then.

Email sent from Shibuya station to friend A:  
15:06 I'll wait at the back entrance of Quattro.

The two friends meet up at Quattro, the performance hall, then go on to a café.

Email sent from café to friend S:  
6:32 About what time are you coming?

There is no reply from friend S, and the two go on to Tower Records.

A call received at Tower Records from Friend S:  
17:02 (Two minute voice conversation about where the two parties are)

Friend S meets them at Tower Records.

A call received at bookstore from Friend C:  
17:50 (Three minute voice conversation about where the two parties are and what time the show starts)

The four meet up at Quattro.

This kind of coordination is the opening sequence of a face-to-face meeting, extending the parameters of what it means to "be together" beyond the boundaries of physical contact. There is generally a point where participants converge in virtual space prior to convergence in physical space as they begin to micro-coordinate (Ling and Yttri, 2002) about precisely where and when they are and how they will meet up as they are in transit to the gathering spot. This could be just minutes before physical contact, as in the case of friend S and C, or it could be as a person boards a train to head towards a meeting spot. A person is not generally considered "late" to a particular gathering if they are present in the virtual space at roughly the appointed time. Informants have reported that they do not apologize for being thirty or more minutes "late" in arriving at a particular place as long as they have been in email contact in the interim. By contrast, if they had left their phones at home or let the battery die, the meeting would have been considered a failure. In other words, presence in the virtual communication space is considered an acceptable form of initial "showing up" for an appointed gathering time.

Although the older generation often describes these practices as "loose" in terms of commitments to time and place, a slackening of manners, we can actually see some consistency

in the integrity of the social norms and expectations attached to "gathering." As in the case of meetings with appointed times and place, with these more flexibly arranged gatherings, the consistent rule is that you should not keep somebody waiting in a particular place. If their partner has already "shown up" in virtual space by announcing where they are, keitai users can go off to a book store or take care of an errand rather than wait at an arbitrary spot. Here is an example of an interview excerpt and log of a meeting between two women in their twenties, again at Shibuya. As is typical in cases like this, lateness is a matter to be announced but not apologized for. The one being "kept waiting" has been attending to other matters about town rather than waiting at an appointed spot. (Messages in this case are extrapolated from brief descriptions of content rather than exact transcripts.)

On this day, I had decided to go see a performance with my friend. We had decided to meet in Shibuya, but had not decided where. We were supposed to meet at 4:30 (16:30), but by 3:00 I knew I was going to be late so I sent a message that I would be 30 minutes late as I was leaving the house. She replied right away, "okay."

|                   |   |
|-------------------|---|
| [Bus stop]        | 15:00 (Send) I'll be about thirty minutes late.                 |
| [Bus stop]        | 15:01 (Receive) Okay.   |
| [Shibuya station] | 16:32 (Send) I've arrived at Shibuya.                           |
| [Shibuya station] | 16:33 (Receive) Where in Shibuya are you?                       |
| [Shibuya station] | 16:34 (Send) Hachiko Square.                                    |
| [Shibuya station] | 16:35 (Receive) Wait there. I'll be right over.                 |
| [Shibuya station] | 16:36 (Send) Okay. Will wait.                                   |
| [Shibuya station] | 16:40 (Voice call) "Where are you? Oh, there, okay, I see you." |

The first message announcing lateness signals initial presence in a shared technosocial situation of "getting together." Subsequent exchanges between the two are highly responsive, with a one minute turn-around time, and indicate that they are keeping close track of incoming messages. Though this is a case of "lateness" becoming social permissible, gatherings arranged via mobile technologies do not necessarily have the effect of shortening the length of time for physical co-presence. This same research subject described how on a prior day, she had made plans with some friends to meet after work for drinks. They decided on 7:30 as a meeting time, but she got off of work early that day, and was able to contact a friend to meet up earlier since "It would be boring to be by myself until then." In both these cases, social voids and waiting times have been filled with contact and coordination via mobile messaging.

### *During*

After participants have converged in physical space, keitai communication does not necessarily end, particularly for social gatherings. In contrast to work meetings in which keitai communications are largely excluded, among gatherings of young people, the keitai is a common accessory. In the previous case of Erin's meeting, we saw how the phone was used in the context of a gathering of friends to check on the status of others who may or may not be joining them. When an email message comes into a friends' keitai, it is quite common to ask who it was from and a conversation about that person to ensue. Young people generally reported that they had no

reservations about making contact with others via keitai when they were with a group of friends, though they might make a brief apology if a one-on-one gathering was interrupted with a voice call.

In other cases, keitai messages get used as a way of making contact when the recipient is just out of visual range or is unavailable to voice contact. Messaging during class or lectures is one common way that people gathered in a shared space make contact that would otherwise not be possible in a given setting. We saw email being sent during class in only two of our communication diary cases, but almost all students reported in their interviews that they would receive and send messages in class, hiding their phones under their desks. Here is the response from one of the high school students who we did see using her phone during class.

Okabe: What sorts of places and situations do you use your phone a lot?

Student: At school, during class.... I leave my phone on my desk and it vibes.

Okabe: Your teacher doesn't care?

Student: Well, the teacher pretty much knows. He doesn't do anything about it.

Okabe: Really? You can leave it out?

Student: Everyone has them out.... Some kids even let their keitai ring, and the teacher is like, "Hey, it's ringing..." I think this is just our school.

...

Okabe: Do you take voice calls during class?

Student: No. That would be going to far.

Okabe: Oh, so you wouldn't answer. What kinds of exchanges do you have over email during class? Do you send email to people sitting in the same classroom?

Student: Yes, I do that too.

Okabe: What do you say?

Student: "This is boring."

Okabe: And you get a reply?

Student: Yes.

Okabe: When you write your email, do you hide it?

Student: Yes. When the teacher is facing the blackboard, I quickly type it in.

Like this student, three other students described conversations with students in the same classroom, making comments like "this sucks," "this is boring," or "check it out, the teacher buttoned his shirt wrong." More commonly, students reported that they conducted "necessary" communications during class, such as arranging a meeting or responding to an email from somebody with a specific query.

Another example of augmented co-presence was when one of our informants was standing in a long line for a bus and saw her friend near the front of the line. She sent her a message to look behind her so that she could see her and wave. In other cases, students have described how they will message their friends upon entering a large lecture hall to ask where they are sitting. In all of these cases, keitai email augments the properties of a particular place, enabling contact and communication that would not otherwise be available. One observation documented by Ito of a group of high school students on a bus illustrates this dynamic.

I am sitting near the front of a bus that is not very crowded. Most seats are occupied, but there is nobody standing. A group of five high school boys in black uniforms are congregated just behind me, speaking rather loudly across the middle aisle. They are discussing some kind of gathering they are arranging. I am not able to determine exactly the nature of the gathering, but they are involved in a heated dispute over who is coming and why some members are not coming, and suspicions that somebody is sabotaging the arrangements.

"Ask 'Ken.'" One boy suggests. "Ask him if he is coming." One of the boys carrying a keitai punches in a message. As they await their reply they continue to debate about what is going on. "If the girls are coming, they the guys will come too." "Send a message to 'Kei' then." "Or do you want me to send it?" "No, you send it." In the meantime, Ken has responded that he thinks he will come, a fact that the recipient announces to the group. "Okay, then he's not the problem" they all agree. The exchange continues in this manner, with the boys making selective contact with their friends and collectively developing a theory of the fate of their planned gathering.

### *After*

Just as keitai email extends the prior and present parameters of social contact, it also extends the possibilities for contact after a gathering. In all of the gatherings we saw between heavy keitai email users, a trail of messages were scattered after a physical gathering as people continued the conversation, mentioned a forgotten bit of information, or gave thanks to the person who organized the gathering. "I forgot to give you back your CD!" "Thanks for the lift." "Thanks for coming out with me today!" In the past, the common practice was to say "thanks for last time," on the next occasion of a phone call or a meeting. A newly emergent norm is that these exchanges happen as people scatter to return home on foot or public transportation. The dead time in transit on the way home is now occupied by the fading embers of conversation and contact.

While all planned encounters have always had some element of prior contact (making a phone call to arrange a meeting, confirming by email, etc.) and post contact (saying thanks the next time you call or meet), the keitai makes these situations contiguous rather than disjunctive, stitching them together into a technosocial gathering that extends beyond the time and space of physical co-presence. This stretching of prior boundaries of what it means to "be together" does not mean, however, that the social order attached to these gatherings has eroded. In all the cases presented, we can see the construction of new technosocial settings and situations that have clear expectations for interaction and role performance.

### **From Technosocial Situations to Technosocial Orders**

The cases we have presented of technosocial situations and settings enabled by keitai email are hints of a broader sets of shifts in what Meyrowitz (1985) has called the "information systems" that structure the availability of information and social contact in particular situations. We consider these situations as part of changing technosocial orders that structure urban life in Japan. While it is impossible to extrapolate from these cases what the overall contours of these

technosocial orders are, we can hazard a few guesses as to certain trends and changes in experience these cases suggest.

One shift we are seeing is a change in our sense of what it means to be co-present, to share a social and physical space. Keitai email constructs a space of connectivity that relies on a pulsating movement between background and foreground awareness and interaction as people shift from lightweight messaging to chat to flesh meets. Occasionally contact is severed entirely, as when someone enters a business meeting or the bathtub, but for many heavy keitai email users, it is becoming more the norm than the exception that a certain level of ongoing connectivity is expected. Particularly in the case of couples who have a sense of close intimate connection but who do not share a home keitai email inscribes a concrete new social setting for private and pervasive togetherness.

Another shifting balance is between serendipitous to intentional contact. The experience of contact with anonymous others in dense urban spaces like Tokyo has changed with the widespread adoption of the keitai Internet. Public transportation and meeting places were previously sites for "people watching" and occasional lightweight contact with strangers. While these more longstanding forms of urban interaction persist, there is a broadened palette of social possibilities in these settings. Through keitai contact, these locations can also become settings for intimate and private contact with physically absent others. This is related to what Matsuda (this volume) describes as "selective sociality." Even when traveling through urban space solo, mobile messengers make lightweight contact with others, updating friends about their whereabouts, beaming some news about a hot sale, transmitting a photo of a celebrity sighting. Urban space has become a socially networked space criss-crossed with the flow of messages.

This paper has used the case of keitai email to extend practice-based theories of place and setting to take into account the role of a new media technology. We have argued that new networking technologies structure emergent technosocial orders as much as they erode the boundaries of prior ones. Research must be attentive to emergent technosocial places as well as prior senses of place to avoid a technically determinist assumption that electronic media necessarily erode social boundaries and the integrity of place. While it is crucial to attend to the structuring influences of physical places and architectures, networked and online infrastructures are also becoming increasingly salient. The concept of "technosocial situation" relies on a formulation of place and setting that accounts for flows of electronic media but is still grounded in material architectures and structuring social orders. Unlike Internet ethnography, which has often been productively pursued with a focus on a bounded online space, keitai ethnography insists on accountability to both electronic and traditionally located architectures. It is thus a productive object for examining hybrid technosocial situations that navigate settings defined by longstanding senses of place such as the train, restaurant, or classroom, and those enabled by the exchange of electronic media. We have described mobile text chat, ambient virtual co-presence, and the augmented flesh meet as technosocial situations located in concrete social, electronic, and material architectures that span geographically bounded definitions of place.

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<sup>ii</sup> When examining the practices of those that use substantial amounts of electronic interpersonal communication, physical gatherings are often the marked category, as in the description "flesh meet" for a physical gathering of an online community, often called "*offukai*" or "offline meeting" in Japan. I borrow the term flesh meet to refer to a physically co-located gathering.

<sup>iii</sup> By "situationist" Myerowitz is referring to sociological work that focuses on the details of situated action, not to the political and artistic movement known as "Situationist International."

<sup>iv</sup> Although we depart from the methodological details of conversation and interaction analysis, our work is broadly inspired the related commitment to studying emergent and dialogic practice (for example, Duranti & Goodwin, 1992; Tedlock & Mannheim, 1995). Studies of how people incorporate technologies and artifacts into everyday practice are particularly relevant to our perspective (for example, Lave, 1988; Suchman, 1987).

<sup>v</sup> The messages have been translated into relatively standard English though the Japanese text includes abbreviated forms and idioms similar to what has been reported for texting in other languages. The Japanese versions of smileys have been left as is. The notes in parentheses are actions reconstructed through the communication log and subsequent interview.