

**Everyday Contexts of Camera Phone Use:
Steps Toward Technosocial Ethnographic Frameworks**

**Daisuke Okabe
Keio University**

**Mizuko Ito
University of Southern California and Keio University**

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Introduction

A friend you have not seen for a while, a pet's endearing gaze, Tokyo Tower, a funny-looking stuffed panda, gorgeous parfait at a new café, a classmate who has just fallen into a puddle, a child opening wide for a spooned-in mouthful, or a miniature milk package on an airline tray -- the camera phone makes it possible to take and share pictures of the stream of people, places, pets and objects in the flow of everyday life. Around town, and particularly at tourist spots, the sounds of the camera phone's shutter have become an unremarkable part of the setting. Although the camera phone has only recently become a fixture in everyday life in Japan, already it feels like a familiar presence. It is the latest portable media technology to become commonplace, one more component of the layered information and media ecologies that overlay our everyday experience in urban Japan.

This paper reports on an ethnographic study of camera phone usage in Tokyo, based on a diary study of usage patterns. First, we briefly describe the current state of camera phone adoption in Japan, and introduce our methodology and conceptual framework for this study. We frame our study as an example of adapting traditional anthropological approaches to the study of everyday practices that are distributed across real and virtual settings. The body of the paper describes emergent practices of camera phone use in Japan, providing concrete examples from the ethnographic material. Camera phone use is still very much an emergent practice, though we are beginning to see some usage patterns stabilizing. There are indicators of practices of picture taking and sharing that differ both from the uses of the stand-alone camera and the kinds of social sharing that happened via mobile phone communication (Kato, Okabe, Ito, and Uemoto 2005; Okabe and Ito 2003).

Camera Phone Adoption and Research

Built-in camera functions are now a popular and accepted add-on to the mobile phone. The camera phone is part of an overall trend towards non-voice functions in the mobile. Recent years have seen a shift to email as the dominant modality for mobile communication, now exchanged more frequently than calls in Japan (Matsuda 2005; Okada 2005). More recently, this email exchange is coming to include photos and moving images. In October 2000, J-Phone (now Vodafone) launched its first camera-

phone handset, the J-SH04, to a skeptical population. In particular, the introduction of a terminal with the “Sha-mail”(photo mail) function by J-Phone in November 2000 changed mobile phone practice, making it possible to send each other photographs with the mobile phone. According to estimates by the Telecommunication Carriers Association (TCA), camera phones now comprise over 60% of all mobile phones in use in Japan. The trend is towards camera phones becoming a standard feature of mobile phones and it is clear that they are here to stay.

Camera phone development has advanced dramatically in a number of areas, particularly in the resolution of images. High-end terminals can reach the 2-mega-pixel level, and they might include features such as auto focus, optical zoom, and removable memory card (Kato, Okabe, Ito, and Uemoto 2005). Although research on camera phone usage in Japan is still limited, some survey work is indicating certain patterns of usage. In a multiple-choice survey by japan.internet.com (2003) asked how they used photos taken by their camera phones, almost 90% of respondents answered that they “view them on their handset,” followed by “use them as wallpaper for their mobile phone” at almost 60%, with “email them to friends and family” at over 50%, and “upload them to a PC” trailing at 35%. In a survey of 300 Internet users (men and women between the ages of ten and fifty), japan.internet.com (2003), found that 65% reported using a camera phone. In response to the question, “In what kinds of settings and for what purposes to you actually use the camera function?” the most common answer (75%) was “recording and commemorating moments with family, friends, acquaintances,” followed by “recording and commemorating interesting or unusual things in everyday life” (69%) and “travel photos such as of scenery” (39%).

As camera phones spread in Japan and other countries, we are just beginning to see the emergence of an international empirical corpus on related usage patterns. Most of the early qualitative studies of camera phone use have been based on quasi-experimental methods that involve providing image capture and sending technologies to users (Koskinen 2005; Koskinen, Kurvinen, and Lohtonen 2002; Ling and Julsrud 2005; Van House, Davis, Ames, Finn, and Viswanathan 2005; Van House, Davis, Takhteyev, Ames, and Finn 2004), or reducing some of the barriers to image capture and sharing among existing users (Ito 2005a; Kindberg, Spasojevic, Fleck, and Sellen 2004). In both of these cases, the approach tends to be focused on anticipating future uses of technical capacities that are not yet well established as consumer technologies (see Koskinen 2005). By contrast, like Oksman’s chapter in this volume and the work of C. Riviere and C. Licoppe in France (2004), our work described here represents naturalistic observations of camera phone usage among existing users. Because Japan is among the first national contexts to have widespread popular adoption of camera phones, we have been in a unique position to conduct more naturalistic observations of an emergent but popularly adopted set of technologies. In other work, we have taken a more experimental approach in piloting a new set of technological capabilities among existing camera phone users (Ito 2005a). The state of the field in camera phone research is indicative of the social study of new technologies more generally, which tends to hybridize future-oriented methods from technology design with methods from the social sciences which have traditionally focused on the study of existing social patterns. Here, we use our study of camera phone usage as a way of illustrating a particular form of methodological hybridization that focuses on the strengths of an anthropological method, while also responding to ongoing

changes to the technologies underlying our social activity. In this, our work is focused on documenting existing practices rather than designing for new ones, but we hope to demonstrate the relevance of our approach in uncovering resilient patterns of behavior that can inspire reconsideration of technosocial engineering.

Research Design

Our Studies

Our research on camera phone grows is part of a broader research program that is examining the use of portable ICTs in urban Japan, centered at Keio Shonan Fujisawa Campus near Tokyo. We began our research in 2000, with exploratory interviews with college and high school students. After that, we designed a diary-based study of mobile phone use reported on elsewhere (Ito 2005b; Ito and Okabe 2005) and adapted from the study reported in Grinter and Eldridge (2001). This method of study relies heavily on self-documentation and self-reflection on the part of the participant. We begin with a pre-interview to get basic background information and train the participants in the self-documentation process. Participants are asked to note every instance of mobile phones use and the context in which the usage occurred. In the diaries, they note the time of 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 the period of self-documentation, we conduct an in-depth interview where we gather more information about their ICT habits, and go over the content of the diary in detail. Participants are compensated for their time. This has varied somewhat depending on the specific study they are involved in, but for diary studies we have offered the equivalent of about \$200 USD.

The camera phone research described here relied on an adaptation of these self-documentation protocols in a follow-up study focused on camera phones users. The central body of data is a set of "camera phone diaries" and interviews collected between August-September 2003. In addition to the content of our standard diary, participants were asked to keep records of photos taken, received, and shared off their mobile phone. After completion of the camera phone diaries, we conducted in-depth interviews to understand more detailed information about the context of camera phone use. Our study involved two high school students (aged 17-18), eight college students (aged 19-23), two housewives with teenage children (in their forties), and three professionals (aged 29-34). Every participant was asked to submit their latest 10 pictures. All participants resided in the Tokyo Kanto region.

The distinctiveness of our data collection method lies in the combination of detailed and contextualized observational data collected by the participants themselves, and in-depth interviews where researchers and participants co-construct the meaning and patterns behind the observational data. In the case of private and mobile communications, it is not realistic for an ethnographer to directly observe all of the interstitial communications and information access that mobile phone users engage with. It is also not sufficient to only collect usage logs, since we are seeking the contextual information

on location, setting, and situation in addition to information on communication itself. While retaining an ethnographic commitment to capturing details of everyday behavior in the contexts that they occur, our approach departs from a traditional anthropological method which relies on the ethnographer participating in, observing, and documenting behaviors and settings. While we have conducted observational studies of mobile phone use in public transportation (Okabe and Ito 2005), most of our research takes a person-centered rather than a location-centered approach. While the mobile phone has significantly reshaped the logic of urban space, we believe that the mobile phone's primary context of meaning is located in relation to personal communication and identity. By focusing on personal meaning and relying on a self-documentation method, our participants begin taking a role akin to research collaborators or assistants. We pay them for their time and effort, and they also have access to the data that they generate. Of course, this does not mean vacating our role or perspective as professional researchers and social scientists in structuring and interpreting the data. The diary provides the framework and discipline for documenting activities that laypeople would not generally document or even recall otherwise. Further, it is through the final interviews that we ask participants to reflect on their activities and verbalized the logic of their practices in terms of our research categories and frameworks.

Conceptual and Methodological Framework

This paper builds on the conceptual framework developed in our earlier studies, where we have examined new kinds of "technosocial situations" that are emerging through mobile phone usage, where users assemble social situations as a hybrid of virtual and physically co-present relations and encounters (Ito and Okabe 2005). For example, one key technosocial situation we have identified is "ambient virtual co-presence," where users use text messaging to inscribe a space of shared awareness of one another, sending messages that are primarily designed to keep in touch, rather than to communicate specific bits of information. This paper extends this framework to the use of camera phones, where we have seen similar kinds of technosocial situations emerging, though inflected in new ways due to the visual dimension. For example, the situation we identify as "intimate visual co-presence" grows out of the idea of "ambient virtual co-presence" but is a more intimate and restrictive social sphere due to characteristics specific to visual sharing.

By mobilizing a situational frame, our studies represent a translation of traditional ethnographic analytic frameworks to newly technologized social practices. Our technosocial framework has dictated our data collection methods as well as our mode of analysis. Much of what has been traditionally been considered stable locations, contexts, and infrastructures for social action are in flux, and increasingly distributed and technologically dependent. Certainly many types of activities can be pursued with a spatially localized form of participant observation that analyzes behavior as structured by face-to-face and physically localized interaction. In places like Japan, however, more and more social and cultural context is mediated and spatially distributed, requiring ethnographers to capture and document these fragmented activities, as well as develop ways of analyzing them that take into account their unique characteristics. With the advent of the mobile phone, in particular, remote social relations and cultural contexts are

omnipresent in all settings of action, mobilized with the touch of a keypad and always close at hand in a pocket or a handbag.

Our analytic challenge has been to retain an anthropological focus on native meaning and situated practice, while also recognizing the importance of remote and mediated meanings and social relations. Much of the work in technology and design studies is primarily interested in the specifics of individualized activity and interaction, rather than on cross-cutting communal and cultural structure surrounding the activity. By contrast, most work in anthropology prioritizes settings for behavior that are spatially localized and communal rather than private, atomized, and distributed. We hybridize these approaches by developing analytic categories that are embedded in established social structures and systems of meaning, but are newly embodied through technical mediation. Our categories of technosocial situations emerge from the specifics of the technologically enabled activities we have observed, but rely on meanings and structure more general than these specific situations. For example, our concept of newsworthiness in photo sharing grows out of the more general and longstanding of native concept of “neta” that manifests in a wide range of cultural domains. Similarly, our categories of couple intimacy and peer group interaction are not specific to camera phone usage, but are grounded in our ethnographic understanding of the structure of Japanese society. In other words, we try to stay true to two key anthropological tenets: The first is to take the native’s point of view (Geertz 1989) rather than mobilizing categories of meaning that are primarily analytical and have no local counterpart. The second is to base our analysis on patterns of meaning and social structure that cross-cut domains that are institutionally distinct. For example, cultural categories of gender difference or personal versus public are mobilized settings ranging from educational, religious, recreational, and political domains (Yanagisako and Delaney 1995). Anthropological analysis thus seeks to relate the specific situation and activity in question with resilient and generative native categories and structures.

In this, our analytic approach differs from a strictly ethnomethodological approach that deals with activity as emergent in interaction rather than generated as part of a pre-existing social and cultural system. Our approach also differs from certain sociological frames that seek to develop analytic or technical categories that transcend the specifics of local social and cultural structures. Reviewing existing camera phone studies may provide some specificity to these general claims. For example, Koskinen et al. (2002) take an ethnomethodological approach that focuses on the details of turn taking and interaction in the exchange of messages, but does not seek to analyze the content of these exchanges in relation to pre-existing social and cultural categories. In a more recent study, Van House et al. (2004) develop categories based on “higher-order motives” for mobilizing personal photos: social relationships, self-expression, and self-presentation. These categories are targeted to provide a rubric that can generalize across current and emergent technologies in order to inform design. Although their categories are quite different, Kindberg et al. (2004) also work to develop categories that are primarily theoretical rather than native, creating a grid of social versus individual, and affective versus functional in categorizing camera phone photos. Ling and Julsrud’s (2005) analysis of genres in multimedia messaging is probably closest to the analytic approach that we take, identifying culturally recognizable frames for communication. But their approach is experimental rather than naturalistic, so differs from ours in the nature of the

intervention and data collection. In contrast to design-oriented studies that seek to optimize human-device interaction and drivers of activity, our analytic frame is oriented primarily towards understanding native contexts of meanings and frames for action.

Our analysis is not optimized for the analysis, testing, and critique of specific technical affordances, but this does not mean it is irrelevant for design and engineering. Our goal is to provide descriptions that present the native point of view and the phenomenology of experience in everyday life in Tokyo, which can ideally put designers and engineers into a local frame of understanding that may differ from their existing one. Further, the underlying systems of meaning and social structure woven into our categories are generative and resilient and will continue to structure emergent behaviors. Our argument is that technical structure is inseparable from structures of culture and society. Thus even design efforts that are technology focused and don't intervene in cultural or social negotiations need to be approached as an intervention into incumbent technosocial systems. Based on our commitments to a technosocial frame of ethnographic analysis, we have arrived at categories of practice that are keyed to native frames for action. These are personal archiving, intimate visual co-presence, and peer-to-peer news and sharing. The first might be considered a kind of personal self-authoring practice that is unique to the visual medium of photography. The second two are extensions of the kinds of technosocial situations we have observed in prior forms of mobile media exchange, revolving around the sharing of information among close friends and families. Overall, these uses conform to a more general pattern we have observed in our research towards personal, portable, and pedestrian forms of technology use through the use of handheld devices (Ito, Okabe, and Matsuda 2005). Mobile phones and camera phone use are enabling forms of communication and information access that are closely tied to the everyday, personal, and street-level visions of its users.

Technosocial Situations of Camphone Use

Personal Archiving

Compared to mobile email, camera phones have a personal collection and archiving function. Most photos taken by the camera phone are not sent or shown to others, but are captured more as a personal visual archive. Camera phones enable personal visual archiving and authoring, a street level everyday visual viewpoint.

One type of visual capture for personal use is visual note taking. For example, we saw one user snapping a photo of a job advertisement poster and another taking a picture of the titles of some books she intended to track down in the library (Figure 1).



Figure 1: Recording book titles and publisher information

Okabe: Is this at a bookstore?

Interviewee: Um, it is at a used book district. Each copy was really expensive, about ¥4000. I thought “These I will borrow from the library,” so this photo is really a memo to myself. Lately I take photos of things I want to buy. Like, I want to buy this book.

Okabe: Did you really do that?

Interviewee: Yes, I did look for the book in the library.

This kind of visual note taking is relatively infrequent among the cases we recorded. When they are no longer needed, these kinds of photos tend to get erased from memory. A more common practice is to spontaneously take a photo of some scene or viewpoint on everyday life. For example, one 20-year-old college student snaps several pictures a day with her camera phone: a really large shell that she found on a beach; a photo of an interesting view from an escalator at a station that she frequents (Figure 2). Dog pictures (Figure 3) were taken by female high school student, age 16. She often takes photos of her family pet dog, when it acts cute.

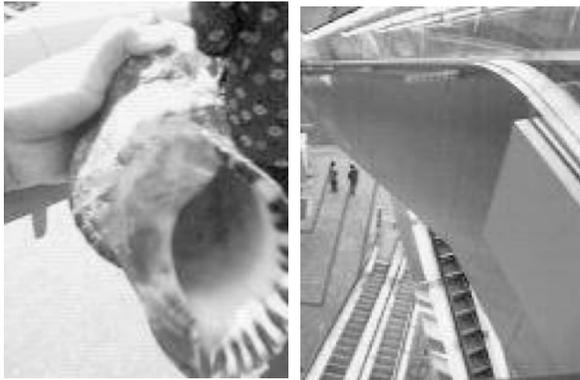


Figure 2: A picture of a large shell (left), and an escalator in the station (right)



Figure 3: Pictures of a cute pet

These photos of mundane scenes are indicative of an emergent practice of visually archiving an individual’s everyday life. These photos are not posed or staged, or particularly well-framed or thought out. Rather, they are snapped casually, with the

intention of possibly looking at them a little later, recording a momentary slice of a viewpoint on everyday life. The following photo (Figure 4) and interview is indicative of this kind of casual attitude towards photo taking.



Figure 4: A photo of a view of Yokohama Bay taken when out with a friend

Okabe: This is the ocean, or rather the bay?

Interviewee: Yes

Okabe: Were you out with a friend, just hanging out and it was like “okay, I’ll just snap a photo”?

Interviewee: Yeah, I think we were just hanging out.

Okabe: How casual was the photo?

Interviewee: I was just walking along and thought, oh, this looks nice.

Okabe: And you got your mobile out.

Interviewee: I thought if I snapped it I might remember it just a little later.

Most of the photos that people take are not intended be sent to others. One example we gathered was particularly indicative of this sense of personal visual collecting. In the following interview, a college student describes a photo she took as an *omamori* (good luck amulet). In Japan, people often carry *omamori* simply to have a trusted spirit close by. This student sees her photo as a similar kind of presence.

Interviewee: ...There are seven students at that farewell party. I took the photo of my professor’s profile while he was talking.

Okabe: Did you send or use this picture?

Informant: No, this photo is just an *omamori*.

Within the broader ecology of personal record-keeping and archiving technologies, camera phones occupy a unique niche. One participant says, “The camera phone is my eye. The personal viewpoint is the most important thing.” These are not random photos, but rather are highly personal viewpoints on everyday life that are archived on the small screen. Most of our informants described a unique pleasure in building this personal viewpoint archive. Most of these photos only have meaning to the individual who took them, a quality that makes them even more valuable as a resource for personal identity construction.

Intimate Visual Co-Presence

The photos described thus far were saved on an individual's handset and were not shared with others. In contrast to personal uses, photo sharing provides a window into the organization of social relations through these new technologies. We are finding that the sharing of photos is related but interestingly different from some of the patterns we have seen with mobile email exchange.

Many noted that sharing photos feels more "intrusive" than email, and tend to feel more narcissistic. This is particularly true for photo mail as a "push" modality that gets sent uninvited. Most of the sharing we saw of photos was off the handset screens. People would show their friends the photos they had in their phone on occasions that they got together. We have found that photos are generally only emailed to intimates such as a lover, spouse, or very close friend. In the case of mobile email, we found that most people had regular exchanges with 2-5 others, but not more than 10 people (Ito and Okabe 2005). With photo mail, the circle for exchange tends to be even smaller and the content more selective.

We would first like to describe some examples of people sharing photos off of their handset screens. In the following interview, a collect student describes how he went out to Yokohama with a childhood friend, and later showed the photos to his mother.

Okabe: So your friend from sixth grade in Yokohama, you still get together?

Interviewee: Yes, I we still get together.

Okabe: This is from when you two went out?

Interviewee: Yes.

....

Interviewee: This is a picture I took with my friend.

Okabe: Why did you take it?

Interviewee: I took it thinking I would show my mom. My friend's appearance really changed compared to elementary school.

Okabe: Oh, so you were meeting with your friend occasionally even after elementary school, but you mom had not seen her.

Interviewee: That's right.

Sharing photos with close friends by showing them the keitai screen is a common practice. There are technical and economic reasons why people don't email photos to each other very frequently. Generally photos cannot be sent between people subscribed to different carriers, and the packet fees for sending photos are expensive. But there are also interesting social reasons that limit people's emailing of photos. Apparently, in comparison to sending text messages, sending photos is perceived as "intrusive," and "narcissistic." The following photo (Figure 5) and interview excerpt indicate this view. One college student send a photo of herself with a new hairstyle to her boyfriend, with the comment, "How does this look?"



Figure 5: Taking a photo of a new hairstyle and emailing it to her boyfriend

Interviewee: I might take a quick photo of my hairstyle and check if it looks okay. This is at home. I'd take 2 or 3 and pick one that looks good and send it out asking if it looks okay.

Okabe: To who?

Interviewee: I guess to my boyfriend. I had plans to see him the next day... If my boyfriend had a camera phone I would send it, saying "What do you think?" But he doesn't have one now. I could never send a picture like that to a friend. They'd think I was an idiot. What point is it to look at friend's face like that?

In this interview, she describes how she would send a photo of a new hairstyle to a boyfriend but not to a girlfriend. Decisions of whether to send a photo or what kind of photo to send are made based on social relationships and levels of intimacy. This same college student made a different kind of decision with respect to a photo of some steamed sweet bean buns that she made (Figure 6). After she made them, she sent this photo out to several of her friends with the caption "Look, look what I have cooked!" Unlike the photo of herself, she felt that this was something she could share with friends. It seems the reason for this was that it was less narcissistic than a picture of herself, and it was a more "newsworthy" even than a new hairstyle.



Figure 6: Home-made steamed sweet bean buns, sent to close friends

Figure 7, like the picture of the steamed buns, was a picture shared between friends. In the interview, our research subject says how he feels that if it is between very close friends he feels that picture sharing is appropriate, and he might share a picture in exchange for one received. The photograph below was received by a female professor,

age 34, while she was away on a business trip overseas. Her husband emailed her a camera phone photo of their son riding a two-wheeler for the first time (Figure 8). It is an example of a photo that is newsworthy among the circle of the nuclear family, another social unit that shares a level of intimacy comparable to couples and close friends.



Figure 7: A photo of home-made hamburger steak



Figure 8: A photo of a child riding a bike, sent between parents

Interviewee: This is a picture of some hamburger steak I made.

Okabe: Can you tell me the context for this photo?

Interviewee: This one—a professor that I am close to sent me an amazing photo of a flying frisbee. I felt like I needed to send some kind of image in return. I happened to be making hamburger steak, so I thought I would just send this off to him.

Interviewee: When that first frisbee photo arrived, you didn't think it was annoying?

Interviewee: Not at all. I thought it was really fun and it made me happy.

Okabe: When you sent the photo of the hamburger steaks you made, did you attach some text?

Interviewee: Yes, I did, I wrote, "Aren't I an independent guy?"

These examples demonstrate how the sharing of photos is tied to a sense of "distributed co-presence" that we have found people constructing through the exchange of texts messaging (Ito and Okabe 2005). In the case of text messaging, people will often email intimates with information about their current status, such as "I'm walking up the

hill now,” or “just watched a great TV show.” The visual information shared between intimates also represents a similar social practice, of sharing ambient awareness with close friends, family and loved ones who are not physically co-present. As in the case of the prior mediums of text and voice, these communications are part of the construction of “full-time intimate communities” (Nakajima, Himeno, and Yoshii 1999) or what Ichiyo Habuchi (2005) has called a “tele-cocoon.” These perspectives are based on a growing body of work on mobile phone use in Japan is showing that people generally exchange the bulk of their mobile communication with a relatively small and intimate social group of 2-5 others. The exchange of communication with this group, in turn, becomes a reflexive process of self-authoring and viewpoint construction.

Peer-to-Peer News and Reporting

In addition to the ongoing mundane sharing of visual information between intimates who are in close touch, camera phones are also being used to capture and share what people consider more noteworthy events that others might be interested in. In Japanese, “material” for news and stories is called “neta.” The term has strong journalistic associations, but also gets used to describe material that can become the topic of conversation among friends or family: a new store seen on the way to work; a cousin who just dropped out of high school; a funny story heard on the radio. The following photos represent this kind of *neta* photo taken by young people and shared between peers.



Figure 9:

Neta photos of a matrix-style move (left), a student who passed out drunk and got vandalized by friends (center), and an odd statue sited in town (right)

Camera phones provide a new tool for making these everyday *neta* not just verbally but also visually shareable. These moment might have been talked about between friends, but now are captured visually and enter the stream of conversation and exchange. Figure 10 shows embarrassing moments caught on film by a professor. One student just fell into a puddle, another student got drunk and wrapped toilet paper around his waist and stuck on a “beginner driver” sticker at a lab party.



Figure 10: A student who fell into a puddle (left), a drunk student who wrapped toilet paper around his waist and stuck on a “beginner driver” sticker at a party (right)

The following photo (Figure 11) also represents an image in this vein. In the interview about this photo, the college student who took the photo (age 23), describes how he captured the image intending it to share with others in the near future.



Figure 11: A can of beer stuck to a forehead without the use of adhesives

Interviewee: This one—when I was fooling around with a friend a can got stuck to his forehead [laugh].

Okabe: What happened to this photo? Did you send it to someone?

Interviewee: I did. This is kind of interesting so I held on to it. It’s an interesting image.

Okabe: Did you show it to anyone?

Interviewee: Yes, I did. I showed it to some friends.

My last example (Figure 12) is directed toward a somewhat different kind of audience than the family and friends that are generally the recipients of camera phone images. This research subject has an online photo journal site that she sends her camera phone photos to. The site is public, so could be viewed by anybody.



Figure 12: A panda ride at an amusement area on the roof of a department store

Interviewee: This next one is of a really scary panda ride. It is a panda with sunken eyes at an amusement park at the top of a department store. This one was on its way to [the photo journal site] yapeus. It was really scary.

Okabe: Were you thinking of yapeus when you took the photo?

Interviewee: Yes.

...

Okabe: Is this more like *neti* than just a regular everyday photo? When you send a photo are you selecting things that some anonymous viewers might think is interesting?

Interviewee: Yeah. I think of if people will get it, things that I want to say “Look! Look!”

Okabe: Is your own personal viewpoint important?

Interviewee: Yes, that is the key thing.

Through the capture and sharing of small but significant visual events in people’s lives, camera phones are contributing to a kind of everyday photojournalism, where people are attentive to images and events that might be interesting or newsworthy events. Some of these photos might make it onto a photo journal site or into the news if the photographer happens to capture an event newsworthy to a general public. But most of these photos are trafficked among peers, and are newsworthy only among friends and families. We would argue that the transformation of “news” in the hands of these amateur photographers a less spectacular, but perhaps more significant shift in behavior and visual awareness than the photos that might grab the latest headline on a news site.

Conclusion

The practices we have described of capturing and sharing visual information are inseparable from social relations and contexts, and grow out of the patterns of mobile phone use that have been established through voice and text exchange as well as practices of amateur photography and resilient categories of social relationships. This includes the authoring of personal life stories through photographs, the construction of distributed co-presence through mobile media exchange, and peer-based sharing of news and stories. In conclusion, we would like to comment on some of the unique social practices that are being constructed through the merging of the mobile phone and the digital camera into a single device.

The social function of the camera phone differs from the social and cultural position of the camera and the phone in some important ways. In comparison to the traditional camera, most of photos taken by camera phone are short-lived and ephemeral images. The camera phone is a more ubiquitous and lightweight presence, and is used for more personal, less objectified viewpoint and sharing among intimates. Traditionally, the camera would get trotted out for special excursions and events -- noteworthy moments bracketed off from the mundane. By contrast, camera phones capture the more fleeting and unexpected moments of surprise, beauty and adoration in the everyday. The everyday is now the site of potential news and visual archiving as a user might snap a scene from a familiar train station or a friend who just fell into a puddle. By embodying the characteristics of the mobile phone as a "personal, portable, pedestrian" device (Ito, Okabe & Matsuda 2005), the function the camera has shifted.

One consequence of this more personal and pervasive viewpoint is that the camera is more strongly associated with an individual and intimate viewpoint. The traditional camera tended to take on more of the role of a third party, photographing a group photo or a scene that is framed in a more distanced way. The camera phone tends to be used more frequently as a kind of archive of a personal trajectory or viewpoint on the world, a collection of fragments of everyday life. This kind of archiving is unique to the visual medium, in the sense that photos are often taken for purely personal consumption, where as text messages are generally created with the intent to share with others.

Sharing of visual information, by contrast is a more selective and intimate enterprise than sharing of text. Users are still working out the social protocols for appropriate visual sharing, but seem to take pleasure in the adding visual information to the stream of friendly and intimate exchange of opinions, and news. Camera phones enable an expanded field for chronicling and displaying self and viewpoint to others in a new kind of everyday visual storytelling. Camera phones makes ubiquitous visual access to others possible. In other words, the gaze of others is always present as a potentiality, leading to a heightened sense of visual awareness and a growing centrality of images in the ongoing social exchanges of everyday life. The camera phone is the latest addition to our technosocial repertoire that enables us to mobilize our existing social relationships and systems of meanings in ways that are both innovative and locally intelligible.

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