Seeing with Mobile Images: Towards Perpetual Visual Contact

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Abstract

The last fifty years have witnessed a sustained semiotic, sociological and cultural attack on the notion that photographs picture reality. These criticisms have been based on traditional photography, whether stills or video. This paper continues this criticism. I focus on visual practices in a new environment, mobile multimedia messaging, where people are in a visual contact potentially perpetually. I analyze several examples of such messaging recorded in Helsinki and Southern Finland in 1999-2002. These practices consist of both ways in which senders make their messages interesting for recipients, and in which recipients' take action on their own. In discussion, I argue for a naturalistic analysis of mobile multimedia messaging in perpetual visual contact.

Key words

photography, mobile phones, mobile multimedia messaging, conversation analysis.

About the author

Ilpo Koskinen is a sociologist who works as a professor of industrial design at the University of Art and Design, Helsinki. His Ph.D. is from the University of Helsinki. Originally trained in conversation analysis, he got interested in studying how people interact with each other through technology. In his work, he tries to bridge the gap between the social sciences and the quickly developing field of design research. Mobile technology is one of his research areas. In this area, his main publications in English are *Mobile Image* (Helsinki: IT Press, 2002, with Esko Kurvinen and Turo-Kimmo Lehtonen), which was the first study on the uses of mobile multimedia, *Empathic Design* (Helsinki: It Press, 2003), and several articles. He has also written about the social order of meetings and gossip, as well as industrial design in manufacturing. Currently, he works on an interpretive methodology for designing for user experience.

1. Introduction

At the end of 2003, Siemens estimated that up to 30% of phones sold in Europe in 2004 would have a built-in camera. Worldwide, 84 million camera phones were sold in 2003; the estimate for 2004 is 150 million. This is more than the sale of digital cameras during the same period; camera phones are fast becoming the dominant technology of digital imaging.[1]   In 2003, the biggest companies on the market were NEC and Panasonic, with 15% of the market each, and Nokia, with 14%. Indeed, the largest digital camera manufacturer in the world in 2003 was Nokia rather than Sony or Canon. If we are moving towards a culture of mobile multimedia, how is it evolving?[2]

2. From Kodak Culture to Mobile Multimedia

Perhaps the most sophisticated attempt to understand ordinary photography is Richard's Chalfen's concept of *Kodak Culture*. In line with the performative movement in folklore, he examines the "home mode of imagery," the Kodak Culture:

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[1] See www.infotrends-rgi.com, accessed March 26, 2004; www.wireless.info, accessed March 26, 2004.

[2] In this paper, mobile multimedia is a general category for mobile devices capable of sending and receiving multimedia content (text, audio, images, and video). MMS refers more narrowly to multimedia messaging service.

Kodak Culture will refer to whatever it is that one has to learn, know, *or* do in order to participate appropriately in what has been outlined as the home mode of communication… By studying Kodak culture, we want to learn how people have *organized themselves* socially to produce personalized versions of their own life experiences… We want to consider how ordinary people have *organized their thinking* about personal pictures in order to understand certain pictorial messages and make meaningful interpretations in appropriate ways. We also want to learn how Kodak culture provides a structured and patterned way of looking at the world… we are examining how a 'real world' gets transformed into a symbolic world.[3]

Functionally, however, images do not just document our lives by creating visual histories, validating, preserving, and encapsulating them, but also act as *aide de memoire*, as memory banks, and as tools of cultural membership. In photos, people do things right and grow into various membership roles. For example, children learn the signs of success and appropriate modes of kinship. Photography reifies previous and on-going social bonds, documents their change, and creates order in a mundane world.[4]

However, this analysis cannot be applied in a straightforward way to mobile multimedia. *First*, when cameras are built into mobile phones, imaging capacity becomes a potential part of perpetual *visual* contact.[5] People must remember to take digital cameras with them, but mobile phones follow people everywhere. Camera phones open

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[3] R. Chalfen, *Snapshot Versions of Life,* Bowling Green, OH: Bowling Green State University Press, 1987, p. 10.

[4] Chalfen, *op. cit.*, pp. 133-141; P. Bourdieu, *Photography. A Middle-Brow Art.* London: Polity Press, 1990; R. Barthes, *Image – Music – Text.* New York: Hill & Wang, 1964.

[5] J. E. Katz and M. Aakhus (eds.), *Perpetual Contact. Mobile Communication, Private Talk, Public Performance*, Cambridge: Cambridge University Press, 2002.

up new, mundane areas of life for photography, such as personally noteworthy, intimately share-worthy, and everyday news items.[6] *Secondly*, the mobile phone is a special environment for technical reasons. They provide text, audio, and sometimes video tools for augmenting images. Also, because of their poor image quality, they have quite specific "affordances": they are primarily fit for photographing people, and the explicating text/audio elements are particularly important. These features make this technology useful for practical and less practical activities alike.[7] *Thirdly,* as I have argued with my colleagues in *Mobile Image*,[8] mobile phones provide an interactive social context for photography: people may respond immediately to MMS messages.

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[6] O. Daisuke and M. Ito. Camera Phones Changing the Definition of Picture-Worthy. *Japan Media Review,* 2003. Annenberg School for Communication, USC. www.ojr.org/japan/wireless/1062208524.php. Accessed April 15, 2004.

[7] From asking for instructions to jokes and play: K. Nyíri, "Pictorial Meaning and Mobile Communication", in Nyíri (ed.), *Mobile Communication. Essays on Cognition and Community.* Vienna: Passagen Verlag, 2003; R. Grinter and M. A. Eldridge, "Y do tngrs luv 2 txt meg?", in W. Printz, et al. (eds.), *Proceedings of the 7th European Conference on Computer-Supported Cooperative Work ECSCW'01.* Dortrecht: Kluwer, 2001; T. Kopomaa, *The City in Your Pocket. Birth of the Mobile Information Society*, Helsinki: Gaudeamus, 2000; R. Ling, *The Mobile Connection. The Cell Phone's Impact on Society.* San Francisco: Morgan Kaufman, 2004, pp. 57-81; A. Mäkelä et al., "Joking, Storytelling, Artsharing, Expressing Affection: A Field Trial of How Children and their Social Network Communicate with Digital Images in Leisure Time", in *CHI Conference Proceedings: Human Factors in Computing Systems*, April, 2000.

[8] I. Koskinen, E. Kurvinen and T.-K. Lehtonen, *Mobile Image*, Helsinki: IT Press, 2002; for mobile telephony as exchange, see C. Licoppe and J. P. Heurtin, "Managing One's Availability to Telephone Communication Through Mobile Phones: A French Study of the Development Dynamics of Mobile Phone Use", *Personal and Ubiquitous Computing* 5, 2001, pp. 99-108; A. S. Taylor and R. Harper, "Age-Old Practices in the "New World": A Study of Gift–Giving Between Teenage Mobile Phone User", in

3. Seeing with MMS

Mobile Image proposed an "applied conversation analytic" perspective for studying mobile phones with an imaging capacity. Images as such are indexical, capable of supporting many interpretations, and get their meaning only in *the* context in which they are taken, processed, and viewed; there is no time out from indexicality. However, as we also argued, indexicality is not a problem for ordinary people who use whatever resources they have available to make sense of images and to reply to them, if they so decide. In *Mobile Image*, the most important resource was text that explicated the message, motivated it, and picked up elements for specific attention; images, in turn, provide evidence for the text. Thus, we analyzed mobile imaging in terms of mutually explicative text-image pairs rather than prioritizing one element over another.

Furthermore, we argued that mobile images are methodic in two ways. People who compile messages resort to a set of methods. For example, they construct their messages as postcards, greeting cards, travel stories, family photos, and stories. Typically, text guides the recipients' attention, instructing recipients about the "preferred" interpretation and proper next action. Typically, recipients provide "proper" responses. For example, when people send an image announcing their engagement, they

get congratulations in response. However, recipients' action may be unconventional. For example, teases challenge the ordinary course of action.[9]

The senders and recipients of an MMS message face many kinds of interpretive challenges. *Senders* face interactional problems in deciding what is significant enough for sending and in deciding how to motivate the message. Somehow, they have to arouse the interest of the recipient.[10] *Recipients* also face interactional problems. Images in messages may introduce new people, objects, scenes, environments, and spaces to recipients, and thus open up possible questions. Some objects may be familiar but unidentifiable because of technical or "artistic" reasons. The intention behind an image may be unclear. Finally, they may have to respond to the sender's action, not just to the image. The image may be boring, but the text may still require a response.

This paper analyzes some of the methods used by senders to arouse the recipients' interest, and recipients' methods of responding to images in messages sent at their own initiative. The central premise of the analysis is that MMS cannot be interpreted in terms of a fixed set of needs or functions. It must be studied as a naturally occurring activity. Similar studies have been done on museum exhibits and art, and on diagrams in Physics

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[9] E. Kurvinen, "Only When Miss Universe Snatches Me: Teasing in MMS Messaging", in *Proceedings of Designing Pleasurable Products and Interfaces, DPPI'03*, Pittsburgh, PA. ACM, New York, 2003, pp. 98-102; K. Battarbee and I. Koskinen, "Co-Experience: User Experience as Interaction", *CoDesign* 1(1), 2004. (forthcoming).

[10] H. Sacks, "Doing 'Being Ordinary'", in H. Sacks, *Lectures on Conversation, Vol. 2*, Oxford: Blackwell, 1994, pp. 215-221.

classrooms.[11] Rather, we must situate MMS in interaction and study it as a set of methods people use in multimedia messaging. In MMS, seeing becomes an on-going social affair of messages and responses, augmented with textual, visual, and sometimes auditory means.

4. Data

For the Radiolinja MMS Study *(Radiolinja)*, we selected three user groups from a Radiolinja technology and service pilot. This study was conducted in 2003 with industrial designers Esko Kurvinen and Katja Battarbee, and several assistants in Helsinki, Finland. The study took place in summer 2002, and lasted about 5 weeks. Each user was given a MMS phone (either Nokia 7650 with an integrated camera or SonyEricsson T68i with a plugin camera). Three mixed-gender groups with 7, 11, and 7 members were studied. Out of the Radiolinja pilot, we selected groups to take into account gender difference, terminal types, and the urban/rural axis. Exact numbers are confidential, but the following figures point to the scale of messaging. In all, users sent over 4000 messages in the pilot, of which over 2000 were unique (the rest being duplicates in group messages,

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[11] D. vom Lehn *et al.*, "Exhibiting Interaction: Conduct and Collaboration in Museum and Galleries", *Symbolic Interaction* 24, 2001, pp. 189-216; C. Heath *et al.*, "Crafting Participation: Designing Ecologies, Configuring Experience", *Visual Communication* 1, 2002, pp. 9-34; E. Ochs, S. Jacoby and P. Gonzales, "Interpretive

or recycled messages). These data were produced through the Radiolinja system. As in *Mobile Image*, the service was free of charge.

For this paper, I have chosen a subsample consisting of 198 messages, all sent by the 3rd group during the third week of the pilot study, July 11-20, 2002. Participants knew that they were being studied, and were informed about the ethical procedures we used. In particular, I told them how the data was produced, promised not to publish pictures without their consent, and promised to change details of images so that it would not be possible to identify them from our publications. In addition, we have followed standard academic and legal practice and have changed all names and details that could identify people or places.

5. How Senders Arouse the Recipients' Interest

The simplest visual practice in MMS is when the text picks up a subset of possible objects from the image, thus instructing the recipients to see it in one particular way. Recipients typically ratify this selection as the key element in the image by focusing their next action around this instruction.

Journeys. How Physicists Talk and Travel through Graphic Space", *Configurations* 1, 1994, pp. 151-171.

To illustrate, we may look at the following two MMS messages. In (1a), four young women are in a cab going to a party. They call themselves "Barbies," with a slight sexual overtone, and ask Markku to pay special attention to "Patsy's" (Mari's nickname) cleavage. Leila's text selects one item from all possible items in the message, and directs the gaze that way. In (1b), Markku shows "embarrassment" with a gesture typical of a sudden exposure of nudity, and "demands" that someone should cover up the cleavage. In the reply, he also does several other things; however, the main point is that he goes along with Leila's selection. In this episode five people focus their attention on a detail in the image, making "Patsy's" dress a commentable issue. The image further situates the detail in a context of a taxi in not so many words. Five people come to coordinate their understanding of what is going on, and to focus their reaction to a detail in that activity.

By Leila 02/7/18 19:13 pm. Barbies in taxi. Note Patsy's cleavage

By Markku 02/7/18 19:43 pm: The starry-eyed fairy girl gave me such a humongous compliment that I got pretty flushed and embarrassed… Hmmm… Have fun but, for God's sake, cover Patsee's cleavage with a safety pin or something.

Message 1a-b.

Often, the recipient's interest is attached to the whole picture rather than to its specific details, as in the case of travel pictures. A colleague based in San Francisco told me recently how he had a few weeks earlier taken photographs with his mobile phone in Tokyo, and sent them to his wife. She had responded with text messages instructing him to take more photographs of certain places. Thus, a mobile phone enabled these two people to coordinate their vision across the Pacific.[12]

However, in most cases in ordinary life, the interest does not lie in the topic: if messaging is too banal, it may arouse requests to stop messaging.[13] People live in the middle of familiar surroundings, events, and routines: senders have to *make* drama out of the banalities of ordinary life. Occasionally, they *account for* sending images others might not appreciate. For example, in one message a picture of a pond was accounted for with the excuse "I know that some people find pictures of nature boring, but I can't help but rejoice when I find something beautiful in Korso." Korso, an outlying neighborhood in the Helsinki metropolitan area, has a poor reputation, and hence its beauty is remarkable. More often, senders use "interest arousers"[14] to guarantee the recipients' interest. For example, events depicted in the image may be characterized as funny, uncommon or shocking enough to make them worth sending.

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[12] The story was reported to me in Helsinki on March 2, 2004.

[13] See Battarbee and Koskinen, *op. cit.*

[14] Sacks, *op. cit.*, pp. 226.

6. Clarification Requests as Recipients' Action

In *Radiolinja*, not just senders, but also recipients take several actions related to images. Typically, these recipient-initiated "clarification requests" take place when there are unclear elements in the picture. The senders typically provide a response.

Perhaps the simplest example comes from the "evening out episode" already dealt with in Message 1a-b. In (2a), three young women are in party dress, happily drinking beer, as the text tells. In (2b), Markku takes a picture of his upper torso, and asks Mari to identify Ann.[15] The answer is in (2c). In this message, Mari first accuses Markku of being slow-witted, and then goes on to identify the people in the original message. In the final part of the message, she ventures into a description of her present hangover, and closes the message by describing her plan to go a rock festival later in the evening.

Importantly, in 2b, Markku also asks who is the fourth person in the scene, although there are only three in the picture. The fourth person, Mari, is implied in the process: she took the photograph. Here we see how Markku uses his common-sense knowledge of ordinary action to fill in a missing element in the message. Unremarkable as it is, this example also shows that people can see events, people and action "through"

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[15] Markku's message begins by complimenting Mari; this is a side issue related to a self-portrait Mari had sent him at 18:15.

photographs utilizing common-sense knowledge of social action.[16] For Markku, the image and the text in (2a) are an index of something else: a social action behind the image. The key feature of the perceptual organization in Markku's message is from the outside: it is not seeable in the original image, but provided for by him. Simultaneously, this understanding becomes his resource to initiate more action.

141_
From Mari to Markku 18:42, 02/07/18: We always have fun!

144_
From Markku to Mari 19:13, 02/07/18:
Wow! One of the best pictures of you. You look really good, I must admit. Which one is Ann in that group? And who's the fourth one? Emma?

151_
From Mari to Markku 05:37, 02/07/19:
What a redneck! AnnMARIE of course… In the middle in the group picture is Emma, and on the left Emma's friend whose name escapes me. I'm feeling bad, sweaty, and feel like throwing up, and I must go to work today. Then I have to buy a swimsuit, and as a bonus, a train ride to Jyväskylä to Betonirock. Oh my God :)

Message 2a-c.

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[16] H. Garfinkel, *Studies in Ethnomethodology*. Prentice-Hall, Englewood Cliffs, 1967, pp. 77-79.

Obviously, recipients take many kinds of things with messages they receive. For instance, they may ask the senders to elaborate their messages, thus leading to improved, more accurate understanding by focusing attention on details that would have gone unnoticed otherwise. Elaboration requests are typically done with text, but they may contain photographs as well. Notice that although these actions are familiar to everyone, their meaning lies in their consequences. For example, in Message 2a-c, Markku's clarification request not only leads to a more accurate understanding, but also to the sharing of significant social information.

8. Conclusions and Discussion

Literature on photography has focused on the semiotics, functions, or uses of images.[17] In contrast, I have analyzed images as elements in interaction which proceeds on a turn-by-turn basis.[18] Such imaging differs from photography for three reasons: first, unlike with regular cameras, people practically always have their mobile phones with them and can thus take pictures at will; secondly, since mobile phones are so ubiquitous,

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[17] See Barthes, *op. cit.;* Bourdieu, *op. cit.;* Chalfen, *op. cit.*
[18] Koskinen *et al., op. cit.*

people are in perpetual contact with other people; and thirdly, mobile phones offer a special technical environment for imaging.

MMS gives people means to interpret and share their life visually, and elaborate their experiences together.[19] This paper has given examples of several methods people use in solving problems that arise in this process. *Senders* have to secure the interest of the recipients, which, with few intrinsically interesting topics aside, is not a trivial task. To dramatize messages, senders account for sending messages others may find boring, and characterize events in pictures as somehow unusual, funny, or shocking. *Recipients* also face problems they solve methodically. For example, unclear elements in images lead to clarification requests. Thus, senders and recipients alike have means to take action in MMS. People share parts of their lives visually with MMS, but also make it problematic, sometimes laughable, and occasionally even a topic of rational discourse.

Notice that these methods are sometimes orderly enough to be analyzable in terms of genres, as Rich Ling has done in this collection. It may be that such genres develop in the future; still, they have a foundation in the practical activities of users. These actions are also available for people, who observe them in terms of lay notions and may report them in interviews (see Scifo and Oksman in this collection). Again, to get beyond such notions, we need a flexible analytic framework capable of describing action in detail. The visual processes I have described in this paper are typically side issues in imaging. They

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[19] Battarbee and Koskinen, *op. cit.*

take place, but are typical examples of the "seen but unnoticed" quality of action.[20] The framework developed in this article is aimed to provide access to just these qualities, which are essential for understanding mobile multimedia in all of its richness.

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[20] Garfinkel, *op. cit.*