The Mobile Image: Experience on the Move

As visuality is an important part of everyday practice, pictorial representation is also an essential element in everyday communication. McLuhan's famous aphorism that "the medium is the message" has long been discussed within the paradigm of orality vs. literacy. Nowadays, when within the practice of everyday telecommunications in the narrow sense, images are gaining ground, it is worth investigating the communicational potential of images from the perspective of this paradigm.

On the one hand, we consider the communicational potential of images to be their natural capability; on the other hand, however, we are not quite ready to use them confidently. There are deeper reasons in cultural history for this duality. The long centuries of literacy gave rise to peculiar cognitive techniques that involve the conceptual processing of experience in a way which does not completely overlap with the outcome of visual information processing. The difference between these cognitive techniques and visual information processing sheds light on the very feature of images which makes their utilization in everyday telecommunications and particularly in mobile communication a prospective agent of important changes.

In his book *Prints and Visual Communication*, William Ivins puts forward a convincing summary of the technical and technological reasons for, and the cognitive consequences of, the centuries-long oblivion of images. His historical overview reveals that, as it took a long time to reach a reliable method of reproducing pictures, the potential of images to mediate information was basically neglected in thinking, adapting to the constraints of verbal expression. Moreover, this remained the dominant attitude and condition even in the decades following the rise of the photograph.¹ How-

¹ "Thus we find ourselves in the peculiar dilemma of having a technical knowledge and capacity that are far in advance of many of our settled, accepted modes of thought and valuation, which have remained just as they were before even the initial steps were taken towards photography and are based on notions that in many respects are incompatible with its modern developments." (William M. Ivins, Jr., *Prints and Visual Communication*, Cambridge, MA: Harvard University Press, 1953, p. 134.)

ever, time has not passed idly since the emergence of photography. In fact, efforts to reconquer the realm of images have been made by way of philosophical reflection as well as through the possibilities offered by technology in everyday practice. Here I mean not only the moving pictures mediated by film and particularly television, but also the development and diffusion of various systems of iconic signs (such as ISOTYPE or a multitude of emoticons, which are now commonly used, especially in mobile communication).

Similarly, the study of the role played by images and pictorial messages in mobile communication can no longer be considered to be an intact terrain. For example, several notable findings, including some within the narrower field of research on MMS, have been published in the framework of the cross-national interdisciplinary research programme COMMU-NICATIONS IN THE 21ST CENTURY, launched in 2001. At an early stage, in 2002, Kristóf Nyíri had already pointed to the essential role of images in thinking and the possibilities deriving from the fact that pictures have become easy to communicate.² Since then, a number of studies have been prepared on the role of visualization and multimodal tools in education,³ the informative and integrative potential of images, and the distinct characteristics of pictorial representation.

When the use of MMS is studied against the background of photography and its cultural-historical traditions, it turns out that the institution of MMS incorporates photography into ongoing discourses. Findings from earlier research⁴ clearly show that the role and function of photographs in our lives has undergone significant transformation. Traditional photos served as memory banks, perpetuating important moments, locations, people, and groups of people. Cameras built into mobile phones have created a new possibility – the possibility of maintaining perpetual visual contact. Since pictorial messaging has become mobile, there are no practical obstacles to the development of "an interactive social context"

² Kristóf Nyíri, "Pictorial Meaning and Mobile Communication", in Kristóf Nyíri (ed.), *Mobile Communication: Essays on Cognition and Community*, Vienna: Passagen Verlag, 2003, pp. 157–184. The German version of this volume was published as Kristóf Nyíri (ed.), *Allzeit zuhanden: Gemeinschaft und Erkenntnis im Mobilzeitalter*, Vienna: Passagen Verlag, 2002.

³ See esp. Lynn V. Marentette, "Thinking, Learning and Communicating through Multimedia", in Kristóf Nyíri (ed.), *A Sense of Place: The Global and the Local in Mobile Communication*, Vienna: Passagen Verlag, 2005, pp. 319–328. Multimodal tools can satisfy requirements which may be set by and for adults more efficiently than paper-based education; more specifically, visualization can greatly facilitate understanding in general terms.

⁴ Ilpo Koskinen, Esko Kurvinen and Turo-Kimmo Lehtonen, *Mobile Image*, Helsinki: Edita Publishing, 2002.

for photography.⁵

More detailed study of the MMS communication genre brought forth certain typologies. For example, researchers distinguished some general genres of use, separating the documentation of particular situations from the visualization of specific details, or snapshots (which serve to develop camaraderie among colleagues), from postcards and greetings for sharing personal experiences, and "chain-messages" that can generally characterize the communicative practices of smaller or larger communities. These genres have been embedded into the existing practice of communication as useful supplements to traditional modes.⁶

Several studies emphasize the integrative power of MMS, which partly derives from the fact that it allows us to share our visual experiences continuously and thus create a shared code and practice of interpreting visual experiences.⁷ Some authors, including Barbara Scifo, consider the exchange of visual information to be no less than an act of trust,⁸ which can help us, among other things, describe and even testify to situations, allowing those situations and experiences to be shared.

A variety of surveys revealed that young people consider sending a pictorial message to be a very convenient, timesaving, and effective means of exchange;⁹ moreover, mobile phones capable of storing images served as photo albums for their users.¹⁰ Empirical studies¹¹ confirm that MMS exchanges can be mostly found within narrow circles of close friends. This is no coincidence, since the interpretation of an image requires shared contextual information. On the other hand, as almost all analyses based on empirical research emphasize, pictorial messages are very effective tools for maintaining co-presence and visual presence. Therefore the

⁹ Ibid., p. 371.

⁵ Ilpo Koskinen, "Seeing with Mobile Images: Towards Perpetual Visual Contact", in Kristóf Nyíri (ed.), A Sense of Place, pp. 339–347.

⁶ Rich Ling and Tom Julsrud, "Grounded Genres in Multimedia Messaging", in Kristóf Nyíri (ed.), A Sense of Place, pp. 329–338.

⁷ Cf. Koskinen, "Seeing with Mobile Images", *loc. cit.*, and Barbara Scifo, "The Domestication of Camera-Phone and MMS Communication", in Kristóf Nyíri (ed.), *A Sense of Place*, pp. 363–373.

⁸ Scifo, op. cit., p. 368.

¹⁰ See also Virpi Oksman, "MMS and Its 'Early Adopters' in Finland", in Kristóf Nyíri (ed.), A Sense of Place, pp. 349–361.

¹¹ See, for example, Nicola Döring, Christine Dietmar, Alexandra Hein and Katharina Hellwig, "Contents, Forms and Functions of Interpersonal Pictorial Messages in Online and Mobile Communication", in Kristóf Nyíri (ed.), *Mobile Understanding: The Epistemology of Ubiquitous Communication*, Vienna: Passagen Verlag, 2006, pp. 197–207.

mobile phone, which was already considered a person-specific (personally tailored) device, can help maintain personal presence and reinforce the contacts of its user when it utilizes visuality as a supplementary tool.

The potential of images on the move may also bring about changes in relationships with a community and the location specific to that community. Shared images, functioning as shared experiences, may, on the one hand, make us aware of multiple viewpoints, and, on the other hand, can strengthen ties among members of a community.¹²

The theoretical issue of the difference between verbal and pictorial communication also attracted the attention of researchers. An interesting experiment is described in a paper which analyzes findings for the Hungarian "MMS of All Knowledge" project, where the abstracts of lectures given as parts of the University of All Knowledge/ENCOMPASS series were sent as MMS messages.¹³ Certainly, figures and diagrams have had a role in the development of science. Drawing on Allan Paivio's *double coding* theory and certain considerations raised by Wittgenstein, the experiment clearly supported the idea that, depending on content, pictorial and verbal representations can effectively complement each other.

In another article analyzing the origins of pictorial and verbal communications from a phylogenetic perspective, Kristóf Nyíri concludes that images constitute a natural environment for thinking.¹⁴ Images provide a more natural medium than language as far as they can be considered natural signs due to their resemblance to the objects and situations represented. During the long centuries of literacy, the lack of a proper technology for duplicating images basically made people forget the capability of pictures to carry information. However, this situation has changed radically. MMS may – in fact, by today it certainly does – turn images into a ubiquitous means of communication.¹⁵ The potential of pictorial communication to strengthen communities is considerable, even if we take account of the phylogenetic shifts in communication. In a later paper where he contemplates the relationship between images and space,¹⁶ Nyíri reaches a similar conclusion. Unlike words, pictures have an inherently spatial or-

¹² Cf. Fumitoshi Kato, "Seeing the 'Seeing' of Others: Environmental Knowing through Camera-Phones", in Kristóf Nyíri (ed.), *Mobile Understanding*, pp. 183–195.

¹³ Viktor Bedő, "MMS of All Knowledge: Mobiles and Scientific Visualization", in Kristóf Nyíri (ed.), A Sense of Place, pp. 383–393.

¹⁴ Kristóf Nyíri, "Pictorial Meaning and Mobile Communication", loc. cit.

¹⁵ Cf. the article published on 30 November 2006 by the Hungarian portal *Index*, which reports on the significant spread of MMS use in Hungary, http://index.hu/tech/mobil/mobsur2egy.

¹⁶ Kristóf Nyíri, "Images of Home", in Kristóf Nyíri (ed.), A Sense of Place, pp. 375-381.

ganization and they are much more suitable for representing objects and events. On the other hand, a certain spot in space, namely one's home, has a prominent role. Drawing on Heidegger's trichotomy of building– dwelling–thinking (*Bauen Wohnen Denken*), Nyíri points to the possibility of handing down local tradition. Utilizing images in mobile communication allows the local and personal to be communicated.

We can find remarkable divergence in opinions about the combination of image and text. While Döring et al. emphasize that most pictorial messages sent via either e-mail or MMS do not contain text at all, which is, they add, "an indication of our skills in visual communication"¹⁷, some authors contributing to the subsequent volume for the COMMUNICATIONS IN THE 21ST CENTURY programme published a year later in 2005, including Bedő, Koskinen, and Nyíri, emphasize that image and text tend to be complementary. However, this difference should not come as a surprise if we consider, on the one hand, that it took decades to rediscover images, and, on the other hand, that there are conceptual and intellectual differences between the cultures expressed through images and words (as highlighted in one of my own studies where I compared the metaphysics of ancient Egypt and Western metaphysics¹⁸). Again, this shows well our oblivion of the image: the fact that it is obviously an easier task to process images at an elementary level than to visualize certain information, i.e. represent it in a pictorial form. We possess the former as an innate skill, while the latter is essentially culture-specific.

Research on MMS use has clearly shown that MMS can function as a very informative message carrier, provided that an unambiguous context exists or communicating partners have a common background which allows a certain pictorial language to develop. Therefore, an important condition of success in interpreting images is that the frame of reference including the message should be evident or familiar. A closely related factor is that pictorial messages are very useful in creating and binding smaller communities, as well as in developing closer and more intensive contacts. Pictures are rich in detail and are able to mediate interrelations in their entirety, which, in addition to the characteristics of visual perception, enables images to provide an impression similar to primary experience, i.e. they virtually communicate direct experience.

It is sometimes said that the image, being a prominent means of medi-

¹⁷ Nicola Döring, Christine Dietmar, Alexandra Hein and Katharina Hellwig, *op. cit.*, p. 207.

¹⁸ Zsuzsanna Kondor, "The Iconic Turn in Metaphysics", in Kristóf Nyíri (ed.), A Sense of Place, pp. 395–403.

ating reality, has an immersive power. However, such a proposition usually does not define the property by which the image assumes such power. In what follows, I will attempt to give an explanation of this peculiar power possessed by the image, and pinpoint the place of mobile telephony among the agents and modes of mediating representation with respect to mediation and access to experience.

We can approach the source of the image's immersive power via certain features of visual perception. According to the representational theory of the visual mind, the processing of visual information can be described – both functionally and, of course, anatomically – on the basis of a dual model. This theory, developed by Pierre Jacob and Marc Jeannerod,¹⁹ makes a distinction between visual and visuomotor representations. The former provides information for higher-level cognitive functions, such as categorization, conceptual thinking, or argumentation, while the latter serves action.²⁰ None of these representations has conceptual content, although both can serve as the basis for or be subject to conceptual processing. The authors argue that the content of visual perceptual representations is "both more fine-grained and informationally richer than the conceptual contents of thoughts".²¹ This means that information gained from visual perception can be transformed into thoughts with a considerable loss of information only, since such information is much more manifold and detailed than something we can grasp conceptually and express as a thought. So, for example, to represent the relation between two objects through concepts, we have to omit several bits of information which are essential parts of the information gained through visual perception. The relation between two objects can be grasped only if we know the pictorial/iconic content (e.g., form, size, colour, etc.) of those objects. On the other hand, when the pictorial content of visual perception is transformed into conceptual content, a new cognitive element, namely a kind of reflexive egocentric perspective, is added to the evolving perception. Consequently, transformation into conceptual content also expresses a reflexively treated relation or situation with respect to the given state of affairs.²²

In addition to the functional difference between visual and visuomotor representations, there is an essential difference between their frames

¹⁹ See Pierre Jacob and Marc Jeannerod, *Ways of Seeing: The Scope and Limits of Visual Cognition*, New York: Oxford University Press, 2003, rev. ed. 2004.

²⁰ *Ibid.*, p. 45.

²¹ Ibid., p. 22.

²² *Ibid.*, p. 31.

of reference. Visual representation provides information about the context with respect to the relation between different elements of this context and the order of objects, while visuomotor representation visualizes the elements of the context through the eyes of the perceptor, so as to show the conditions of manipulating objects. Switching between these modes of representation is an automatic act, although it can be hindered by certain brain injuries. However, it is also notable that the egocentric perspective which emerges in the course of conceptual processing considerably differs from the egocentric reference of visuomotor representation. The former is reflexive and can be consciously converted, while the latter is spontaneous and alters only with a change of the actual physical situation.

In visual perception, our pragmatic orientation plays an important role, while the perception of numerous minute details provides us with abundant information about the context. The conceptual processing of these percepts results, at the cost of losing certain pieces of information, in a detached description of the situation. Such detachment is a necessary consequence of the peculiar situation in which the conceptual transformation of pictorial information implies mapping to a considerably narrower domain, and this mapping takes place along the lines of a certain perspective or intention. As Michael Tomasello notes, discussing the special features of linguistic representation in the light of human ontogeny and the difference between primate and human cognition, speaking implies a certain intention and, depending on this intention, it represents a certain viewpoint or perspective. Linguistic representation is built on the decision made by individuals in the given situation, i.e. the perspectives that best fit their objectives in interpreting phenomena, rather than the simple recording of various sensory and kinetic experiences.²³

In contrast, representations which process visual perception are either pragmatic, i.e. specific to action in the given situation, or they basically mediate iconic content which can serve as a basis for various modes of conceptual processing due to its information-richness. The new devices of communication may have a role as agents of these representations. Therefore, utilizing various modes of representation in everyday communication implies a peculiar situation in terms of space and time as well

²³ "[T]he intersubjective and perspectival nature of linguistic symbols actually undermines the whole concept of a perceptual situation by layering on top of it the multitudinous perspectives that are communicatively possible for those of us who share the symbol." (Michael Tomasello, *The Cultural Origins of Human Cognition*, Cambridge, MA: Harvard University Press, 1999, p. 132.)

as the reality of the here-and-now. Concerns about potential distortion and manipulation are often shown with respect to mediation and mediated nature. However, as we have seen, a significant change, in fact, distortion, has to be considered even for the most elementary steps of representation. Our implicit, procedural knowledge becomes declarative and consequently accessible and tangible through representational redescription. "Systems of thought emerge from this reflective activity [i.e., representational redescription] because self-observation employs all of the categorization and analytic skills that are employed in perceiving, understanding, and categorizing the outside world – in effect the subject perceives, understands, and categorizes her own cognition facilitated by the fact that it is expressed *externally* in language."²⁴ We can say that linguistic representation itself has a role of mediating between certain kinetic, episodic experiences and communicable cognitive content. Obviously, this mode of mediation within the individual is closely related to the social nature of humans – a fact that is also supported by cognitive evolution research. External storage systems which serve to aid memory, such as writing, helped extend communication in time and space; however, the very possibility of such extension brought about the development of several constraints. As we have seen, verbalization itself means a certain restructuring of our perceptions, and written text has to be self-explanatory without any other sensory supplement to facilitate understanding. This is why making voice transmittable, and later, making images and moving pictures telecommunicable significantly facilitated communication in certain situations. If we also consider that, as we can see nowadays, all these capabilities are becoming an organic part of our everyday lives via portable and user-friendly devices, then apparently the world of the here-and-now is separated from the reality of the there-and-then experienced by others by a very thin boundary only. Therefore, we can easily share our primary experiences with others, and, in fact, in a form which allows others, through visuality, to access these primary experiences directly.

The transformation of technology from analogue to digital is usually linked to the shift from real to virtual. However, this change is not as radical as we might think at first sight. As Ron Burnett writes, "images are virtual because they are distant from the spectator or user but are experienced as if that distance could and, in some instances, must be overcome".²⁵ Consequently, the reality represented by pictures excludes, through the power of visual perception, the detachment so characteristic

²⁴ Ibid., p. 195, emphasis not in the original.

²⁵ Ron Burnett, How Images Think, MIT Press, 2004, p. 72.

of verbality, and thus an attitude prevails which generally characterizes our relationship with the environment. If we consider how this property - i.e. the one that characterizes our basic relationship with the environment – exerts an effect via the use of MMS and the videophone as a part of our everyday lives, then we can see spontaneous adaptation on the one hand, and feel that we can easily and freely share our experiences on the other. In fact, images may significantly ease the burden of multitasking, which is often attributed to mobile telephony. The ceaseless switching between problems and tasks to be solved, which is a constant challenge posed by flexible time management, will become simpler if a problem located somewhere else in space becomes virtually tangible because we can see its context through a real-time account (videophone) or as the result of a pictorial account (MMS). Apparently, the mobile, which has become a part of our everyday lives, is a device increasingly suitable for representing reality, and thus it may become one of the main mediators of our experiences.

How can this practice of mobile communication modify our cognitive habits? How will the habitual relationships between our visual experiences and the surrounding world develop? Will the dominant position of here-and-now reality change? The workload generated by the necessity of performing various tasks simultaneously can decrease if the things that are now distant are brought closer – in a sense, unnoticeably – by the immersive power of images. Furthermore, we can gain in-depth knowledge through the orienting and informative power of images which greatly facilitates the understanding of particular situations/problems. Of course, such a practice of sharing experiences reduces the significance of spatiality. However, we should also ask whether it will have a greater role, provided that particular relationships between experience and locality can evolve through the permanent interplay of the virtual and the real. The contrast between real and virtual may decrease further if they are habitually switched in everyday practice. Recall that this contrast is the product of that very era during which words had an overriding role in communicating thoughts.