

The present volume attempts to provide a summary of the results of social science research on mobile communication, underway worldwide since 2000 or so, pursued in Hungary since January 2001 within the framework of the project COMMUNICATIONS IN THE 21ST CENTURY, conducted jointly by T-Mobile Hungary (until 2004 Westel Mobile) and the Hungarian Academy of Sciences.

In the course of the T-Mobile/HAS collaboration, altogether eight scholarly conferences were held (five of them international, with the fifth in the series, in 2005, achieving the dimensions of a world conference), in which, representing about 35 nations, 160 speakers participated. In the ensuing nine volumes – three Hungarian, one German, and five English – papers by 143 authors, representing 26 nations, have been published. These volumes witnessed the history of the mobile between 2001 and 2005, no doubt the most dynamic aspect of the recent history of technological and social transformation. But most of all they amount to a first laying of the foundations for, and at the same time the awakening to consciousness and self-reflection of, a young discipline: the social science of mobile communication. Initially, research on problems pertaining to the mobile arose as an interdisciplinary task. From this interdisciplinary research, each of the participating disciplines profited, being forced to take account, on the level of theory, of the new medium which by now has come to constitute their main communicational environment. As a consequence of this taking account of the new realities, by 2005 a transformation was occurring which today has clearly become irreversible: *the internal adaptation of the social sciences to the world of mobile communications*. At the same time, an autonomous line of research emerged, based on a set of well-established paradigms of its own: the social science of mobile communication, *Mobile Studies*. Both aspects of this juncture in the history of science are represented in the present volume, which on the one hand takes stock of the paradigmatic results of mobile studies, and on the other hand highlights some new perspectives of the social sciences becoming aware of their mobile environment.

Let me here recapture very briefly some key ideas from our previous volumes. The first two Hungarian collections – *Mobil információs társadalom: Tanulmányok* [The Mobile Information Society: Essays] and *A 21. századi kommunikáció új útjai: Tanulmányok* [New Perspectives on 21st-Century Communications: Essays], both published in 2001 – on the one hand gave an initial inventory of the pertinent research problems and conceptual resources, and on the other hand, by way of drawing, as it were, a sketch of the mobile horizons of the future, formulated the following theses/hypotheses: 1. Mobile communication and physical mobility mutually reinforce each other – the internet and mobile telephony ultimately result in more, not less, travel and personal encounters. 2. Since knowledge is *information embedded in context*, and mobile communication is markedly situation-dependent and thus context-creating, the mobile information society is likely to be a society of *knowledge*, not of mere information. 3. Mobile, interactive, multimedia communication amounts to a return, on a higher level, to primordial, less-alienated forms of communication. 4. Mobile communication induces changes in human cognitive faculties. 5. The nature of political communication becomes transformed. 6. The nature of scientific communication becomes transformed.

Our third Hungarian-language collection appeared in 2002, under the title *Mobilközösség – mobilmegismerés: Tanulmányok* [Mobile Community – Mobile Cognition: Essays], as an enlarged variant of the parallel German and English volumes *Allzeit zuhänden: Gemeinschaft und Erkenntnis im Mobilzeitalter* (2002) and *Mobile Communication: Essays on Cognition and Community* (2003). This collection discussed in depth the notion of the information society as a *knowledge community*; among its chapters were Robin Dunbar’s essay on gossip as a mechanism for maintaining community cohesion, and a definitive study on m-politics by Miklós Sükösd and Endre Dányi. Our Hungarian-language volumes are fully accessible, the German-language and English-language volumes partially accessible, via the www.socialscience.t-mobile.hu webpage.

Of the four other English-language volumes following upon *Mobile Communication*, a further two appeared in 2003: *Mobile Learning: Essays on Philosophy, Psychology and Education*, which played a pioneering role in the social scientific exposition of the notion of “m-learning”, a notion that today is very much in the centre of educational theory; and *Mobile Democracy: Essays on Society, Self and Politics*, presenting the mobile phone as the very answer to the communicational challenges of a decentralized global mass society. In the collection *A Sense of Place: The Global and the Local in Mobile Communication*, published in 2005, we strove to demonstrate that the mobile phone is not just an instrument for enabling global contacts, but also

a means to maintain local bonds, organizing the life of small regions and small territories. Finally, appearing in 2006, the volume *Mobile Understanding: The Epistemology of Ubiquitous Communication* once more turned to the issue of m-learning, this time on a markedly philosophical level. It told of the revolution in epistemology, in particular about *the revolution in educational theory*; of our mobile companion as part of our mind; of the return of collective thinking; and of the development of the world of non-formal learning. Some of the chapters of *Mobile Understanding* have been published in Hungarian in the January 2006 issue of the periodical *Világosság*.

The present summarizing, retrospective and forward-looking volume begins with a paper by Csaba Pléh, examining a question of overarching significance regarding the connections between our communicational environment on the one hand, and our mental organization, i.e. cognitive architecture, on the other. This overall question is analyzed by Zsuzsanna Kondor along the specific dimensions of pictorial communication and pictorial representation. András Benedek investigates the connections between communicational environment and mental organization from the point of view of educational theory, István Maradi the connections between communicational environment and labour, elucidating the notion of mobile work, while Kristóf Kovács analyzes the effect of changes in communications technology upon human intelligence. Klára Sándor bases on her empirical field-work an investigation of the linguistic consequences of our contemporary communications technology tools. The analyses of Kovács and Sándor are connected through the issue of *digital literacy*, those of Sándor and Daniel Golden through a markedly evolutionary anthropological outlook. Golden sees the mobile telephone as an organ of extended perception, in particular as an instrument to bridge distance. Distance, communication, and space are the topics examined by Ferenc András, “space” also in the specific interpretation which served as the background for Manuel Castells – world-famous author of *The Information Age*, held in high esteem in Hungary as well – to construct a connection between what he called “the space of flows” and “timeless time”. The topics of Castells, and of time as becoming something in itself different with mobile communications, are in the present volume further pursued by Kristóf Nyíri. Both Zsuzsanna Szvetelszky and Viktor Bedő analyze the connections between space and communication, in particular the connections between spatial organization, community organization, and the digital mappings of community organization. Community life, network organization, and political participation are focussed on by Gergő Prazsák; the intertwining of political participation, the public sphere, mobile communication, and the internet, by Endre Dányi. Henrik Schneider’s study deals

with the transformation of the public sphere, the radical changes in journalism implied by mobile telephony, and the triumphal march of bottom-up testimony; finally, the role of testimony in contemporary – mobile – scientific communication is described by Gábor Palló. Mobile communications has altered the nature of scientific research, and also the nature of human cognition in general.

Altogether, the chapters in this volume provide a rather complete survey of the social science literature on mobile telephony. As is to be expected with a topic like this, often the references are not to hardcopy publications, but to webpages. The editor has checked, and if necessary, updated, all such references. All references to webpages were valid at the time this volume went to press, i.e. in April 2007.

Research on mobile communication is today an internationally recognized research trend in the Hungarian social sciences. At the same time, it is a trend that resurrects and utilizes the pioneering Hungarian discoveries in the philosophy of communication of the 1920s and 1930s – the work of József Balogh, István Hajnal, and Béla Balázs. I would like to express my gratitude to T-Mobile Hungary for their long-standing support, which meant not just sponsorship, but spiritual partnership. The humanities scholar and the engineer were able to speak one and the same language. The success of the COMMUNICATIONS IN THE 21ST CENTURY project amounts to a spectacular refutation of the myth of the “two cultures”.