

INTERNATIONAL CONFERENCE
TECHNOLOGIES OF GLOBALIZATION
DARMSTADT, OCTOBER 30-31/2008

Presently (re-)shaping social life as well as economics and science, the effects of globalization are in their turn – and in manifold ways – related to and in fact highly dependent on technology. The first International Conference of the DFG Graduate School »Topology of Technology« seeks to explore in greater detail and from a deliberately interdisciplinary angle the role(s) and function(s) of world-embracing information and communication technologies, transport and computing facilities in the global age.

In plenary discussions and five interdisciplinary streams the conference

- inspects the novel ways in which global(ized) technologies enable mobility (and require new modes of managing these) / **STREAM 1**
- attempts to clarify how newly developed technologies contribute to and assist the currently observable developments in the particular field of engineering and, more generally, in labor distribution and organization / **STREAM 2**
- traces the influence of these technologies on the re-definition of »the local« against the backdrop of »the global« / **STREAM 3**
- gives space to historical considerations aiming at the disclosure of precursors of technology-enhanced globalizing tendencies / **STREAM 4**
- discusses the world-wide efforts of controlling and improving body movement(s) for the target group of old-age people in sport science / kinesiology and perceptual computing. / **STREAM 5**

1 MANAGING MOBILITY

2 INFORMATIZED WORK: TOWARDS A NEW DIVISION OF LABOUR?

3 GLOBALIZATION IN THE PRODUCTION OF BUILT ENVIRONMENT

**4 GLOBALIZATION REVISITED: WORLD-EMBRACING TECHNOLOGIES
IN A HISTORICAL PERSPECTIVE**

5 AGING AS A GLOBAL ISSUE – A CHALLENGE FOR TECHNOLOGY AND SOCIETY

REINER ANDERL
BRUNO ARICH-GERZ
RUDI SCHMIEDE (eds.)

**TECHNOLOGIES OF
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Proceedings

Edited by Reiner Anderl, Bruno Arich-Gerz, Rudi Schmiede

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Sonja Neudörfer, Florian Sänger, Diana Völz, Mascha Will-Zocholl

Conference Program:

	30. Oct:		31. Oct:
09:00	Reception	09:00	Streams
10:00	Greeting		
10:30	Keynote: Reinhard Blomert	10:30	Coffeebreak
11:30	Keynote: Jyoti Hosagrahar	11:00	Streams
12:30	Lunchbreak	12:30	Lunchbreak
14:00	Streams	14:00	PTC-Keynote: Rupert Deger
		14:30	Panel Discussion MC: Ludwig Siegele
		15:15	Keynote: Johann Dietrich Wörner
16:15	Coffeebreak	16:15	Closing
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Editorial

Presently, we witness an era of fundamental reshaping of social life as well as economics and science. These processes of reshaping – commonly discussed under the header of globalization – are closely related and highly dependent on technology. Whereas there is a vast literature on the virtual aspects of globalization, especially its implications of world-wide informatization, its spatial dimensions and consequences are much less present in the minds of scholars as well as in public mind. However, the often described virtual processes have their material side to them, too, and the material processes are taking place in the spatial dimension. This is the background to the Graduate School „Topology of Technology“ which has for two years been working at the Technische Universität Darmstadt in what we call „large interdisciplinarity“, i.e. engineering sciences and humanities/social sciences co-operating on parity.

The first international conference of the Graduate School discusses the spatial dimensions of current developments in the context of globalization, and in parallel streams brings together researchers on various heterogeneous aspects of this reshaping processes.

1. Physical mobility of persons and goods with its implications for new forms of work in production and services, new forms of distributed living and cooperation, and new technologies supporting these forms of mobility, create new tasks and problems of managing mobility.
2. Whereas the informatization of work is now present in public awareness, new dimensions and forms of the international division of labor with their consequences on value chains in production and services are much less so, although they are at the economic basis of globalization.
3. Our built environment, not only cities themselves and their architectural spaces, but also the connections and networks between cities and regions are changing considerably. Underneath the new global networks, new local structures are developing. Glocalization combines both tendencies.
4. Although globalization has become a dominant phenomenon only in the last thirty years, the technologies supporting it do not all have such recent origins. Infrastructures like broadcasting, telecommunication, railways or trams and trans-spatial knowledge transfer have in fact developed over centuries. So, world-embracing technologies have to be looked at also in historical perspective.

5. Last, but not least, globalization goes along with an aging population in all advanced and semi-advanced countries. Various technologies have been developed or are in development to support the elderly. New world-wide communities who exchange technological knowledge and technologies constitute aging as a global issue.

In key note contributions from academic scholars and experienced industry leaders, the analyses of some of the basic tendencies frame the more detailed work in the streams. The economic and financial aspects of globalization, the history of our built environment in glocalization, the world-wide availability and development of qualification and competences, of education and research, and the development of global and lean structures of product development are looked at from a general perspective.

We hope that this collection of papers helps to further the analysis and understanding of the complex relationship between globalization and technologies, and sharpens our view of the spatial and material dimensions of contemporary technological, economic, and social developments.

This conference is kindly supported by the Deutsche Forschungsgemeinschaft DFG (German Research Foundation), the Carlo und Karin Giersch-Stiftung (Giersch-Foundation), and the Parametric Technology Corporation. We are deeply indebted with our thanks to our sponsors.

Darmstadt, October 2008

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