TechnoSpaces: Persistence – Practices – Performance – Power

Veranstalter: Research Training Group „Topology of Technology"
Datum, Ort: 18.03.2015–20.03.2015, Darmstadt
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From March 18 to 20, 2015, the Research Training Group „Topology of Technology" held their final conference „TechnoSpaces" at the Technische Universität Darmstadt. The conference gathered international scholars from diverse fields to present papers on topics ranging from colonialism to online poker, from stamps to cockpits and from reading techniques to sports games. The following gives a brief overview of the papers presented.

Starting with a panel on „Spatial Perception", ALEKSANDRA DOMINIAK (Darmstadt) and DAVID H. UTTAL (Chicago) discussed how spatial competencies can be enhanced by sports games and which effects this can have on the learning process in science and engineering. In the following talk MELANIE DIETZ (Darmstadt) and STEFAN PANZER (Saarbrücken) discussed the prerequisites for motor learning. PAUL HAIDUK (Darmstadt) and PETER M. LENHART (Zürich) examined aircraft cockpits and how data glasses and remote pilot stations will help to improve aviation. With their focus on landscape perception, LARS FRERS (Telemark) and ERIC LAURIER (Edinburgh) presented video material and showed in their analysis how people interact with technology when they are perceiving nature.

The panel on „Topologies of Work" was opened by MASCHA WILL-ZOCHOLL (Frankfurt) and JESSICA LONGEN (Dortmund) with a talk on the influence of Information Technology on the work structures of call center services and engineering in the automobile industry. JÖRG FLECKER and ANNIKA SCHÖNAUER (both Vienna) presented further examples of IT-applications and related jobs ranging from software development to crowdsourcing in their paper.

They argued that work is never placeless, but delocalized at the most. A case study about Digicom workers was presented by CAROLINE ROTH-EBNER (Klagenfurt), stressing that virtual offices enabled by digital media have led to a flexibilisation of workspaces and the creation of new ones in which virtual presence is obligatory. Whether online gambling is a form of work was discussed sapidly by KAIRE HOLTS (Hertfordshire) and flanked by ALEXANDRA FLOREA's (Frankfurt) paper about online workers as individuals, focussing on the motives for e-work and its effects on life quality.

The third panel dealt with „Urbanizing Infrastructures" and was opened by HEIKE WEBER (Wuppertal), who argued that the question of unmaking technology is not pressingly enough articulated and that histories of unmaking are needed. In a second paper, she gave a fine example of that account when she concentrated on landfills and urban dumps to analyze the relationships between city, nature and material stuff during the 20th century, considering the agency of dumps in particular. DEJAN PETKOV (Darmstadt) shed light on the so-called rebirth of the light rail from a socio-technical perspective and showed with his case studies how the introduction of technological systems needs supporting policies to be effective. ANNIKA WOLFF (Darmstadt) examined the European Union's waste laws and its national implementations, focusing on how German municipalities adapt to this imposed pressure. Broadening the view, H. ÇAGATAY KESKINOK (Ankara) laid out the changes that took place in urban policy frameworks in Turkey's recent history. GÜL TUÇALTAN (Darmstadt) elaborated on this topic by underlining how municipal solid waste spaces in Ankara influence actions of (de/re)territorialization. The focus was shifted from waste to energy by PAULINE GABILLET (Paris), who discussed how the cities of Grenoble and Metz manage to urbanize energy-climate issues and how they territorialize energy.

KATHRIN PASSIG (Berlin) and MICHAEL LIEGL (Lancaster / Hamburg) gave a keynote address dealing with the evolution of co-working spaces by taking the audience on a trip down memory lane. They gave a rich as-

semblage of places and spaces that working people adopted as their offices in the last ten years, showing that a good cup of coffee is essential but not sufficient.

OLIVER HONER (Darmstadt) opened the panel „Shaping Lives and Life Forms" with his paper on the relationships between objective technology and the subjective body, highlighting the question how the understanding of what medicine and what a body are change with the advent of enhancement. The status of Henri Lefebvre's non-intelligible and irrational residuum was the central topic of BAHAR SEN's (Darmstadt) talk, who argued that the body is essential for lived space and therefore always a part of urbanity. The phenomenological approach was broadened by IRENE BREUER (Wuppertal) when she presented an architectural reflection on the constitution of lived space, taking on positions of Husserl and Merleau-Ponty. JENNY BAUER (Darmstadt) went into a deeper analysis of how media and markets imprint their hegemonies on bodies. The rhythms of pedestrians were the starting point in FRAYA FREHSE's (São Paulo) proposal for a regressive-progressive rhythm analysis as a method for sociological research on urbanization. ALEXANDER FRIEDRICH (Darmstadt) and BRONWYN PARRY (London) examined different aspects of cryotechnology: The first talk explained the emergence of the cryosphere as a dispositif and its impact with special attention towards cryobanks. The second elaborated on how a distributed economy of reproduction is enabled by the latest technology, stressing that the walking egg project as an example illustrates how a process of democratization and dissemination is taking place and that this can lead to a new form of society.

KRISTOF VAN LAERHOVEN (Freiburg) and JOSEF WIEMEYER (Darmstadt) opened the panel on „Current Spaces of Human-Technology Interaction" with their respective perspectives on activity recognition, coming from backgrounds in computer science and human/sports sciences. MANUEL DIETRICH (Darmstadt) presented his approach to bring philosophical thinking, especially the theory of action, into the design of computing devices. Taking Adorno's early writ-

ings on radio as a starting point, DAVID WALDECKER (Darmstadt) argued that only a perspective that includes musicological, spatial and technological aspects can be sufficient for an analysis of everyday musical life.

The panel „Imagine: Visual Entities" began with a joined paper by NORA THORADE (Bochum) and NICOLE HESSE (Darmstadt), in which landscapes were shown to be located between energy and image. Areas that had been influenced by wind or stone coal energy and the mental and visual images that came with them contributed to a visual history of energy-landscapes. SILKE VETTER-SCHULTHEISS (Darmstadt) showed in her contribution to environmental history how the Federal Republic of Germany was visualized on stamps with a focus on the conservation of nature and urbanity. The Barbican project in eastern London was at the centre of SINA KEESSER's (Darmstadt) paper and exemplified how pictures influence urban planning processes and are intentionally used by architects to do so. JENS JÄGER (Cologne) discussed how the concept of historical science excluded pictures as core documents until almost recently and by which methodologies they are included nowadays. The picture as a main paradigm in theories of metaphors was criticized by ANDREAS BRENNEIS (Darmstadt), who discussed philosophical perspectives on what pictures are and how they work.

ANGELIKA EPPLE (Bielefeld) and NIELS WERBER (Siegen) in their keynote address in a way both scrutinized the view according to which history repeats itself. Epple debated whether Vittorio Hösle's idea of a circular evolvement of philosophical ideas, in which idealism is followed by scepticism and then by empiricism, can be transferred to the way global history works. Werber took up the Graduate Program's „Topological Manifesto" and laid out parallels to German geopolitic discourses of the 1930s and 1940s, thereby criticizing the manifesto to be unhistorical in certain ways.

Another discussion of the manifesto opened the panel on „Philosophy of Topology". KAI DENKER (Darmstadt) argued that topological descriptions impose a perspective onto empirical material and that perspec-

tives can be criticized only immanently – what he then did by drawing a line from Newton's Bucket to Deleuze's notion of multifariousness. Derrida's writings and the way they deal with the topos of the border were the subject of MANUEL REINHARD's (Darmstadt) talk, where he examined the method of deconstruction along a topology of the border in Derrida's writings. SUZANA ALPSANCAR (New Haven) examined the genesis of Technological Determinism as well as its rebirth in a softer version nowadays and articulated a need to look for the question to which it seems to be an answer.

The first paper in the panel „Constructed by Motion: Space and Technology in History" was presented by ROBERT JULIO DECKER (Darmstadt) and dealt with colonial labour regimes during the construction and operation of railroads in German Southwest Africa and the Phillipines, pointing out inter-imperial exchanges. MARIE-CHRISTIN WEDEL (Darmstadt) and VOLKER BRIESE (Paderborn) talked about the uses of roller skates and bicycles and the spatial conditions and demands that came with them in the 20th century. Ski-lifts were the central topic of ROBERT GROSS' (Klagenfurt) paper, in which he examined the changes that came along with their advent by looking at them as socionatural sites. MARTIN KNOLL (Salzburg) broadened this view by pointing to temporal and spatial interfaces that can turn out to be critical for hubs like socionatural sites.

SERGEJ HARDOCK (Darmstadt) looked at sensor-defined-networks in his talk that opened the panel „Digital Spaces". By showing the need for the fast processing of data through examples like driver assistance systems, he argued that that there is a big need for efficient use of big data technologies. How the Digital Humanities can be made sense of and used was the topic of ANNA SPATZ's (Darmstadt) presentation, where she showed how big data effects literary studies. JULIANNE NYHAN (London) built on that and stressed how collaboration is essential to the Digital Humanities but that there is very little research on how it is happening concretely. In their joined paper, PETRA GEHRING (Darmstadt) and ANDREA RAPP (Darmstadt) dealt with text as a form of space from different angles. While Gehring discussed the long term changes in the ways that written text and reading techniques have changed, Rapp showed how recent methodologies are elaborated to digitalize medieval manuscripts to make them available for research and to an interested public.

Throughout the conference, the „Topological Manifesto" provided by the hosting Research Training Group was discussed on several occasions. In his closing remarks, MIKAEL HÅRD (Darmstadt) presented an example of how the manifesto can be a fruitful tool to open up a new research field from his perspective as a historian.

Conference Overview:

Mikael Hård / Petra Gehring (Technische Universität Darmstadt), Welcome Note

Spatial Perception

Aleksandra Dominiak (Technische Universität Darmstadt), Gender-Based Training of Spatial Competencies by Means of Gesture-Controlled Sport Games

David H. Uttal (Northwestern University Chicago), When and Why Does Spatial Thinking Matter in Learning Science and Engineering?

Melanie Dietz (Technische Universität Darmstadt), The Influence of Spatial Abilities on the Use of Videos in Motor Learning

Stefan Panzer (Saarland University Saarbrücken), What Information Do we Need to Learn New Motor Sequences?

Paul M. Haiduk (Technische Universität Darmstadt), Data Glasses to Support Pilots in the General Aviation

Peter M. Lenhart (Zürcher Hochschule für Angewandte Wissenschaften), Topologies of Aircraft Cockpits and Remote Pilot Stations

Lars Frers (Telemark University College / Norwegian University of Science and Technology)/ Eric Laurier (University of Edinburgh), Furrowing, Sighing and Clicking: Facing Beautiful Landscapes

Topologies of Work

Jessica Longen (Universität Dortmund) / Mascha Will-Zocholl (Goethe University Frankfurt), Topologies of Work. Globalisation, Localisation or in between?

Jörg Flecker / Annika Schönauer (Universität Wien), Place and Space in Service Value Chains

Caroline Roth-Ebner (Alpen-Adria-Universität Klagenfurt), Spatial Phenomena of Mediatized Work

Kaire Holts (University of Hertfordshire), Real Work in Virtual Worlds - Is Online Gambling a New Form of Work?

Alexandra Florea (Goethe Universität Frankfurt), Occupational Identities and Quality of Life of Digital Workers

Rudi Schmiede (Technische Universität Darmstadt), Digital Work in an Informatised Society

Urbanizing Infrastructures

Heike Weber (Bergische Universität Wuppertal), (a) Unmaking Technology: The Political Ecology of Old Stuff, Infrastructures and Leftovers. (b) Waste Matters: The Case of 20th Century Landfilling in Germany

Dejan Petkov (Technische Universität Darmstadt), Tramway Systems Development

Annika Wolff (Technische Universität Darmstadt), Europeanization of Waste Prevention

H. Çagatay Keskinok (Middle East Technical University, Ankara), The Change in Urban Policy Frameworks in Turkey since the mid-1980s

Gül Tuçaltan (Technische Universität Darmstadt), Urbanization of Garbage in Ankara, Turkey

Pauline Gabillet (Ecole des Ponts ParisTech), Local Public Utilities and the Construction of Urban Energy Governance in France

Antje Matern (Technische Universität Darmstadt), Comment

Keynote
Kathrin Passig (Berlin), The Coworking Evolution: Notes on the History of Coworking Spaces, their Species Lines, Selective Pressures, and Current Development

Michael Liegl (Cemore Lancaster / Hamburg University), Comment

Shaping Lives and Life Forms

Oliver Honer (Technische Universität Darmstadt), Objective Technology and Subjective Body. Logic of Objects, Cultural Space and Alienation

Matthias Kettner (Witten/Herdecke University), Comment

Christian Lenk (Universität Ulm), Comment

Bahar Sen (Technische Universität Darmstadt), Lived Space: Lefebvre's „Non-Intelligible and Irrational Residuum"

Irene Breuer (University of Wuppertal), Husserl and Merleau-Ponty: Body Scheme and Lived Space in Architecture

Jenny Bauer (Technische Universität Darmstadt), Disrupted Relations: Bodies, Markets and Media

Fraya Frehse (Universidade de São Paulo), When Pedestrians' Body Rhythms Disclose Rhythms of Urbanization

Alexander Friedrich (Technische Universität Darmstadt), The Cryosphere and the Bioeconomy of Global Cold Storage Networks

Bronwyn Parry (King's College London), The Mobilisation of Cryotechnologies: Exploring the Biopolitics of the 'Walking Egg' Project

Current Spaces of Human-Technology Interaction

Kristof van Laerhoven (Universität Freiburg), Activity recognition – From the Perspectives of Computer Science and Human Sciences

Josef Wiemeyer (Technische Universität Darmstadt), Comment

Manuel Dietrich (Technische Universität Darmstadt), Applying Philosophical Theory for Ubiquitous Computing Design

Yvonne Rogers (University College London), Comment

David Waldecker (Technische Universität Darmstadt), Music as Technique and Technology. Adorno's Concept of Technology and the

Sociology of Music

Ruth Sonderegger (Academy of Fine Arts Vienna), Comment

Imagine: Visual Entities

Nicole Hesse (Technische Universität Darmstadt) / Nora Thorade (Ruhr-Universität Bochum), Beyond the Idylle: Landscapes between Energy and Image

Ute Hasenöhrl (Universität Innsbruck), Comment

Silke Vetter-Schultheiß (Technische Universität Darmstadt), Urbanity – Landscape – Nature. Visualizing the FRG on Stamps

Anna-Katharina Wöbse (Bielefeld University), Comment

Sina Keesser (Technische Universität Darmstadt), Depicted Space – The Barbican as Media Phenomenon

Jens Jäger (Universität zu Köln), Historical Science and Images – Images as History

Andreas Brenneis (Technische Universität Darmstadt), Metaphors – Figures of Speech – Topoi

Jakob Birken (Ruperto Carola Heidelberg), Comment

Keynote
Angelika Epple (Universität Bielefeld), Idealism, Scepticism, Empirism: Is there Scientific Progress in Global History?

Niels Werber (University of Siegen), Space, Agents & Technology

Philosophy of Topology

Kai Denker (Technische Universität Darmstadt), Newton's Bucket – What Might be Learnt from Ontological Speculations for Contemporary Discussions of Space

Manuel Reinhard (Technische Universität Darmstadt), The Topos of the Border

Suzana Alpsancar (Yale University), What was Technological Determinism? The Making of a Legend

Constructed by Motion: Space and Technology in History

Robert Julio Decker (Technisches Universität Darmstadt), Imperial Models, Colonial Labor

Ulrike Lindner (University of Cologne), Comment

Marie-Christin Wedel (Technische Universität Darmstadt), Of Moving and Meeting Spaces. Roller-Skating in Germany and the US

Volker Briese (Universität Paderborn), Spatial Conditions and Demands of the Diverse Use of the Bicycle

Robert Groß (Alpen-Adria-Universität Klagenfurt), Technology, Temporality and Transformation

Martin Knoll (Universität Salzburg), Sites and Hubs

Digital Spaces

Sergej Hardock (Technische Universität Darmstadt), Storage and Processing Challenges of Big Data Based on the Example of Sensor-Defined Networks

Ilia Petrov (Hochschule Reutlingen), Comment

Anna Spatz (Technische Universität Darmstadt), Debates in the Digital Humanities

Julianne Nyhan (University College London), Collaboration and Digital Humanities. Two Studies and a Plea

Petra Gehring / Andrea Rapp (Technische Universität Darmstadt), Text as Space

Farewell Note
Mikael Hård (Technische Universität Darmstadt), Farewell Note

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