Suzana Alpsancar, Technische Universität Darmstadt

Ubiquitous Computing – Zwischen Vision und Gestaltung von Handlungsumgebungen

Anfang der 90er Jahre, als PC und Internet anfingen, auf unseren Schreibtischen heimisch zu werden, rief Mark Weiser in seinem Leitbild des »Ubiquitous Computing« (UC) das Ende von PC und Virtual Reality aus. Diese Technik entführe ihre Nutzer in eine ihnen fremde Welt, entfremde sie von ihren Mitmenschen und bombardiere sie mit Informationen anstatt sie angemessen bei ihren Aufgaben zu unterstützen. Weiser wollte ausgehend von dieser Kritik den idealen Computer der Zukunft bauen, der stets zur Hand, aber nie aufdringlich oder belästigend für seine Nutzer ist - »unsichtbar« und »still« soll »Ubicomp« sein. Angesichts der heutigen Alltagstauglichkeit von UC-Technologien möchte ich in einem Rückblick die konzeptionellen Grenzen der ursprünglichen Vision ausloten und Brüche in der technischen Entwicklung sichtbar machen. Heutzutage versteht man UC als neues Interaktionsparadigma, bei dem sich aus Sicht des Nutzers spezifische Risiken abzeichnen, die es außerdem zu diskutieren lohnt.

Ubiquitous Computing – Between Vision and Design of Interactive Environments

In 1991, when the personal computer was just beginning to become a commercial success, and the Internet had yet to triumph culturally, Mark Weiser, an engineer and computer scientist at Xerox Parc, announced the end of personal computing and virtual reality. Rather then demanding the user's attention all the time, as these technologies do, he argued that the computer of the future should vanish into the background and be ready-to-hand whenever it could be useful. Weiser envisioned the ideal tool, which should be »invisible« and »calm« so that users do not even notice that they are using computer technology but stay focused on their tasks. Today, we haven't thrown away our PCs and VRs but are using ubiquitous-computing technologies at the same time. In order to understand the paradigmatical shift in user perspectives, I would like to revisit Weiser's vision and to problematize its conceptional limits. From here we can discuss the new risks arising from the opportunities of invisible and calm computing.

Shintaro Miyazaki, Institut für Algorhythmik Berlin

*Signale, Rhythmen, Zeiteffekte. Eine Medienarchäologie medialer Umwelten im
frühen 21. Jahrhundert*

Umgeben von digitalen Umwelten und Informationsnetzwerken, die zur Infrastruktur des Alltags gehören und die Art wie wir Informationen speichern, übertragen und prozessieren tagtäglich beeinflussen, wird es notwendig diese unsichtbaren Strukturen zu reflektieren und zu analysieren. Eine Medienarchäologie solcher Mediennetzwerke versucht einerseits historische Grundlagen für das Verständnis der hochtechnischen Situationen anzubieten, andererseits ist es in der Lage ebenso systematische Aspekte der Struktur und Funktionsweise solcher atmosphärischen Medien darzulegen. Dies wird im Vortrag anhand eines klangbasierten Zugriffs erarbeitet. Die Signale, Rhythmen und Zeiteffekte von digitalen Medienökologien lassen sich am besten, so das Argument, durch Klang versinnlichen und ermöglichen damit neue Ansätze für ihre medienwissenschaftliche Analyse.

*Signals, Rhythms, Timeffects. A Media Archaeology of some early 21st
century media ecologies*

We are surrounded by digital ecologies and informational networks, which deeply influence the ways of information storage, transmission and processing. These belong to the infrastructure of our everyday life and as such it is necessary to inquire and analyze their hidden and invisible structure. A media archaeology of such assemblages of media networks can reveal both historical and systematic aspects of such atmospheric, but highly elaborated media technologies. The paper argues that

sound would be an appropriate media to understand such media ecologies. To sensua-lize the signals, rhythms and timeeffects of such media ecologies one can use sonic approaches. This might provoke new methods of critical inquiries in the discipline of media studies.

Jonas Fritsch, Aarhus University

Designing for the Affective Experience of Interactive Environments: Resources and Challenges

Digital technologies and interactive media are radically changing the way we experience and make sense of the physical and social spaces we inhabit. The advent of ubiquitous computing in particu-lar has led to the development of advanced sensor technologies and microchips, moving the realm of computing from the desktop computer into broader contexts of interaction or interactive environ-ments. Designing for living with ubiquitous technologies implies considerations of the experiential qualities that come into play to form our affective experience of these interactive environments. In this talk, I explore how the philosophy of experience of Brian Massumi can be used to address this on an analytic and practical level. Building on this, I present a possible theoretical foundation and a range of affective design concerns related to future challenges for interaction design.

Steffen Fiedler und Jonas Loh, Studio NAND

Designing amplified artefacts

Smart Objects or amplified artifacts[1], as we prefer to say, are not only smart in the sense that they are context aware, they are able to create a new context by themselves. This context is profoundly influencing people's experience and their environment and creates room for complex mediated ex-periences in everyday live. People are more than users and amplified artefacts are more than tools solving problems or artificial created needs, they can create meaning. Further these environments can be designed to cater for complex specific needs, challenging the way we work in the field of design exploring science-related themes based on a well equipped technological fundament to pro-jects creating imaginative projections of alternate presents and speculative futures.

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[1] We use the term ›artifact‹ in reference to anything that has come into existence through the influence of humans. In the term ›amplified‹ we appreciate the connotation to electricity. We use the accumulated term ›amplified artifacts‹ to describe a set of artifacts that are, due to interaction with digital technology, somewhat 'more' than artefacts used to be; thus amplified. http://interaktion-und-raum.herrpaul.de/The_Aesthetics_of_Amplified_Everyday_Artifacts