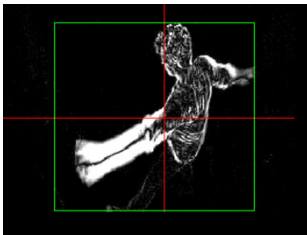


Technology - Human - Design: Paradigms of Ubiquitous Computing

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Abstract



Ubiquitous computing technologies and the Internet of Things are currently being discussed everywhere, as they have an imperceptible but lasting impact on our everyday lives through strategies of intelligent, networked omnipresence, invisibility and seamless immediacy. Increasingly, we no longer interact consciously with individual media, but become part of a “General Ecosystem” consisting of organic and technological actors that influence our perception and behavior. We speak of “natural-technical continuum”, “environmental sensibility”, “sub-perceptual dimensions of human experience”, “hetero-genesis” or “non-sensuous relatedness between organic and inorganic matter”.

The associated processes are to be investigated through the following perspectives and research questions:

- Technology: How does perception emerge in a technologically based sensor-actuator system in contrast to and in resonance with human actors?
- Human: What strategies do humans develop to cognitively and emotionally open up a technologically expanded, responsive environment?
- Design: Which design principles can be derived for an environmentally driven human-machine interaction and how does environmental (ubiquitous) interfacing between the human and the machine work?

Relevant paradigms shall be derived from the theoretical groundwork, which will then be artistically staged and tested in an interactive research facility. The essences of Ubicomp can thus be experienced and evaluated, whereby the focus is not solution- and application-oriented, but a rather critical one. Using sensor data and qualitative ethnographic survey methods, the experiences of the test subjects are recorded, triangulated and evaluated. In this way, the project should contribute to a better understanding and critical assessment of current technological developments and their influence on our living environment, agency and privacy.
