

Call for Papers for a Workshop at the University of Technology in Berlin  
14th to 16th September 2014

## **Design, Interaction, and Technologically Dense Environments. Methodological challenges to entangled work practices**

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In Technologically Dense Environments (TDEs), manifold situated interactions and layerings of humans and non-humans create heterogeneous and messy spaces of work. It follows that density is not a stable feature of TDEs, rather it is permanently produced through the complex translations of actors and artefacts. Likewise, these translations cannot be described as static procedures, but should rather be conceived as constantly developing and sometimes creative interactions of humans and non-humans. This does not only make TDEs as workplaces more similar to workshops – even though they are often framed as sites of mere use. It also represents a challenge for designers who see it as a core task to anticipate and enable trouble-free use for technological artefacts.

Therefore we want to focus on the interrelations between design and use, how novel (and possibly more or less dense?) ways of work and interaction are envisioned and developed by designers, and how users themselves re-design the complex arrangements of TDEs. Both design and use can be thought of as being carried out in technologically dense environments – in design laboratories which are set up to enable and create new forms of interacting with technology on the one hand, and professional sites where these “scripts” for interaction are followed or modified.

In the workshop, we would like to connect design research and science and technology studies (STS) through a shared engagement with TDEs. We conceive TDEs as locales in which numerous artefacts and infrastructures are increasingly intertwined, from paper notes to communication technologies, sophisticated instruments, and electronic information systems. Design and use are thus two distinct social situations which are both mediated by TDEs. Typically, STS analyses of TDEs show how artefacts are locally appropriated by users, i.e. appropriation starts with an artefact and ends with new uses. Design on the other hand, starts with use-problems and leads to artefacts. Methodologically, STS analysis works backwards from an observed phenomenon, trying to identify and interpret the main characteristics of its development. In contrast, design research is oriented toward creating novel artefacts and infrastructures themselves, thus employing a future oriented methodology for envisioning and developing new technologies. We think that the continuous flux and the complex translations of TDEs challenge both the backward orientation of sociological analysis as well as the future orientation of design research. Artefacts and infrastructures are thus not seen as closed and ready-made (or to-be-made) fixtures, but as experimental and creative arrangements in transformation. As routine and adaptation mix in design and use practice, sociological as well as design research must allow for heterogeneous design-use constellations and we would like to explore their interrelations by calling for papers which address the above issues empirically and conceptually.

We specifically seek contributions that follow a “hands on” approach to design and use. This may include specific design methods that try to deal with the unsteady nature of human-technology interaction in original ways, as well as social research methods for studying how new artefacts are used in TDEs. From a design perspective, we could ask how human-technology interactions can be re-shaped and opened up for appropriation, and how novel artefacts can be made to fit the messy interdependencies of TDEs. From a social science perspective, we could ask how to analyse the complex interrelations of work, interaction and technology beyond isolated situations of use or design. From both we may ask, how to follow actors and artefacts through TDEs.

We seek contributions on the graduate and post-graduate level, interested in presenting work-in-progress at the intersection of design research, STS, and technological density. Topics may address, but must not be limited to, the following themes and questions:

- How do anticipated use and everyday use relate? In how far can future work and interaction be envisioned or designed and in how far do users re-design artefacts in practice?
- What non-traditional ways of design-use relationships can we think of that could be more appropriate for TDEs? Which design approaches have proven beneficial to produce useful results for TDEs?
- Which empirical methods lend themselves towards studying the real-time entanglements of technologically dense work settings? How can we account for objects and technological representations and agencies in everyday organizational life?
- Along which lines are interactions and technological density likely to change in the future? For instance, are our bodily engagements with technical artefacts likely to change?
- How are drafts in design and workflow in everyday work connected with TDEs and how do elements of TDEs relate to different types of work?
- In which ways does the cooperation of users and designers challenge design processes as well as the study of technologically dense work settings?
- How can STS studies of TDEs inform design, and how can design projection of TDEs inform STS in turn?

The “hands on” approach of the workshop will extend past the presentations of papers as we want to include visits to different TDEs in Berlin. We will start the workshop on Sunday the 14th with an excursion to an abandoned TDE in Berlin (location yet to be terminated) and will visit the Design Research Lab ([www.design-research-lab.org](http://www.design-research-lab.org)) in the afternoon of the 15th as a laboratory for possible future TDEs.

Please address submissions of about one page to [cornelius.schubert@uni-siegen.de](mailto:cornelius.schubert@uni-siegen.de)

Deadline: **30.05.2014**

#### Preliminary timetable

Sunday, 14th Sept.

16:00h - 18:00h      Excursion to an old/abandoned TDE in Berlin  
19:00h                *Dinner*

Monday, 15th Sept.

10:00h - 12:00h      3 presentation slots, 40 min each  
12:00h - 14:00h      *Lunch break*  
14:00h - 16:00h      3 presentation slots, 40 min each  
16:00h - 16:30h      *Coffee break*  
16:30h - 18:30      Visit the Design Research Lab  
19:30h                *Dinner*

Tuesday, 15th Sept.

09:30h - 10:50h      2 presentation slots, 40 min each  
10:50h - 11:10h      *Coffee Break*  
11:10h - 12:30h      2 presentation slots, 40 min each

In cooperation with

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