Disrupting Scientific Boundaries

International Conference September 25th, 2024

Dresden

The scientific description and monitoring of increasingly complex crises and challenges require interdisciplinary research approaches and strategies as well as modes of thinking and acting that go beyond the rigid boundaries of the academic system. Such endeavors are thus being more and more promoted and demanded. Due to this reason the TUD Dresden University of Technology launched the measure "Disruption and Societal Change" (TUDiSC), where researchers from many different disciplines undertake a joint effort to investigate disruptions from a conceptual and practical perspective. TUDiSC was and is an ambitious project, that requires establishing common ground, integrating expertise and constructively overcoming differences. This process is in itself pushing the boundaries of strict disciplinary research and emanates in the best case a positively disruptive energy. For the 5th TUDiSC conference we would like to explore those scientific boundaries. We will be looking at conditions for successful interdisciplinarity, exploring the intersection between research, art and activism; and examine the interface between science and society. Boundaries inherently imply two perspectives: inside and outside, active and passive or, according to Luhmann, system and environment. Providing explicit boundaries to a system stabilizes and secures it. By establishing clearly defined process dynamics, a system's behavior becomes predictable. As a trade-off, systems with rigid boundaries are limited in their flexibility and adaptability. External influences challenge the structure of a system and therefore potentially change or even destabilize the whole system and its boundaries.

Our era of multiple crises is marked by disruptions on various levels: climate catastrophe, digital innovations in everyday areas, and the rise of far-right political actors are just examples of this. Science is both an observer and an actor amid these changes. Existing processes of the scientific system, such as communication, publications, teaching, or forms of collaboration, are challenged. Science is thus subject to a double contingency, as it cannot plan its own disruptions while simultaneously needing to react to external upheavals and transformations.

In the face of the disruptive condition, we pose the question of how and through what means the boundaries of the scientific system are expanded, torn down, or even reinforced. This question will be explored on three levels throughout the conference, namely society, art, activism. We will tackle this question by discussing the following key aspects:

Society: In the light of rising scientific skepticism, the authority of the academic system with regards to define "knowledge" is challenged. How do new research methodologies and science communication approaches relate to those challenges? How does the permeability of boundaries between science and society influence the prevailing self-descriptions of the science system?

Art: Taking new paths in communication also requires new forms of expression and processing, which reflects in performative presentations of scientific content or the reference of artistic works to scientific discourses. What are the boundaries between objective representation and artistic freedom? Which modalities should be addressed — reason, affect, embodied experience? How and when can art conduct scientific research itself, and what does this tell us about previously structured and clear research designs with established protocols?

Activism: Movements such as scientists for future blur the boundaries between activism and science. This raises the question of existing limits regarding individual involvement versus objective scientific methods. How do personal beliefs influence a scientist's choice of research questions, methods and results? How does this influence the external and internal perceptions of scholars and the scientific system? To what extent does the publicly funded academic system share responsibility for societal developments and how can it participate? Is political engagement of scientists legitimized?

During our conference, we aim to explore the boundaries and processes of change within the scientific system. In which areas are boundaries shifted, expanded, or newly defined? What kind of change is integrated into the scientific system, where does destabilization occur due to boundary shifts, and where are changes catalyzed?

On **September 25th**, we will experiment with open and participative formats to explore the boundaries between science and art as well as deliberate on the role of research in activism and vice versa. Acknowledging interdependencies of research, researchers and society, the solidity or fluidity of boundaries of science will be discussed in the context of conditions for their persistence or disruption in, but not limited to, interdisciplinary contexts.

Contributions can take the form of **lightning talks** or **round tables**.

Lightning talks are highly focused five-minute presentations involving either a central insight into a current research question, a hypothesis or a well-founded commentary regarding the key questions of the conference. After each lightning talk, there is room for a five-minute discussion. The lightning talks will kick off the conference day.

The **Round Table session** will begin with, and be based on, 25-minute research presentations addressing open questions within the field, followed by smaller group discussions lasting approximately 30 minutes. Each conference participant will have the opportunity to engage in three separate round table discussions. Contributors should be prepared to both present their topic and facilitate three rounds of discussions at their respective tables afterwards.

Please send in your contributions of max. **400 words** until **May, 13th 2024** to tudisc@tu-dresden.de.