

## Social Studies of Science as a Research Field

The interdisciplinary field of Social Studies of Science and Technology (STS) is a rather young research field, which aims at understanding the complex and multi-layered interaction processes between techno-science and society at large. On the one hand, it investigates how social, economic, political or ideological contexts influence the way techno-scientific knowledge is produced, and thus how society shapes science and technology. On the other hand, it analyses the impacts of scientific and technological developments on the way we think, structure and live in contemporary societies.

## The Department of Social Studies of Science at the University of Vienna

The Department of Social Studies of Science has been established at Vienna University since 1987, at first as part of the Department of Philosophy and Social Studies of Science. In 2004, the research group VIRUSSS (Vienna Interdisciplinary Research Unit for the Study of (Techno)Science and Society) became the core of the new department of Social Studies of Science at Vienna University's Faculty of Social Sciences.

Based on high-quality research, critical reflexive debate concerning the developments of science, technology and society with scientists and students from all disciplines, but also with wider publics should be fostered. The research is mainly organised in third party financed projects, often based on interdisciplinary teamwork and aims at comparative analysis. Beyond this expertise and know-how are offered in particular to practitioners working at the crossroad of science, technology and society.



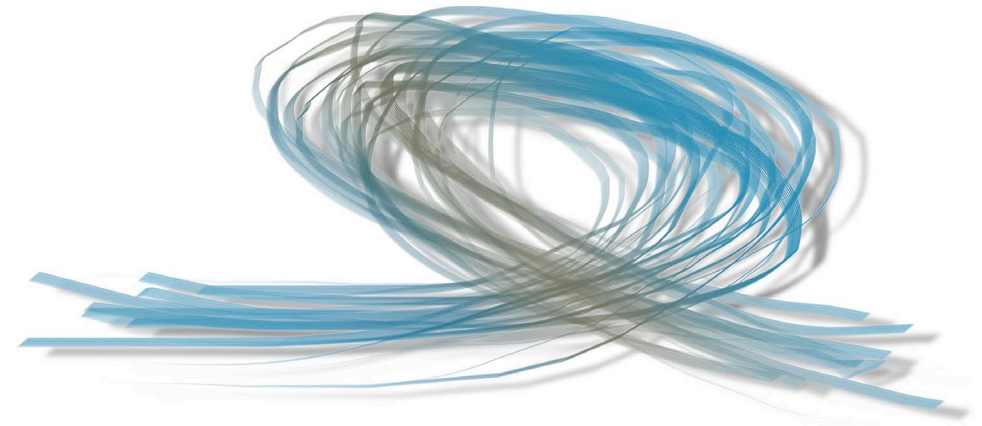
The teaching programme offered by the Department of Social Studies of Science provides a number of different possibilities for students to integrate a social science perspective on Science, Technology and Society into their individual course of studies - ranging from single thematic courses to a specialised master and PhD programme. To meet increasing demands for a deeper understanding of the relations between science and society the master programme "Science-Technology-Society" has been launched in winter term 2009. (see <http://sciencestudies.univie.ac.at>)

Ulrike Felt is head of the department since 2004. Fourteen researchers at master, pre- and post-doc level participate in the diverse research projects at the department.

proVISION Research Project

# Transdisciplinarity as Culture & Practice

An analysis of transdisciplinary project work in the funding programme proVISION from an STS perspective



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## Transdisciplinarity - A New Form of Scientific Practice and Culture?

The past decades have witnessed a growing debate on the role of science in contemporary knowledge societies. A key tenet of most of these debates is that science and society are ever more strongly intertwined. This implies that techno-scientific knowledge and products have become crucial to a broad range of economic, social and cultural activities. In parallel, knowledge production is no longer restrained to the classical spaces and places of science, but rather society may be argued to have become an extended 'laboratory' in which experimental knowledge is produced in close proximity to and interaction with life-world contexts. In turn, classical ways of scientific knowledge production are challenged as knowledge increasingly is produced in the context of its potential future application, and as the potential futures that come along with the respective innovation are constantly reflected in the research process. In this, task-specific temporal collaborations ever more often transgress disciplinary boundaries, institutional territories and traditional academic time regimes. In these constellations, scientists are increasingly called to become more reflexive about social impacts and implications of their research, and specific publics more and more often 'speak back to science' about the ways in which science and technology impact on their lives. Hence, the epistemic core of science can no longer be conceptualised as completely untouched by societal actors and their rationales. It has become more obvious than ever that the way we decide to live in this world is inextricably linked to the knowledge we produce about it.

In this context, new forms of knowledge production emerge and are experimented with. One approach particularly hyped by policy makers, funding agencies and university managers over the last years has been 'transdisciplinarity'. Its proponents seem to share the idea that transdisciplinary research is the most appropriate way to handle complex problems in contexts where facts are uncertain, values disputed and stakes are high. A central claim in this is that science has to transcend a certain disciplinary reductionism and to integrate different kinds of knowledge and experience – including extra-scientific knowledge – in order to frame both the definition of a problem and possible solutions. As a consequence, transdisciplinary knowledge production is confronted with rather diverse expectations and demands, needs to assemble its own sets of guiding values and practices and aims at establishing a new kind of knowledge culture. Such an endeavor, however, raises a wide range of theoretical and practical challenges to knowledge production, which are at the center of our project.

## Project Goals - Understanding New Forms of Knowledge Production and of Relations Between Science and Society

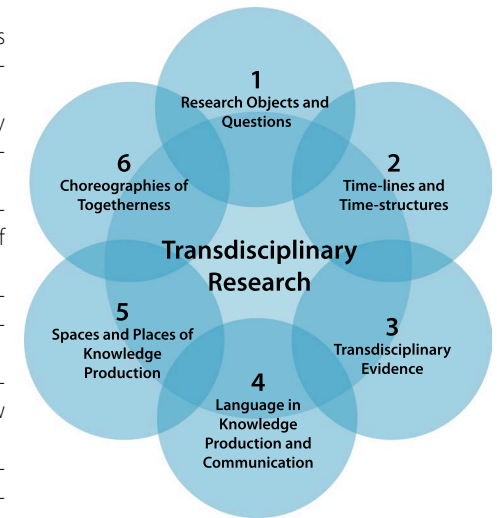
The project aims at developing an *empirically grounded understanding* of contemporary transdisciplinary research practices and thus at better grasping of what a transdisciplinary knowledge culture might mean for those involved. Our analysis in turn aims at contributing to a *broader theoretical reflection* about changing modes of knowledge production and their impact on contemporary knowledge societies. Furthermore, the project will reflect on policy framings and broader political imaginations of transdisciplinarity, on the expectations that are formulated and the impact this might have on the kinds of knowledge produced.

The study is financed in the context of the research programme proVISION, funded by the Austrian Ministry for Science and Research. proVISION focuses on sustainability issues, aiming to provide solutions to some of the more urgent problems concerning impact of climate change on ecosystems, regional development and quality of life. It explicitly fosters transdisciplinary research and is thus an excellent environment to investigate this form of knowledge generation. In that sense we perceive the programme and the projects of proVISION as a kind of 'laboratory' where new ways of knowledge production as well as new relations between science and society are both developed and probed.

## Research Foci of the Project

Our investigation of transdisciplinary research practices is structured along six central analytical foci. Each of them aims at addressing a crucial aspect of this kind of research and points at potential possibilities and limits.

1. How are the research objects and questions negotiated and developed in transdisciplinary research?
2. How do different and partly contradictory time regimes structure these investigations?
3. How is 'transdisciplinary evidence' produced and what counts as legitimate proof in this context?
4. Which role do language and communication play in the generation and dissemination of transdisciplinary knowledge?
5. Where are the spaces and places of transdisciplinary knowledge production and how do they frame the knowledge produced?
6. Which forms of collaboration and togetherness are produced, performed and negotiated in such heterogeneous contexts? What are the spatio-temporal arrangements and who are those participating in the choreography?



## Methodological Approach

In order to analyse the various forms of transdisciplinary practices and to shed light on the broader context of this new form of knowledge production we will work with a multi-sited approach, combining different social science methods such as qualitative semi-structured interviews, focus group discussions, text analysis, ethnographic observations in research and teaching constellations, etc. Going beyond classical grounded theory, our approach will be much more inscribed into the framework of 'situational analysis', thus producing and combining different dynamic maps of transdisciplinary research to a 'thick analysis' of constituting practices and their cultural meanings. Thus we aim at addressing simultaneously a full array of elements ranging from discourse and texts with all their materialities and symbolisms, over temporal regimes at work to power relations in their diverse forms.

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