

Integrating knowledge, values, and perspectives – institutionalizing reflexivity

Workshop on socio-technical integration methods

Monday, October 22nd (10h – 17:30h), Meeting Room ITZ, 4th floor

Tuesday, October 23rd (9h – 13h), Room 216, ITAS

Participants:

- Armin Grunwald, Christopher Coenen, Andreas Lösch and members of ITAS vision assessment group (ITAS-KIT)
- Erik Fisher (STIR, School for the Future of Innovation in Society, ASU)
- Mareike Smolka (PhD Student Univ. Maastricht)
- Mone Spindler (INTEGRAM Project, IZEW, Univ Tübingen), and Nils Heyen (Fraunhofer ISI, Karlsruhe)
- Annette Ripper (iSP NAG) and Elena Dingersen (iSP TuE, TU Darmstadt)
- Alexandra Hausstein, Marcus Popplow (ITZ, KIT)

Aim of the workshop

Decades after C.P. Snow's speech in 1959 on the division of academia into two cultures (science and humanities), the boundaries seem to have not only deepened due to higher degrees of division of academic labour and specialization of knowledge production but also to have become intentionally blurred due to increasing calls for and approaches aimed at socio-technical collaboration and integration. Despite repeated attempts to install interdisciplinary and transdisciplinary approaches, however, there is a widely felt sense that such efforts are only affecting the tip of the iceberg. Calls from civil society, politics and research funding institutions for integrating knowledge have fuelled the emergence of new conceptualizations of academic endeavours in research and teaching as problem-oriented, reconsiderations of innovation processes and technology development as user-oriented, focus on public expectations and subsequent management of emerging science and technology, the reintegration of social values (value sensitive design), norms (ethics, RRI), or the attention to societal implications (ELSI/ELSA). Many of these approaches merge under the conceptual roof of Technology Assessment and/or Anticipatory Governance, aiming at evaluating new technology, advising policy makers and influencing regulatory practices (Expert and Parliamentary TA), contributing to forming public opinion and including a wider array of stakeholders in decision making processes (pTA), allowing for engagement and integrating TA insights more directly into R&D processes and design practices (CTA, Real-time TA). However, the desire to integrate segregated forms of knowledge and diverging kinds of values and to make social science and humanities knowledge more constructive remains often one-sided, leading to a situation where SSH attempts to offer their insights, reflexive support and services to Engineering and Natural Sciences remain unacknowledged, fail, have no impacts, come too late (at best), or are co-opted (at worst). Often, SSH sees itself in a position that it is called to fulfill legitimacy functions, contribute only symbolically, serving accompanying research (Begleitforschung), delivering client-centered research, providing social science methods for better understanding user cultures and their expectations (understanding anxieties and building trust), or even transforming expectations and cultures to fit the advance of new technologies ("co-opting or priming the user" on the level of framing and understanding - science communication, and familiarizing to raise public expectations of social benefits - industry supported and financed public labs). Parts of the STS community involved in TA and AG practices are torn between its need to survive in academic settings, its right to academic freedom, the ambition to form a distinct professional group and the fear to transform its role in

Science Public Relations into advocacy science. And sometimes, their insistence on critical distance and self-reflexivity would dissociate sciences even further, as certain divergent viewpoints may not be tolerable in dominant discourses, putting SSH/STS scholars in the corner as either Mr/Ms Know-it-all or Kill-Joy.

Yet, in the face of (or perhaps because of) these well-known challenges and perils, some SSH and STS scholars are continuing to develop and experiment with various integrative approaches. Beyond such individual approaches, we have to think more generally about strategies and methods.

The workshop will allow for spaces to discuss, both, structural, epistemological and habitual barriers of integrated research and the strategies (observing, moulding, intervening) as well as methods (see below) to be employed when integrating societal perspectives into innovation processes or intervening or stirring up technology development processes. Besides structural barriers, that include access to resources, funding, publishing, as well as hierarchies, there are also methodological challenges that concern questions like the timing (When is a good timing to intervene?), the evaluation of integration (what is considered good integration?), the role and academic identity of the SSH researcher and subsequent research goals (Will it make a difference if the embedded researcher is a Social Scientist, an Ethnographer or an Ethicist? Shall social scientists/ethicists be researchers and/or integration agents, should they reflect or participate in decisions, reflect on or engage in innovation? (STIR Mode 1 vs. Mode 2), the career paths of embedded social scientists/humanists (Which value is assigned to disciplinary research in interdisciplinary/transdisciplinary settings? How does the scientific community value singular STS contributions to integration?), as well as the roles of engineers/scientists (colleague, research subjects, collaborator, competitor, project leader). How do STS scholars working on integration in the field of knowledge production position themselves regarding their capacity as experts, observers, facilitators or even architects of mundane practices and/or future imaginaries by unfolding and narrating them?

The aim of the workshop is to map tools, techniques, practices and approaches to these and similar challenges; to learn from one another's experiences; and to debate broader strategies for dealing with them.

If the goal of integrated research and the embedded humanist/social scientist is to amplify and enhance reflexivity at different stages of the technology development process, then addressing different stages, actors, and expectations will be crucial. How can we grasp values (latent and manifest) that are present in technology development and innovation process (visions, knowledge, practices, identities, institutions)? What methods are at hand to enhance the awareness of concerns, the availability of options and the ability to explore alternatives at different levels of decision-making processes?

I propose, that participants contribute by explaining the use of their methods to the following stages of technology development:

- 1) Formation of visions and expectations – vision assessment, ITAS
- 2) Formation of knowledge orders and epistemological foundations – hermeneutical TA, ITAS
- 3) Mapping decision making practices of R&D – STIR, ASU
- 4) Mapping normative assumption and enabling for value awareness – INTEGRAM IZEW Univ. Tübingen
- 5) Institutionalizing knowledge and reflexivity – ISP NAG TU Darmstadt

Organizer:

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