



Workshop on Self-Governance in Science and Technology

Institute for Advanced Sustainability Studies

Potsdam, Germany

April 14-15, 2014

Call for Abstracts

Topic	How can we explain the (non-)emergence of self-governance by the scientific community in science and technology issues over the 20th and early 21st centuries? How can we situate debates on currently emerging issues such as climate engineering, nanotechnology and synthetic biology in this history?
Format	2-day workshop to present and discuss the topic, for potential compilation into journal special issue
Participants	Researchers and practitioners in a variety of historic and current S&T issues
Location	Institute for Advanced Sustainability Studies (IASS) in Potsdam, Germany
Needed now	Submit 250-word abstract by 7 February 2014
Organizers	Sean Low (IASS Potsdam), Stefan Schäfer (IASS Potsdam), Jack Stilgoe (UCL Science and Technology Studies)

Rationale

Discussions on appropriate governance for currently emerging issues in science and technology (S&T) – including climate engineering, synthetic biology and nanotechnology – have been gaining momentum in academic and policy circles. These are frequently characterized as novel and unprecedented; however, there are aspects to these debates that are not new, and there is much that can be learnt across different cases. Interdisciplinary and comparative historical reflection on these cases is crucial for increasing our understanding of how to create an enabling context for responsible innovation in currently emerging technologies.

The last century has seen the evolution of S&T governance across fields as disparate as transportation, communication, agriculture, energy, medicine, and dual-use military technology. One apparent commonality among these debates is that during the formative periods of emerging issues in S&T, *competing interests can frequently be observed through calls for autonomy of scientific inquiry and technological development, on the one hand, and warnings of potential hazards that require regulatory constraints, on the other.*

We seek to examine one particular response – *self-governance by the scientific community*. Systems of self-governance, in which primarily scientists and technology developers devise safety standards, codes of conduct, and channels of engagement to decision makers and the public, have been proposed across many issues, and have been met with varying degrees of contestation. While other levels of governance have been negotiated, from local regulations to UN treaties, along with all manner of hybrid regimes, self-governance has – with varying degrees of longevity – had remarkable traction as a concept within many debates on emerging issues in S&T.



Discussions of governance of past and present S&T innovations are often based on technocratic and deterministic assumptions in popular and academic discourses, in which a specific form of governance is understood as the answer to a set of *objective* characteristics of an issue, and to the “governance challenges” raised by these. This workshop will problematize this notion and focus on the social processes involved in determining what are the relevant characteristics of a technology, on the processes of contestation that are involved and in the emergence of governance, across a variety of national, institutional, and technological contexts. We thereby challenge the notion that a specific form of governance is a “logical” response to the objective challenges a given S&T issue is claimed to present society with. This demands an appreciation of the often overlooked assumptions and incentives that shape S&T as a form of what Arie Rip calls ‘de facto’ governance.

At the IASS, we have been examining the social construction of self-governance particularly in the context of the emerging debate around climate engineering. We now seek to broaden this discussion to other currently emerging technologies. An application of the investigative methods outlined above to the emergence or non-emergence of self-governance for S&T issues in the 20th and 21st century should thus be the clear and explicit focus of contributions to the workshop.

Workshop

We invite researchers from political science, sociology, law, science and technology studies, history, philosophy of science, and related disciplines to participate in a **2-day workshop at the IASS (Institute for Advanced Sustainability Studies) in Potsdam, Germany, April 14-15, 2014**. Participants are invited to present in-depth case studies of the actors, conditions, and processes through which self-governance emerged, or failed to emerge, in historic and current S&T fields, possibly including, but certainly not limited to:

- Climate engineering (solar and carbon)
- Nanotechnology
- Synthetic biology
- Recombinant DNA and biotechnology
- Nuclear technology
- Stem cells research
- Energy (carbon-based and renewable technology
- systems)
- Weather modification
- Local and regional environmental modification
- Endangered species research
- Human subject research
- Nitrogen and phosphorus fixation
- Transportation innovations
- Information technology
- Biological and chemical weapons
- Robotics
- Financial innovation
- Virology
- Genomics and biobanking

We ask participants to structure their case studies around an examination of the competing claims outlined above, the understandings on which they are based, and how governance emerged from within this social context. Possible questions to address include the following:

- What were the structural conditions relevant to particular periods (e.g. the evolving strength of the regulatory state; economic de-regulation; legal and political de-nationalization; the development of the environmental movement; the rise and fall of ‘Big Science’) that facilitated or constrained the emergence of self-governance?
- What were the repercussions of changes in these structural conditions for self-governance in S&T?
- Have prior S&T debates contributed to the alteration of the structural conditions that shaped later debates?



- Who were the actors, including private actors, governmental actors, international institutions, civic, epistemic, and media communities, relevant to the contestations that occurred over preferred forms of governance?
- What resources did these actors draw upon (e.g. epistemic, organizational, financial), and what strategies and actions did they pursue?
- What assumptions were made about 'science', 'innovation', 'the public', 'regulation' and 'governance'? How were these categories constructed?
- How can we understand the processes of construction and contestation within and between groups of actors? How did these influence scientific and technological development and its governance?
- How does self-governance in S&T issues relate to self-governance in other fields, such as municipal and regional self-governance in public administration, industry self-governance (e.g. through industry standards), and to professional autonomy in general?

Workshop Outputs

Case studies should be conducted with the aim of being integrated into a methodologically rigorous theoretical exploration of the emergence and change of governance for science and technology, addressing the issues outlined above. We plan to compile select contributions in a special issue of a high-quality scholarly journal.

Information and Requirements for Participation in Workshop

Please send, by **Friday, 7 February 2014**, confirmation of your availability to attend the workshop as well as an abstract of not more than 250 words on your chosen topic to sean.low@iass-potsdam.de. If accepted, you will receive a confirmation by **Friday, 21 February 2014**. Where necessary to enable attendance, travel and accommodation will be covered for speakers according to the travel guidelines of the IASS.

We then invite contributors to the workshop to prepare and submit by **Friday, 4 April 2014**, a presentation of not more than 15 minutes. Presentations will be made available to all participants prior to the workshop.

Please do not hesitate to contact the organizers with questions and concerns.

With our best wishes,

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