



INTERNAL WORKSHOP

IMAGINED SOCIETIES AND POLICYMAKERS. THE POLITICS OF IPCC SCENARIOS AND A NEW ROLE FOR THE SOCIAL SCIENCES

Organisation: Stefan Aykut (Universität Hamburg), Oliver Geden (SWP Berlin)

Date and Venue: 14.-15.10.2019, Van-Melle-Park 9, room A215

RATIONALE

Scenario-driven modelling is widely used in (global) environmental governance to assess uncertainties and inform policymakers and wider publics about possible and probable evolutions (Garb et al., 2008; Aykut, 2019). Such prospective expertise forms the backbone of emerging forms of “anticipatory governance” (Guston, 2014). It also shapes the ways in which problems are identified, debates framed and solutions designed (Brown et al., 2000; Beck and Mahony, 2017). While model- and scenario-development involve mostly scholars from economics, engineering and the natural sciences, they also entail wide-ranging assumptions about society and politics. Sometimes made explicit in the form of storylines in scenario-building or stylized policy interventions translated into model inputs, such assumptions frequently stay undisclosed, when they take the form of implicit choices embedded in model architectures or specific conceptions of policymaking and -relevance that inform the design of simulation exercises.

This discrepancy has repeatedly spurred calls for broader participation of social sciences scholarship in scenario-driven modelling (Pulver and VanDeveer, 2009). The workshop aims to contribute to this discussion. It adopts a dual perspective, combining *reflexive review and critique* of current practices with *constructive reflection* on possible ways in which the (non-quantifying) social sciences might productively contribute to prospective expertise.

The starting point for our discussions is that IPCC assessments have, over the last decade, heavily relied on a new scenario framework¹ that builds on three elements: Representative Concentration Pathways (RCPs) represent stylized forcing outcomes (Van Vuuren et al., 2011); Shared Socioeconomic reference Pathways (SSPs) describe typical evolutions of the world without additional climate

¹ A user-friendly introduction to the topic can be found here: <https://climatescenarios.org/primer/>

policies (O'Neill et al., 2014); and Shared Policy Assumptions (SPAs) enclose key characteristics of climate policies, concerning both mitigation and adaptation (Kriegler et al., 2014). All three are inter-dependent: RCPs and SSPs form a so-called “scenario matrix”, to which SPAs add a third dimension (Van Vuuren et al., 2014). The rationale for this new framework stems from practical considerations concerning the sequential organization of disciplinary modelling exercises for IPCC assessments, but also from reflections on the ways to ensure policy-relevance of simulations while avoiding policy prescriptiveness (Moss et al., 2008; Moss et al., 2010).

The current IPCC scenario framework both departs from previous approaches and is also inscribed in a long history of scenario-building, from the SA90 scenarios for AR1 to the IS92 scenario family and the 2000 SRES scenarios (Girod et al., 2009). We contend that these scenario architectures not only shape the ways in which researchers from different disciplines collaborate in the IPCC process; they also entail important, yet oftentimes implicit, assumptions about societal dynamics and on the needs of the policy process in terms of prospective expertise. The objective of the workshop is to make these assumptions explicit *and* to discuss possible contributions from the social sciences to this ongoing process. Possible avenues for discussion include:

- *Imagined societies in scenarios*: how are social dynamics and their drivers, as well as possible societal evolutions conceptualized in the RCP-SSP-SPA framework? What are its assumptions on policy processes and the steering capacities of politicians and public officials?
- *Assessment of uncertainties*: How is scenario variability understood, explained and communicated? To what extent is the source of such variability located in insufficient knowledge, or, to the contrary, in the irreducibly uncertain nature of social dynamics?
- *Imagined policy-makers in uptake*: what assumptions about the policy processes are implicit in the design of scenario exercises? Who are the (imaginary) addressees of simulation results? How is the policy-relevance of prospective expertise understood and its uptake ensured?
- *History*: how did key assumptions about society and governance, along the lines listed above, change historically, from SA90 to the RCP framework?
- *Performativity*: what are the (unintended) consequences of scenario-uptake, and of different ways of organizing prospective expertise?

Concerning the contribution of the social sciences, we will discuss different modalities:

- *Participation*: How, through which methods and at which moment of the scenario process, could the (non-quantitative) social sciences provide valuable inputs?
- *Reform*: What (incremental) changes in the scenario process would allow for a more substantial contribution of the non-quantifying social sciences?
- *Alternatives*: Can we think of other ways or approaches to inform policymakers and civil society organizations on possible / plausible evolutions of the climate system and of societies?

OUTPUT

The workshop aims to prepare a peer-reviewed contribution to the first CliCCS *Hamburg Climate Futures Outlook* in March/April 2020, and to launch a discussion process that includes further meetings on related topics. A medium-term objective is to publish a commentary in a high-ranking academic journal.

WORKSHOP PROGRAMME (FRIST DAY)

Monday, 14.10.2019

10h45-11h Welcome coffee

11h-13h Welcome and state of the art

- **Introduction** by the organizers (15 min) & presentation round (15 min)
- **Elmar Kriegler**: The role of the scenario matrix in the IPCC process (20 min)
- **Glen Peters**: Reflections on the SSP / RCP process from a user perspective (20 min)
- **Discussion** (50 min)

13h-14h Lunch

14h-15h15 Modelling under public scrutiny I

- **Christophe Cassen**: The IAM epistemic community and its role (15 min)
- **Stefan Schäfer**: The Politics of Objectivity in IA Modeling (15 min)
- Comment **Oliver Geden** (10 min)
- **Discussion** (35 min)

15h15-16h30 Modelling under public scrutiny II

- **Bård Lahn**: Science in the Paris stocktake: 'heating up' or 'cooling down' political issues? (15 min)
- **Erland Hermansen**: The missing learning loops in IAM processes
- Comment **Jochem Marotzke** (10 min)
- **Discussion** (35 min)

16h30-16h50 Coffee

16h50-18h Imagined societies and policy-makers

- **Sean Low**: Understandings of 'feasibility' and 'agency' in IA modeling (15 min)
- Comment **Stefan Aykut** (10 min)
- **Discussion** (45 min)

20h30 Dinner at Restaurant Brodersen, Rothenbaumchaussee 46, 20148 Hamburg

WORKSHOP PROGRAMME (SECOND DAY)

Tuesday, 15.10.2019

9h-9h15 Coffee

9h15-10h45 *Performativity and uptake*

- **Silke Beck**: What does it mean to say that IPCC scenarios are ‘performative’? (15 min)
- **Felix Schenuit**: Performativity in practice: the IPCC 1.5°C report (15 min)
- Comment **Rob Bellamy** (10 min)
- Discussion (35 min)

10h45-11h Coffee

11h-12h30 *Contributions from the social sciences I: adaptation*

- **Jan Petzold**: The potential and limitations of IPCC response scenarios (15 min)
- **Sara de Wit**: How qualitative approaches could enrich quantitative scenarios (15 min)
- Comment **Simone Rödder** (10 min)
- Discussion (50 min)

12h30-13h30 Lunch

13h30-15h *Contributions from the social sciences II: mitigation*

- **Markus Schulz**: Sociology and prospective knowledge / scenario thinking (15 min)
- **Bruno Turnheim**: Evaluating the ‘feasibility’ of transition pathways (15 min)
- Comment **Hermann Held** (10 min)
- Discussion (50 min)

15h-16h30 *Wrap-up and discussion of next steps*

16h30 End of the Workshop