The What, Why and Who of Climate Engineering Research Governance
Discursive Structures underlying Responses to a Proposed Code of Conduct for Climate Engineering Research Governance

Miranda Böttcher/Institute for Advanced Sustainability Studies

IASS POTSDAM

Summary: This poster presents a (post)structural discourse analysis of a series of semi-structured interviews with governance experts from US, the UK and Germany about a proposed Code of Conduct for climate engineering research. The mapping of discursive patterns in the governance expert debate aims to help understand the formation of terms, objects, narrative rationales and authoritative governance roles structuring responses to the idea of the Code of Conduct as a governance mechanism for climate engineering research.

Research context/questions

Imagining and governing our collective climate future(s) has been termed one of the most pressing and intractable societal challenges of our time. The already complex discussions about governing climate futures have recently become even more convoluted with the emergence of the idea of climate engineering (CE); an unbounded set of heterogeneous proposals for intentionally intervening into the climate system to reduce the risks of climate change. The idea of intentional, large-scale manipulation of the global climate has been termed a quintessential anticipatory governance challenge. However, despite the increasing interest in the topic of CE governance, so far there has been little empirical analysis of the discursive structure underpinning the emerging CE governance debate and a lack of corresponding discussion about what implications this discursive context could have for the future development of CE governance mechanisms. Understanding the discursive context into which a given contested technology is emerging is especially relevant as the boundaries of the discursive conditions of possibility shape how future governance options can be imagined and institutionalized.

This poster presents the preliminary results of a qualitative, (post)structural discourse analysis based on a series of interviews with governance experts from United States, the United Kingdom and Germany about a proposed *Code of Conduct for Responsible Climate Engineering Research*

The analysis addressed the following central questions:
- **Formation of terms: What is governance?** How is the term governance being assigned meaning?
- **Formation of objects: Govern what?** What is being constituted as the object(s) which should (not) be governed by the Code?
- **Formation of governance demand rationales: Why govern?** What narrative rationales are structuring the call for/rejection of the Code of Conduct as a CE research governance mechanism?
- **Formation of authoritative roles/speaker positions: Who governs?** What governance roles/speaker positions are being constituted as authoritative in the potential adoption and implementation of the Code?

Analytical approach

(Post)structural discourse analysis
- **Premise:** Discursive structures constitute and perpetuate meaningful reality.
- **Aim of analysis:** To identify the underlying structures of a specific issue-focused discourse which provide meaning to the phenomena which are the objects of the discourse and affords authoritative subjectivity to those who speak within the discourse.
- **Reconstruction:** By looking at the textual data produced within the discursive structure, a discourse analyst attempts to reconstruct the underlying structure itself.
- **Open, inductive coding**: Organising individual elements of the texts into inductive analytical categories with the help of the qualitative text analysis program MAXQDA

Iterative analytical approach:
1. **Theoretically guided data pool creation** containing interview transcripts thought to have been produced within the same discursive structure.
2. **Development of a theoretically informed research questions** to guide the search for elements and rules of discursive formation.
3. **Analysis and open coding** to identify how the discursive elements 'terms', 'objects,' 'speaker positions', and 'thematic strategies' (storylines, narrative logics) appear in the texts.
4. **Interpretative reconstruction** of the formation rules with which the identified discursive elements are linked: patterns of internal specification and external differentiation, relationships of equivalence and contrariety, fundamental oppositions
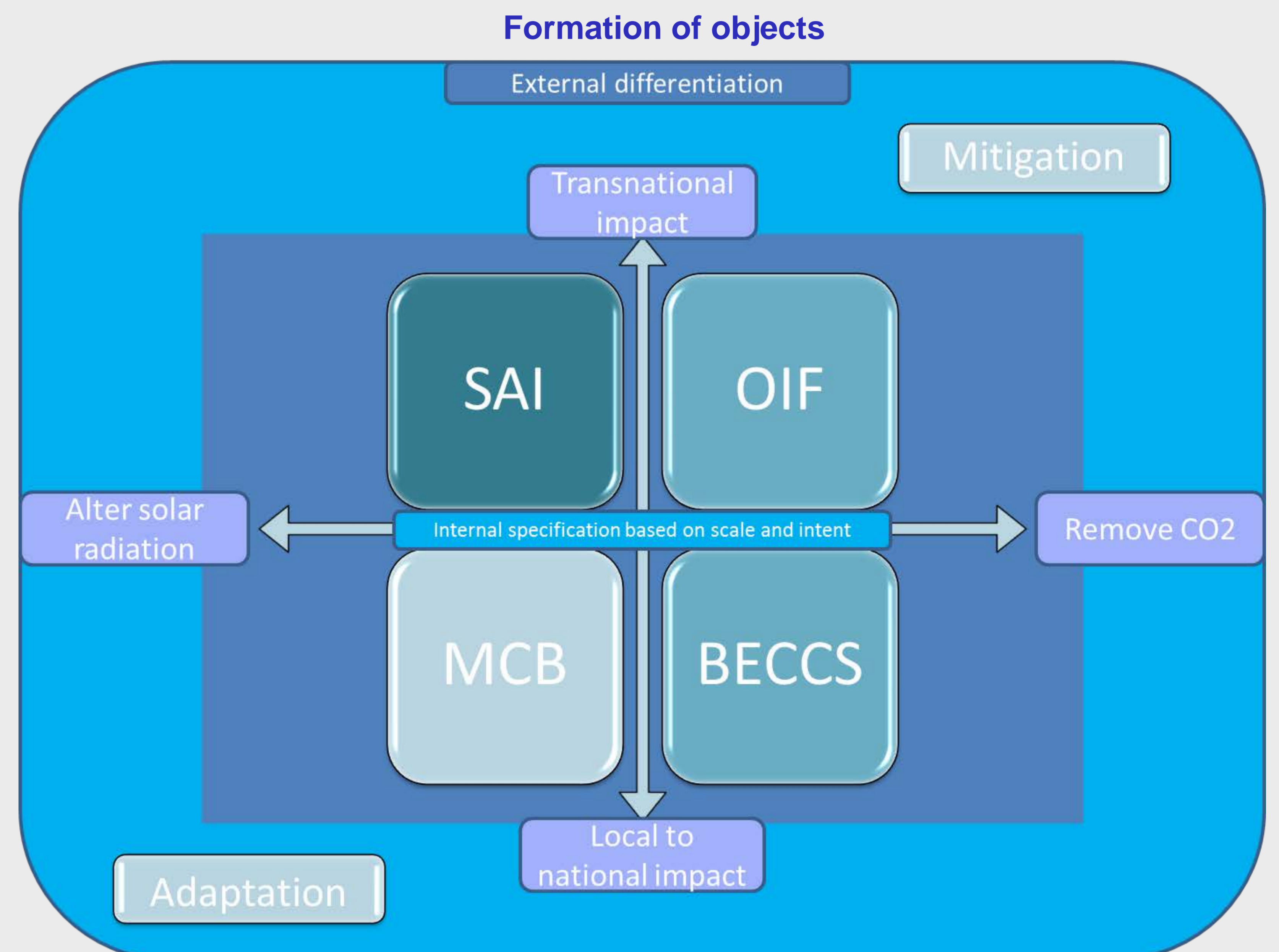
Preliminary Results

Formation of objects

Figure 1: **Formation of objects in the climate engineering governance debate.** Internal differentiation of types of climate engineering approaches according to the scale of their impacts and their intended effect. External differentiation of what is(not) climate engineering according to "dealing with cause'" vs. "dealing with symptoms" dichotomy. SAI = stratospheric aerosol injection, OIF = ocean iron fertilization, MCB = marine cloud brightening, BECCS = bioenergy with carbon capture and storage
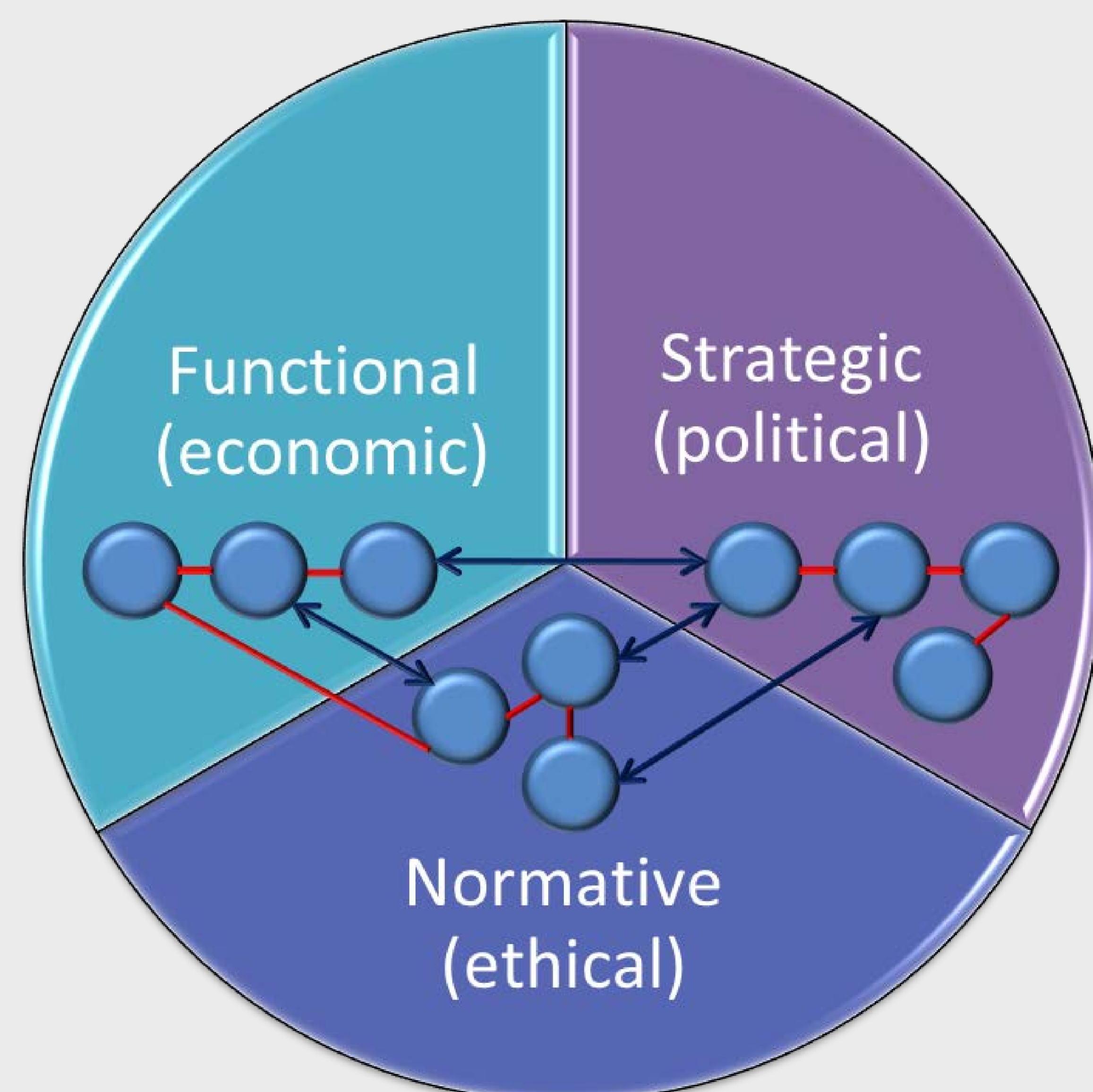
Formation of governance demand rationales

Figure 2: **Formation of narrative governance demand rationales in the climate engineering governance debate.** An example of mapping underlying relationships of equivalence and contrariety between narrative categories. The circles represent distinct narrative categories. Red lines represent equivalence relationships between categories, arrows contrary relationships.

Discussion of results

- What implications could the results have for the emergence of climate engineering research governance?
- How could these results inform the development of context-appropriate climate engineering research governance mechanisms?

Diaz-Bone, Rainer (2006): Zur Methodologisierung der Foucaultschen Diskursanalyse, in: Forum Qualitative Sozialforschung/Forum: Qualitative Social Research [On-line Journal] 7(1).

Miranda Böttcher, miranda.boettcher@iass-potsdam.de; https://www.linkedin.com/in/mirandaboettcher/

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