The ‘user’ as empty signifier in energy scenarios?

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Motivation: Scenarios are popular in discourses on German energy transition goals. Combining modeling with qualitative storylines receives increased attention: Storylines shall not only provide social systems analysis as input data and evaluation frameworks; they shall also take over what models often fail to offer: Informing decision-makers, generating previously unnoticed mental maps and challenging pre-existing ones. However, social science has not properly engaged in questions of who the users potentially are, how they are integrated in scenario work, and how sense-making can(not) occur. By refraining from probabilities, plausibility often reads as key scenario assessment criterion. My research focuses on the under-developed plausibility concept in scenarios: How is plausibility established, assessed and evaluated?

Approach: Following the trajectories of plausibility along the life path of energy scenarios

I propose by considering the life path of energy scenarios [1] as unit of analysis. It demonstrates different interpretations how decisions in the development phase may determine plausibility and how this has implications for users’ perceptions.

Application Area: Energy scenarios in Germany

The extant literature suggests certain characteristics of current practices of energy scenario analysis:

- Concise community of developers
- Serves as scientific policy advice
- Disseminated as reports
- Unclear user group
- Sequential separation of life path

The characteristics reinforce the need to study users’ perception and interpretation of scenarios as plausibilistic constructions

State of Current Work & Preliminary Results

The framework informed an empirical study on the EVALUATION phase, using semi-experimental study findings:

- RQ1: How is plausibility established for different scenario formats and contents?
- RQ2: How do people reason about plausibility of scenarios?

Approaches from cognitive & educational psychology

Plausibility as condition for conceptual change

Regression analyses on variables influencing plausibility