



DEBATING ARGUMENTS OR ONLY PALAVER?

Narratives in the German Debate on Final Disposal of High Radioactive Waste

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Content

1. Introduction: Why narratives, why future?
2. No future, or thinking in alternatives
3. Images for the future of final disposal
4. Linking futures to reflected pathways. Insights into current research
5. Conclusion

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1. Introduction: WHY NARRATIVES, WHY FUTURE?

1-1 Why look for the future?

- Repository for high level waste is a major socio-technical challenge in Germany.
- Over years strong demand for more public participation. Increase since 2013: new site selection procedure fixed by law (StandAG 2013/2017).
- On-going debate especially regarding aspects of the “medium-term future” (Hocke/Kuppler-/Enderle 2021).
- ITAS approach: analyzing societal subsystems integrated in two dimensions: (1) interest aggregation & articulation, (2) decision-making in the field of radwaste governance.

1-2 Modes of governance

- „Governance“ concept analyzing coordination and cooperation - established concept in sociopolitical research, always underlaid by substantial and on-going policy, here nuclear waste policy in a wide sense
- My presentation is framed by TRANSENS, an transdisciplinary research network with more than 60 researchers and 16 institutes.

1-3 Why look for the future?

- Narratives and images of the future shape the future by “shaping the present” (Grunwald 2019)
- “Knowledge about possible futures” is important for consultation and orientation of political decision-making processes (esp. orientational knowledge, see Lösch et al. 2021)
- Imaginaries and narratives are very influential as they steer the framing of problems which have to be managed and considered – esp. in the case of the “wicked problem” nuclear waste (Smeddinck / Roßmann 2022)

2. THINKING IN ALTERNATIVES

2-1 Thinking in Alternatives – The theoretical approach and its operationalization

- Self-limitation by linear conceptual thinking, realizing alternatives as a serious way out (Grunwald 2022: 42, Grunwald 2018)
- Planning site selection and final disposal is complex and wicked. One example: final disposal as challenge for a number of decades: six up to one dozen before closure is a real possibility
- Esp. challenging for affected people, regions and institutions
- How do they talk about it?

2-2 Operationalisation

- Stepwise research design;
- Elaboration of narratives;
- Design of future images, based on different pathways for development and implementation;
- Results from former research extended;
- ITAS-research in TRANSENS: „Capability to act and flexibility in a reversible site selection process“ (HAFF).

2-3 Methods and experimental setting

Vision assessment as a socio-technical TA concept (Lösch et al. 2021) with certain characteristics and specific operationalizations. In our case adopted in a specific way:

- **Elaboration of narratives**

- Qualitative guided expert interviews
- Experts from the fields of: science, civil society, politics, administration, companies

→ *Analytical-explorative methods*

- **Design of visions of the future, based on different development paths**

- Reflection and further development of narratives as key elements
- Workshop with students and PhD students

→ *Exploratory-evaluative methods*

- **Inter- and transdisciplinary experiment „Cability to act and flexibility in a reversible site selection process" (HAFF)**

- Transdisciplinary and transformative research

→ *Methods for consultative design, which integrates different types of knowledge (based on knowledge of citizens, knowledge of professionals with experience in radwaste mangagement, scientific knowledge)*

3. IMAGES FOR THE FUTURE

3. Images for the future of final disposal

- Different development pathways are articulated (pessimistic, moderate and optimistic future)
- Images of the future are more than loosely connected stories (influenced by styles of thinking and also analytical reflection (Fleck 2019))
- Our analysis: Narratives of collective actors are structuring their arguments and their context, when they tell their stories of “pathways” (pessimistic, moderate and optimistic stories)

(Source; HAFF study in TRANSENS / work in progress, see also Brohmann et al. 2021, chapter 5)

3-2 Images

Exemplary Images:

- Radwaste policy without problem-oriented foresight and without long-term strategy and governance in most cases.
- Site selection process is dominated by protests and riots.
- Government has no concept for adequate solution of radwaste problems.

Images for the futures (interim result):

- Images as nodes (more or less complex)
- Explaining the present (Grunwald)
- Different “futures”, not a single one, interwoven by narratives.

4. LINKING FUTURE TO REFLECTED PATHWAYS. INSIGHTS INTO CURRENT RESEARCH

4-1 TRANSENS & HAFF

The analytical HAFF framing in TRANSENS:

- „Capability to act“ and “flexibility to act“ are central topics, collective action of public administration (incl. NBG) and their interaction (with civil society and informal institutions) are an important focus.
- Framing within a collective debate as a mode to develop images, narratives and orientation (Goffman).
(orientation for planning and looking for the mid-term future)
- Policy shift by reorganizing public administration in the policy sector „management of (high-) radioactive waste“ in GER.

4-2 Detected narratives

- „Final disposal is impossible!“
- „The new law and HAW siting procedure would not have happend without Fukushima!“
- „NIMBY blocks common-good oriented decision-making!“

(Further examples available)

4-3 Future pathways for final disposal

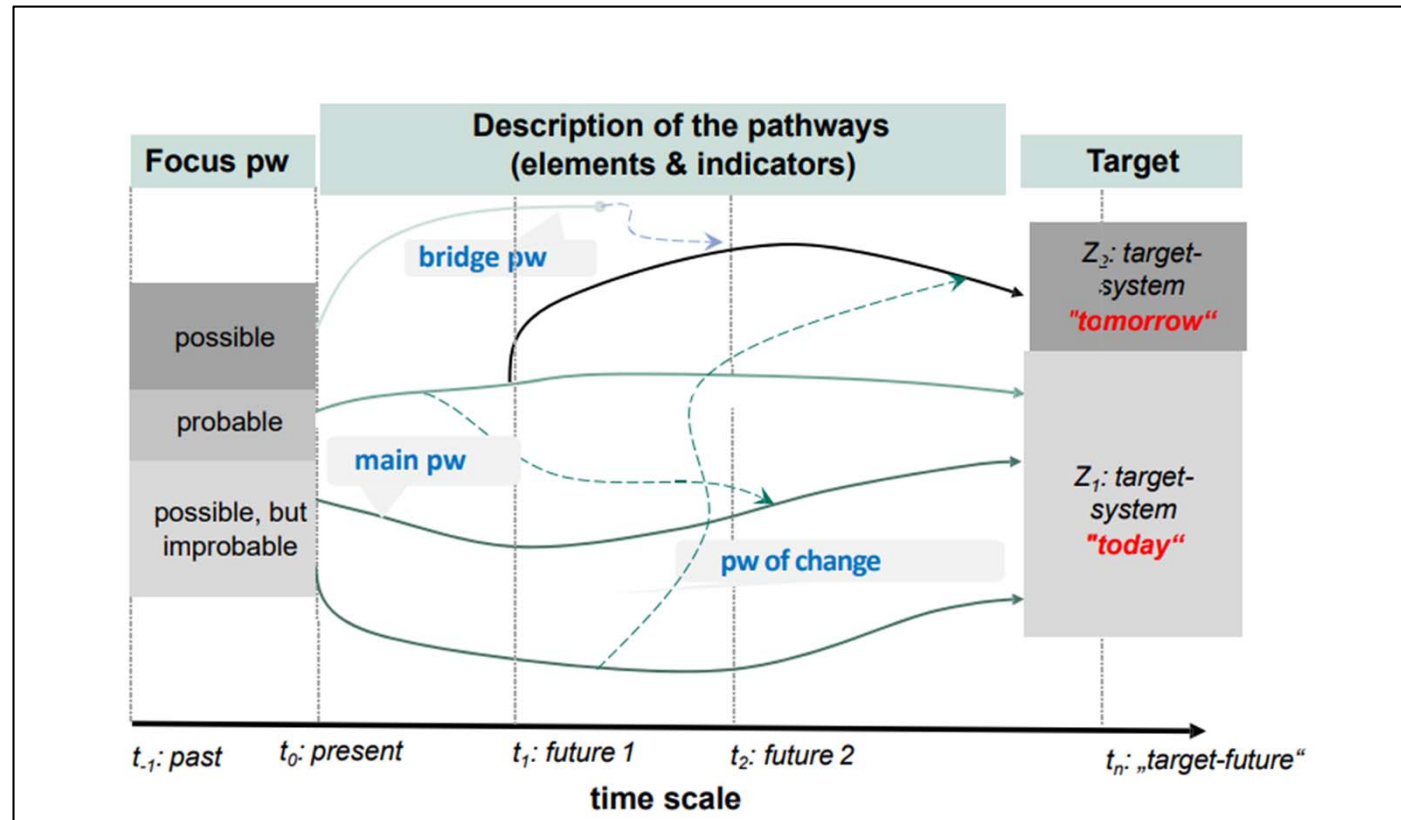
Approach

- Approach "Future paths for final disposal: path heuristics under the paradigm of capability to act and flexibility in a reversible process".
 - conceptual contribution for identification, implementation and consequence analysis of disposal paths with a clear definition problem and a reflected goal
- Bundling and consolidation of findings from TRANSENS
 - in order to identify and design recognizable and distinguishable disposal paths.

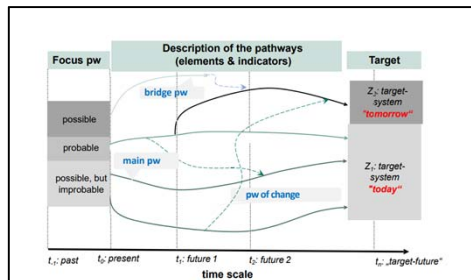
4-4 Future pathways (pw) for final disposal

... with a consistent description, measures, effects

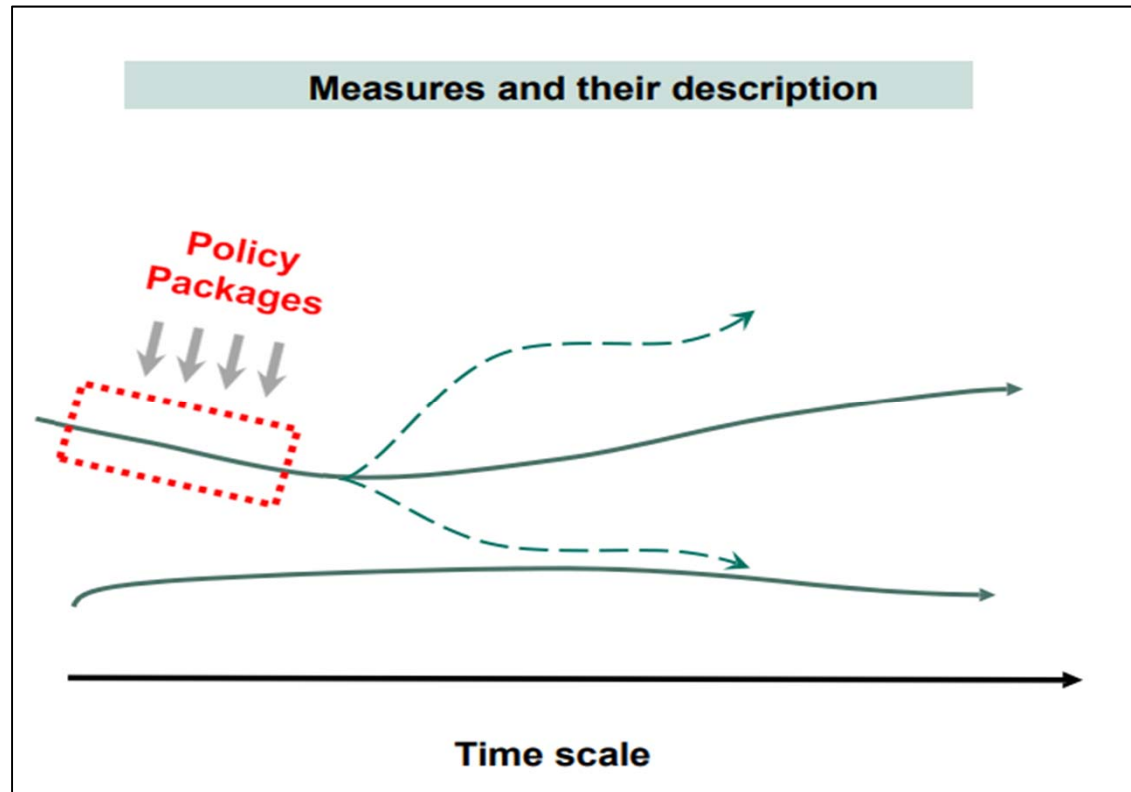
(source: ITAS & HAFF, Scheer/ Becker/ Hassel / Hocke et al.)



4-5 Policy packages as a condition for future pathways



(source: ITAS & HAFF, Scheer et al.)



5. CONCLUSION: DEBATING ARGUMENTS OR ONLY PALAVER?

5. Interim conclusion by interdisciplinary experts

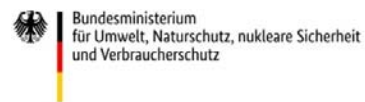
- Images for the future are often dystopias, challenge to reflect this position.
- Interest in research: help to reflect and avoid as much as possible path-dependencies.
- HAFF analyses the influences of images on pathways and their alternatives.
- Starting with dense descriptions on three „alternative“ pathways: Final disposal ...
 - a. ... close to the German StandAG (site selection law) and the paradigm of “Safety First!”;
 - b. ... close to extended interim storage;
 - c. ... with consolidated interim storage.

5-2 Palaver?

- In field of experts: Experiences with the German political culture in radwaste management: social science based research causes skepticism (Sträter 2021; Brunnengräber et al. 2021).
- Future(s) and open pathways are no topic in radwaste discourse.
- The structure of discourse and public debate is not dominated by a rational checking of arguments and search for compromises, but by strategic stakeholder communication (Rosa 2021, Zanetti 2022).
- Palaver or arguing? --> [HAFF-workshops](#) to reflect on not improbable pathways and obstacles to developing alternative courses of action and planning.

Thank you!!!
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