EUSPRI-ONLINE SESSION: FRAMEWORKS AND TYPOLOGIES

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Governing the diversity of Missions-oriented Innovation Policies: A new typology

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RESEARCH MOTIVATION
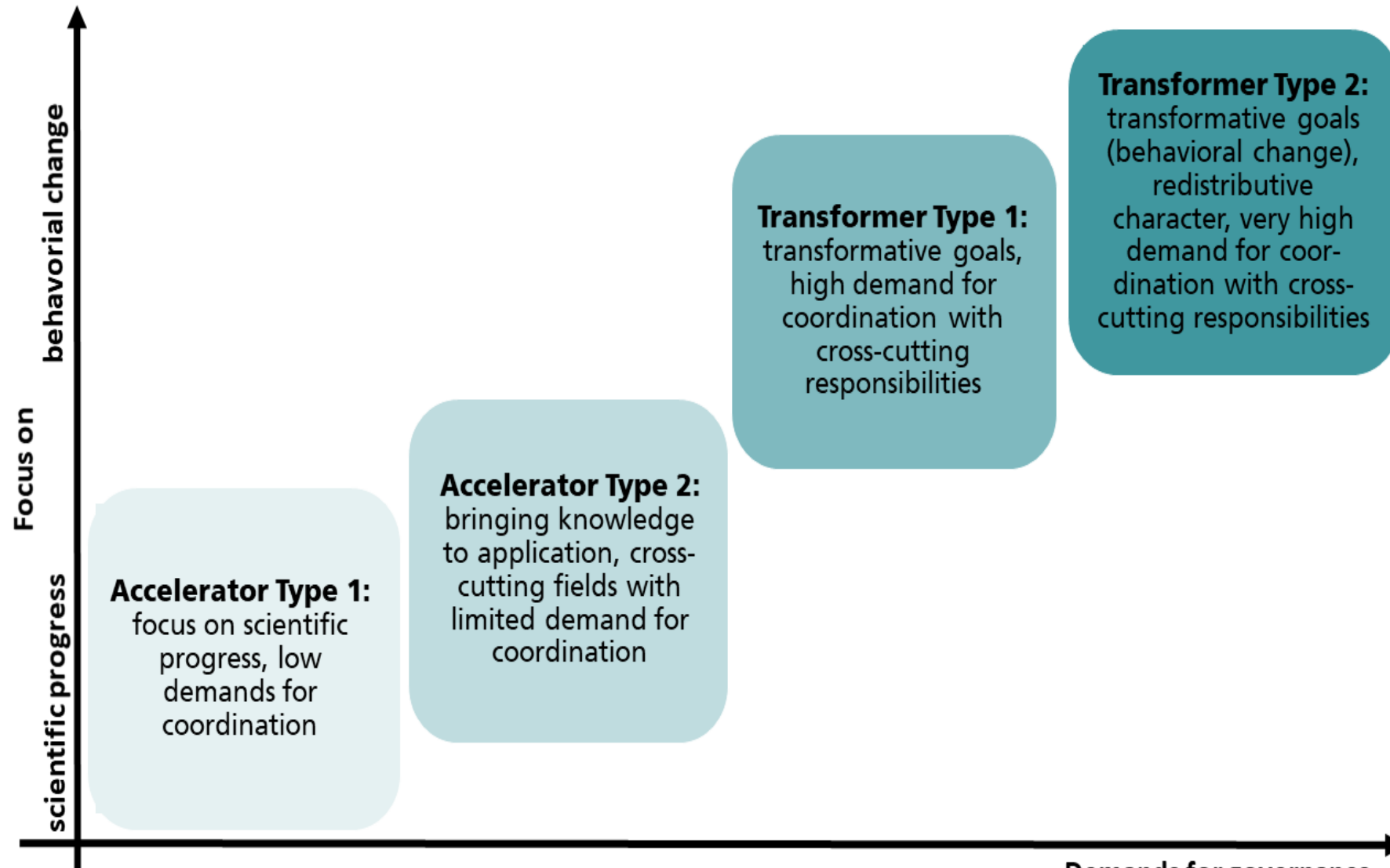
- Growing importance of „new" mission-orientation

- BUT: Empirical diversity subsumed under this label constitutes a challenge for research and policy analysis

  - How context-specific is mission formulation?

  - Are all „missions" really missions?

  - Can we assume similar mechanisms, dynamics and challenges everywhere?

How can we systematize the empirical diversity of missions?

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CONTRIBUTION – WHY A NEW TYPOLOGY?

- Different attempts for systematizing missions with different foci (Larrue et al. 2019, Kuittinen et al. 2019; Polt et al. 2019; Wanzenböck et al. 2019)

- Focusing on **actual formulation** of missions instead of ideal types

    - Missions as a translation of challenges into solvable problems (cf. Mazzucato 2018, pp.811–812; Robinson and Mazzucato 2019, p. 936)

- Disentangling „complexity" by focusing on the implementation of missions

- Accounting for the increasing role of the state

    - Directionality as a source of potential conflicts

   - Cross-sectoral character imposes additional requirements for cooperation and coordination

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TYPES OF MISSIONS

Focus on (y-axis): scientific progress → behavorial change

Demands for governance (x-axis)

Accelerator Type 1: focus on scientific progress, low demands for coordination

Accelerator Type 2: bringing knowledge to application, cross-cutting fields with limited demand for coordination

Transformer Type 1: transformative goals, high demand for coordination with cross-cutting responsibilities

Transformer Type 2: transformative goals (behavioral change), redistributive character, very high demand for coordination with cross-cutting responsibilities

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OPERATIONALIZATION

Dimension	Operationalization	Type of variable	Related Literature
Type of problem	Type of failure (transformative vs. non-transformative)	Binary	Daimer et al. 2012; Weber and Rohracher 2012b
Type of solution	Scientific/technolog. innovation as the main driver vs. systemic change (behavioral additionality)	Binary	Gök and Edler 2012; Wanzenböck et al. 2019; Polt et al. 2019; Hekkert n.d., p. 13
Problem- vs. goal-oriented	Mission defined by goals vs. problem description	Binary	Polt et al. 2019
External coordination (equally weighted)	Cross-sectoral diversity (state, science, economy, society)	Additive index	
	Dimensions of state activity (financing, regulating, coordination, redistribution, information)	Additive index	Larrue et al. 2019, p. 13; Borrás and Edler 2020; Lowi 1972; Hufnagl 2010
Internal coordination	Dimensions of internal interaction (number/type of actors involved, governance architecture/leadership)	Additive index	Larrue et al. 2019

HTS 2025

- main instrument of German federal government for mission-orientation

- Focus beyond STI policy

- Consisting of 12 dedicated missions from different areas

- Budget: approx. 4.5 bln EUR (2019-2021)
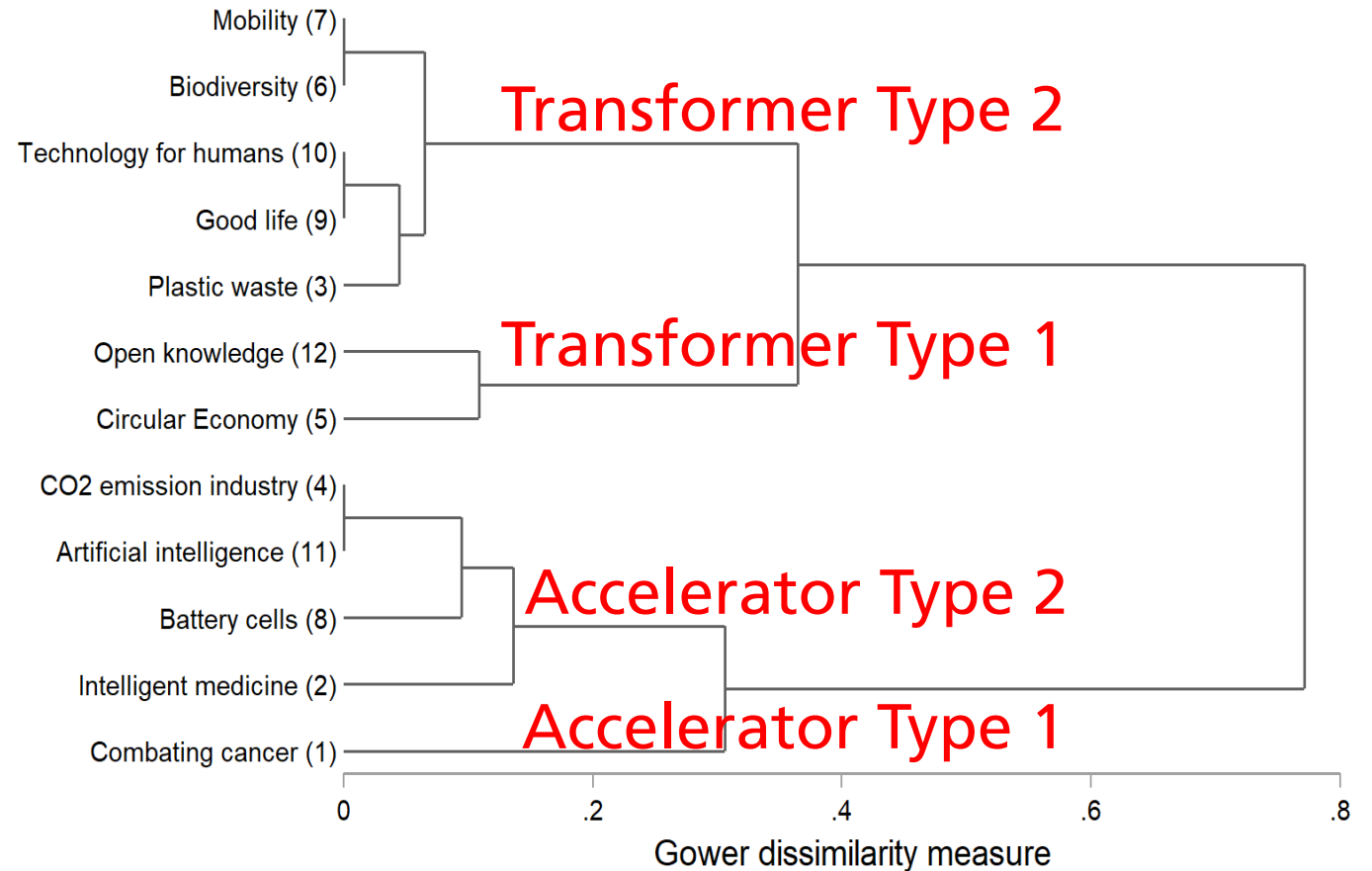
SUMMARY AND OUTLOOK

- Developing a typology that captures the empirical diversity of missions
    - Missions as a translation process from challenges into policy goals
    - Looking at implementation as proxy for complexity and governance requirements
- Identifying four ideal types of missions based on distinction between transformer and accelerator missions
- Further reflections
    - Hybrid cases
    - Missions may change over time (learning effects)
    - Making empirical assessments robust
    - Different types of missions face different types of challenges

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Thank you very much for your attention

Paper available as working paper:
https://www.isi.fraunhofer.de/content/dam/isi/dokumente/cci/innovation-systems-policy-analysis/2020/discussionpaper_64_2020.pdf

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