

MISSIONEN UND MISSIONSORIENTIERTE POLITIK

Begründung und Entwicklungen auf europäischer Ebene

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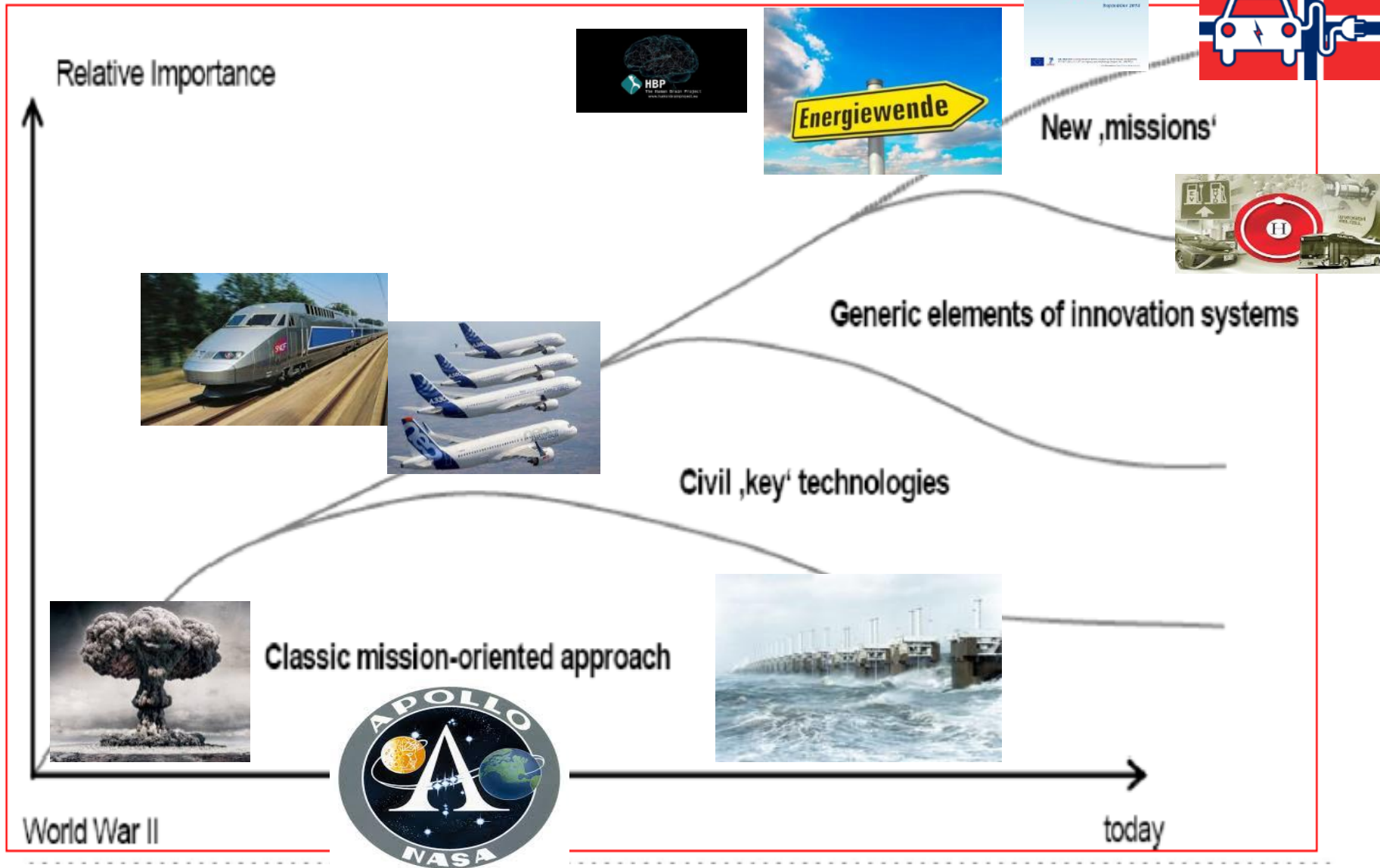
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D2030 Future Lounge

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MISSIONS – OLD AND NEW

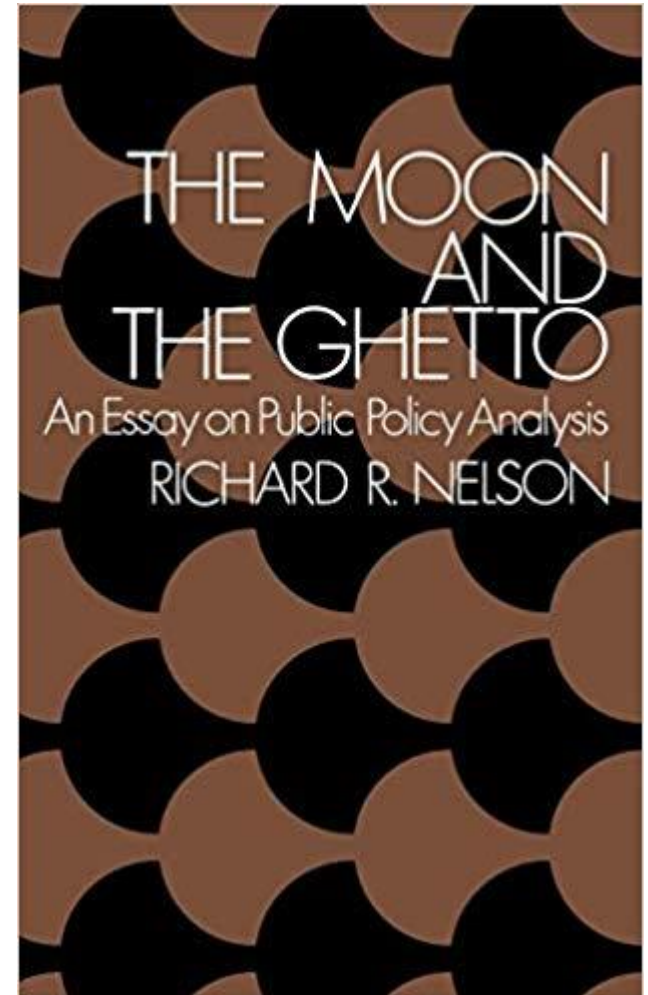


Source: Gassler et al. 2008, Weber et al. 2007, Kuttinen et al. 2018

WHY NEW MISSION-ORIENTED POLICY?

“If we can land a man on the moon, why can’t we solve the problems of the ghetto?”

(Richard NELSON, The Moon and the Ghetto. An Essay on Public Policy Analysis. 1977)



POLICY RATIONALES: THE NORMATIVE TURN

- **1940s – 1960s: Basic research + old missions: big projects**

- „Political“ rationales determine major research initiatives with high visibility:
„The political end justifies the means!“
- Science push model underpins the role of basic research

- **1970s – 1980s – Industrial competitiveness**

- Emphasis on market failure as a counter-movement and response to government failure
- S&T-centric, but first concerns about social shaping and consequences of technologies

- **1990s - 2000s – Innovation systems performance**

- „Structural“ system failure recognising the interactive, collaborative evolutionary and complex nature of innovation processes
- Balance variation and selection, overcoming path-dependencies, institutions

- **2010s - 2020s – New missions: Addressing societal challenges**

- „Transformation“ failure resulting both from impacts of existing systems and from risks/uncertainties of emerging developments
- Abandoning the positive connotation and normative fix of innovation on promoting growth and competitiveness

- **Market failure**
 - Information asymmetries
 - Knowledge spill-over
 - Externalisation of costs
 - Over-exploitation of commons
- **Structural system failure**
 - Infrastructural failure
 - Institutional failure
 - Interaction/network failure
 - Capabilities failure
- **Transformational system failure**
 - Directionality failure
 - Demand articulation failure
 - Policy coordination failure
 - Reflexivity failure

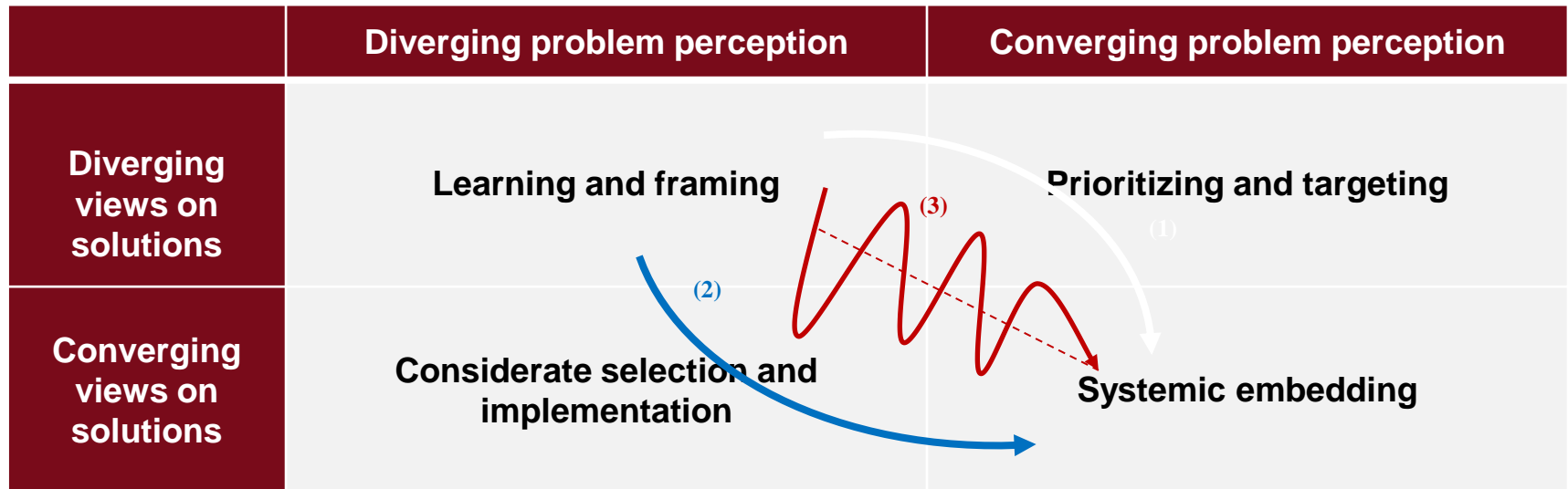
Source: Weber & Rohracher 2012; Daimer et al. 2012



A TYPOLOGY OF MOPS

Type of Mission	Goals / Orientation	Examples
,Science / Breakthrough-Missions‘	Aiming at scientific breakthroughs sometimes, but not always, with view to the potential application	<ul style="list-style-type: none"> ▪ Human Brain Project, ▪ Quantum Flagship, ▪ (Research on) Ebola
,Technology / Accelerator‘ – Missions	Realizing functioning complex solutions of a primarily technological nature, which need concerted action and a concentrated use of resources	<ul style="list-style-type: none"> ▪ Apollo/Artemis-Mission, ▪ civil nuclear powerplants, ▪ TGV, ▪ Concorde, ▪ Battery research
,Transformative Missions‘	Change of existing (large-scale) socio-technical systems, involving social, technological, organisational and institutional innovations	<ul style="list-style-type: none"> ▪ German ,Energiewende‘ ▪ Transport/Mobilitätswende ▪ Sustainable and secure water management (NL)
,Umbrella-Missions‘	Initiatives that follow over-arching goals, including parts which are missions in the proper sense (even of different sorts)	<ul style="list-style-type: none"> ▪ German High-Tech-Strategy ▪ Global CC research, adaptation / mitigation

SUPPORTING CONVERGENCE: A PROCESS-ORIENTED VIEW ON MIP



Source: Wanzenböck et al. 2020

Three stylized pathways

Problem-led : Targeted transformation - open and participatory learning practices followed by distributed search around clear goals (Example: *smoking bans to reduce second-hand smoking*)

Solution-led : Bottom-up search for solutions without societal problem framing; dominant solution 'meets' problem at a later stage (Example: *CCTV to reduce crime in public spaces*)

Hybrid : experimenting in both directions - learning about the challenge in the course of finding solutions; high risk of ill-structured mission approach (Example: *stimulate initial local renewable energy solutions*)