How researchers can empower actors in sustainability transitions – insights from a transition management process towards climate neutrality in the Swiss Alps

Centre for Development and Environment
University of Bern
felix.poelsma@unibe.ch

Felix Poelsma
Stephanie Moser
Susanne Wymann von Dach

What we did

Transdisciplinary & participatory process towards a climate neutral region

- Local and regional governments
- Industry
- Civil society
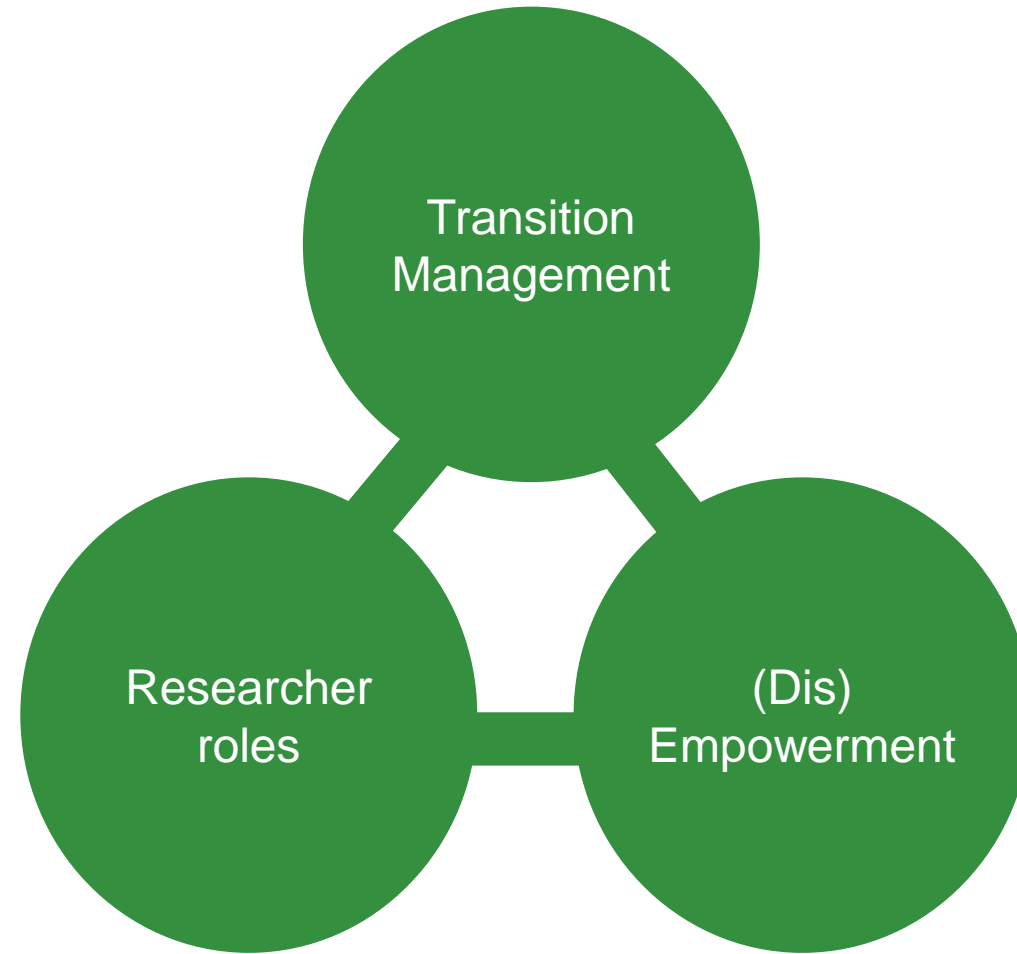
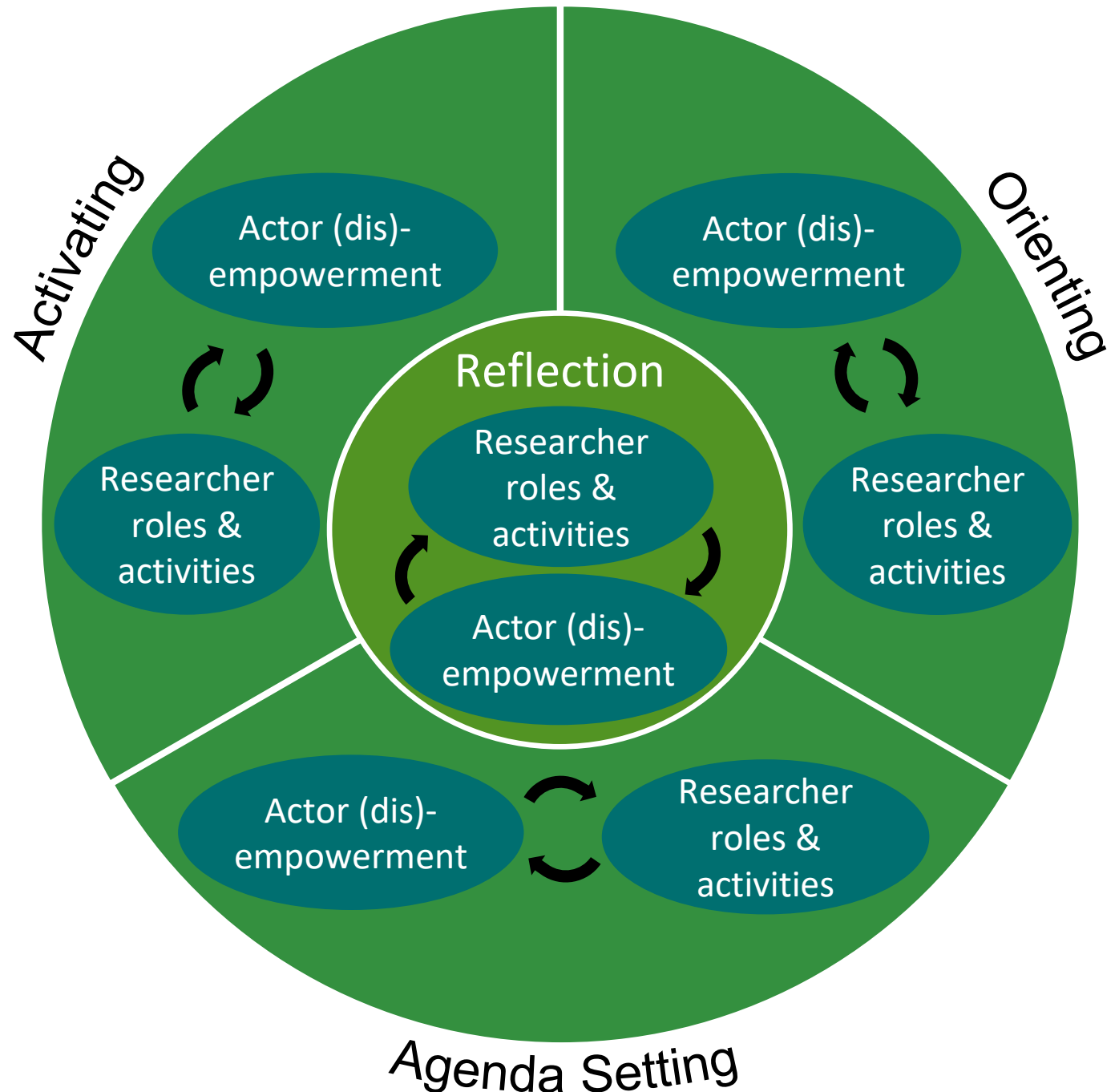**Problem Framing** → **Visioning** → **Transition pathways** → **Experimenting**

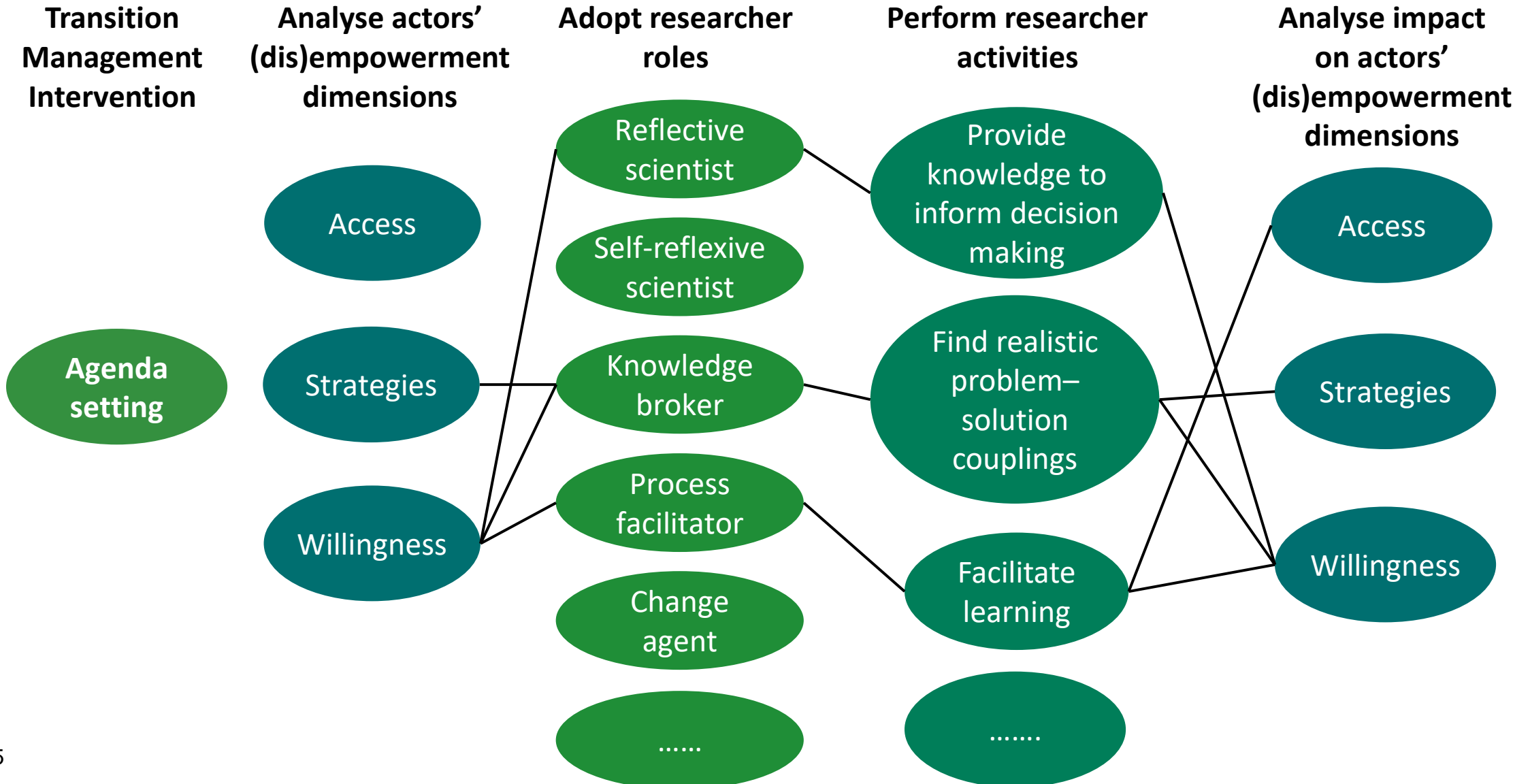# How to design an empowering transdisciplinary transition processes?

Framework

Framework based on:

- **Transition management**
  (Roorda et al., 2014;
  Frantzeskaki et al., 2018)
- **Roles of researchers**
  (Bulten et al., 2021;
  Huning et al., 2021;
  Wittmayer & Schäpke,
  2014)
- **(dis)empowerment**
  (Avelino, 2017)

Framework

Best practices card deck

Best practices card deck

Transition Management Intervention	Analyse actors' (dis)empowerment dimensions	Adopt researcher roles	Perform researcher activities	Analyse impact on actors' (dis)empowerment dimensions
Agenda Setting	**Strategies** Uncertainty on where to start?	Knowledge broker	Develop a 'best-practice' card deck • to provide practical examples	The best practice examples supported project development
	Willingness Feeling of being alone/a minority regarding climate concern	Knowledge broker	Develop a 'best-practice' card deck • include examples from within case-study region)	Local actors became aware of other climate initiatives in their region

Provide knowledge to inform decision making

Transition Management Intervention	Analyse actors' (dis)empowerment dimensions	Adopt researcher roles	Perform researcher activities	Analyse impact on actors' (dis)empowerment dimensions
Agenda Setting	**Willingness** • Uncertainty on the impact of project ideas • Uncertainty on public opinion	Reflective scientist	Provide knowledge to inform decision making	Actors found the information very relevant, but also expressed uncertainty how to use this knowledge during project development

Provide knowledge to inform decision making

Transition Management Intervention	Analyse actors' (dis)empowerment dimensions	Adopt researcher roles	Perform researcher activities	Analyse impact on actors' (dis)empowerment dimensions
Agenda Setting	**Willingness** • Uncertainty on the impact of project ideas • Uncertainty on public opinion	Reflective scientist	Provide knowledge to inform decision making	Actors found the information very relevant, but also expressed uncertainty how to use this knowledge during project development

Sector

Housing

Visions

Heating systems

Fossil-fueled heating systems are replaced with systems based on regional renewable energy. The required energy is produced by the building's own facilities as much as possible.

Skilled workforce

Local architecture and planning offices, building owners, construction companies, licensing authorities and other relevant actors in the construction sector have well-trained specialists at their disposal who provide homeowners with up-to-date, correct and comprehensible information regarding home renovations.

Priorities based on assessment

GHG Reduct. ●●●●●   Synergies ●●●●   Residents ●●●●

GHG Reduct. Indirect   Synergies ●●●●●   Residents ●●●●●

9

Thank you!

u^b

UNIVERSITÄT
BERN

CDE
CENTRE FOR DEVELOPMENT
AND ENVIRONMENT

Project website:

https://www.cde.unibe.ch/research/projects/local_energy_transit
ion_experiments_for_a_low_carbon_society/index_eng.html

Centre for Development and Environment
University of Bern
Mittelstrasse 43, CH-3012 Bern
(felix.poelsma@unibe.ch)

Felix Poelsma
Stephanie Moser
Susanne Wymann von Dach

References

Avelino, F. (2017). Power in Sustainability Transitions: Analysing power and (dis)empowerment in transformative change towards sustainability. *Environmental Policy and Governance*, *27*(6), 505–520. https://doi.org/10.1002/eet.1777

Bulten, E., Hessels, L. K., Hordijk, M., & Segrave, A. J. (2021). Conflicting roles of researchers in sustainability transitions: Balancing action and reflection. Sustainability Science, 16(4), 1269–1283. https://doi.org/10.1007/s11625-021-00938-7

Frantzeskaki, N., Hölscher, K., Bach, M., & Avelino, F. (2018). Co-creating sustainable urban futures. A primer on applying transition management in cities, Future City, 11.

Huning, S., Räuchle, C., & Fuchs, M. (2021). Designing real-world laboratories for sustainable urban transformation: Addressing ambiguous roles and expectations in transdisciplinary teams. Sustainability Science, 16(5), 1595–1607. https://doi.org/10.1007/s11625-021-00985-0

Roorda, C., Wittmayer, J., Hennemann, P., Van Steenbergen, F., Frantzeskaki, N., & Loorbach, D. (2014). *Transition management in the urban context: Guidance manual.* RIFT, Erasmus University Rot-terdam, Rotterdam. https://drift.eur.nl/app/uploads/2016/11/DRIFT-Transition_management_in_the_urban_context-guidance_manual.pdf

Wittmayer, J. M., & Schäpke, N. (2014). Action, research and participation: Roles of researchers in sustainability transitions. Sustainability Science, 9(4), 483–496. https://doi.org/10/f6n3h2

Images:

Appendix
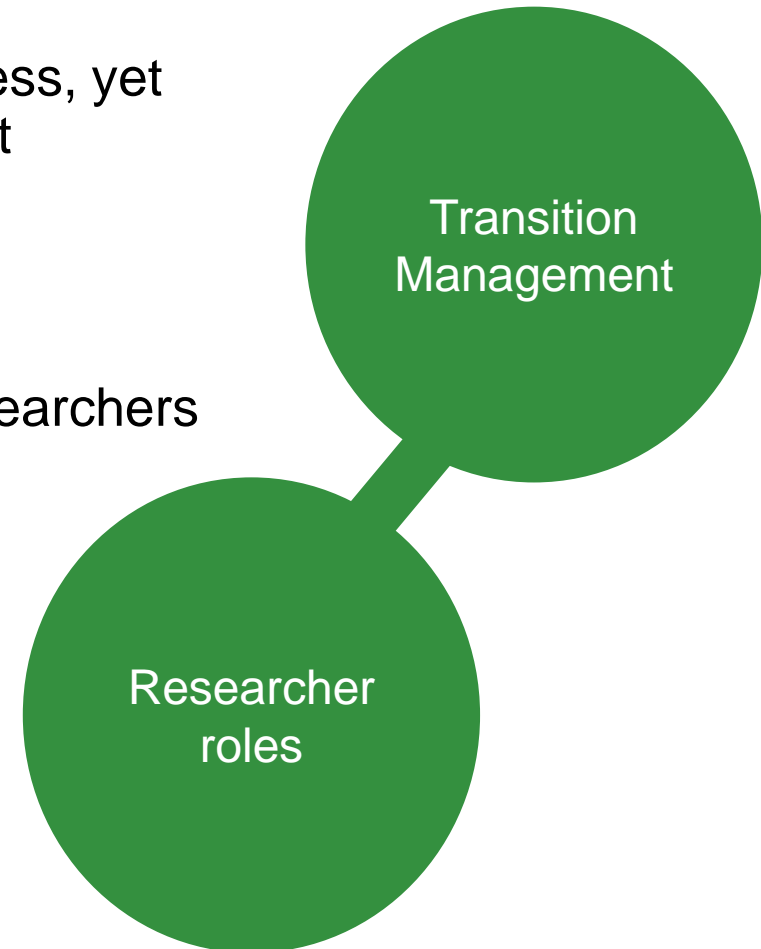
How to design an empowering transdisciplinary transition process?

Transition management

- Could be described as an empowerment process, yet focus on power/empowerment is rather indirect (Hölscher et al., 2019)

Researcher roles

- Lots of literature on the <u>roles</u> and <u>activities</u> researchers can adopt (Bulten et al., 2021; Huning et al., 2021; Wittmayer & Schäpke, 2014). Yet, little attention on how well researchers <u>perform</u> these roles.

- What actually makes a good or bad 'reflective scientist', or 'process facilitator'?

Transition Management

Researcher roles

# How to design an empowering transdisciplinary transition processes?

Transition management

- Could be described as an empowerment process, yet focus on power/empowerment is rather indirect (Hölscher et al., 2019)

Researcher roles

- Lots of literature on the <u>roles</u> and <u>activities</u> researchers can adopt (Bulten et al., 2021; Huning et al., 2021; Wittmayer & Schäpke, 2014). Yet, little attention on how well researchers <u>perform</u> these roles.

- What actually makes a good or bad 'reflective scientist', or 'process facilitator'?

To enhance the impact and reflexivity of the transition process we added insights on (dis)empowerment (Avelino, 2017).

Transition Management

Researcher roles

(Dis) Empowerment
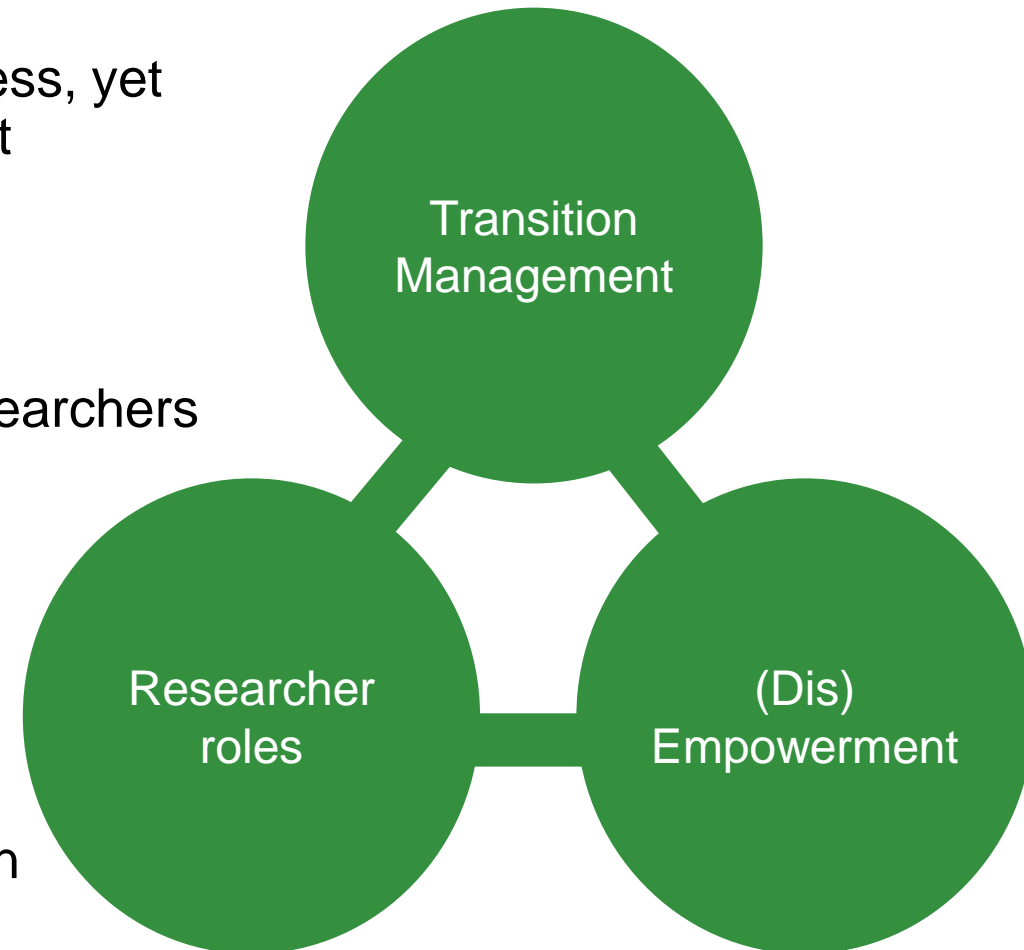
Theoretical background
Transition Management

Roorda et al., 2014

15
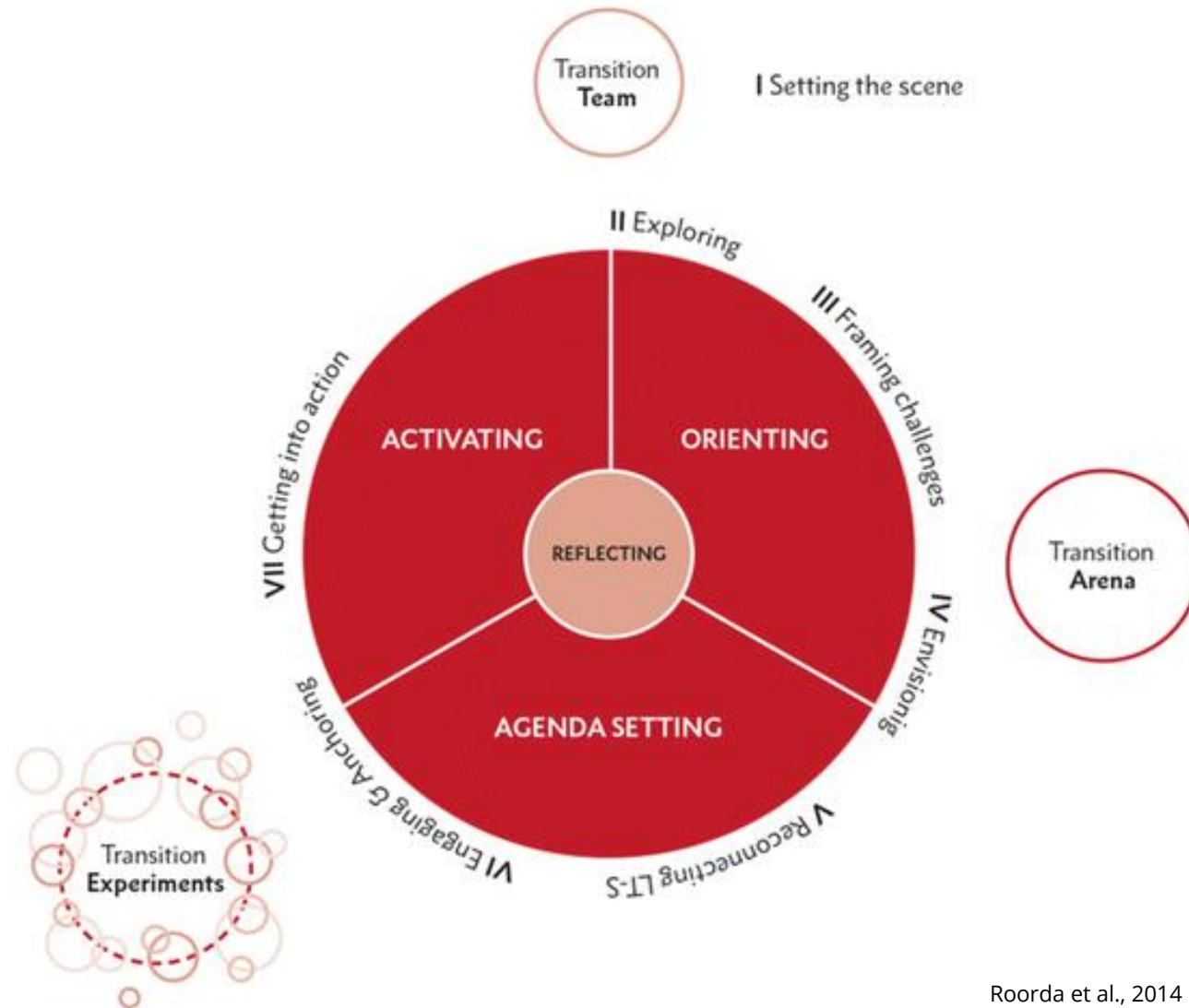
Theoretical background

Roles and activities

Role	Activities
Reflective scientist	Performs traditional research activities i.e., observing, analysing and interpreting data.
Reflexive scientist	Reflects on positionality, power dynamics and normativity.
Knowledge broker	Aims to mediates and synthesize different perspectives and provide tangible and context-specific knowledge.
Process facilitator	Initiates the process, invites participants. Creates a collaborative and supportive space for co-design and co-learning.
Change agent	Actively participates in processes aiming to implement interventions.

Peggy_marco, 2023

Theoretical background
(dis)empowerment

Dimension	
Access	Possibility of obtaining resources as well as the awareness that those resources exist.
Strategies	Methods used to exercise power i.e., lobbying, networking, experimenting, voting, or protesting.
Willingness	Intrinsic motivation, besides the wish to act, an actor should also believe they are able to act.

Peggy_marco, 2023