

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



Transdisciplinary & participatory process
towards a climate neutral region

- Local and regional governments
- Industry
- Civil society

**Problem
Framing**



Visioning

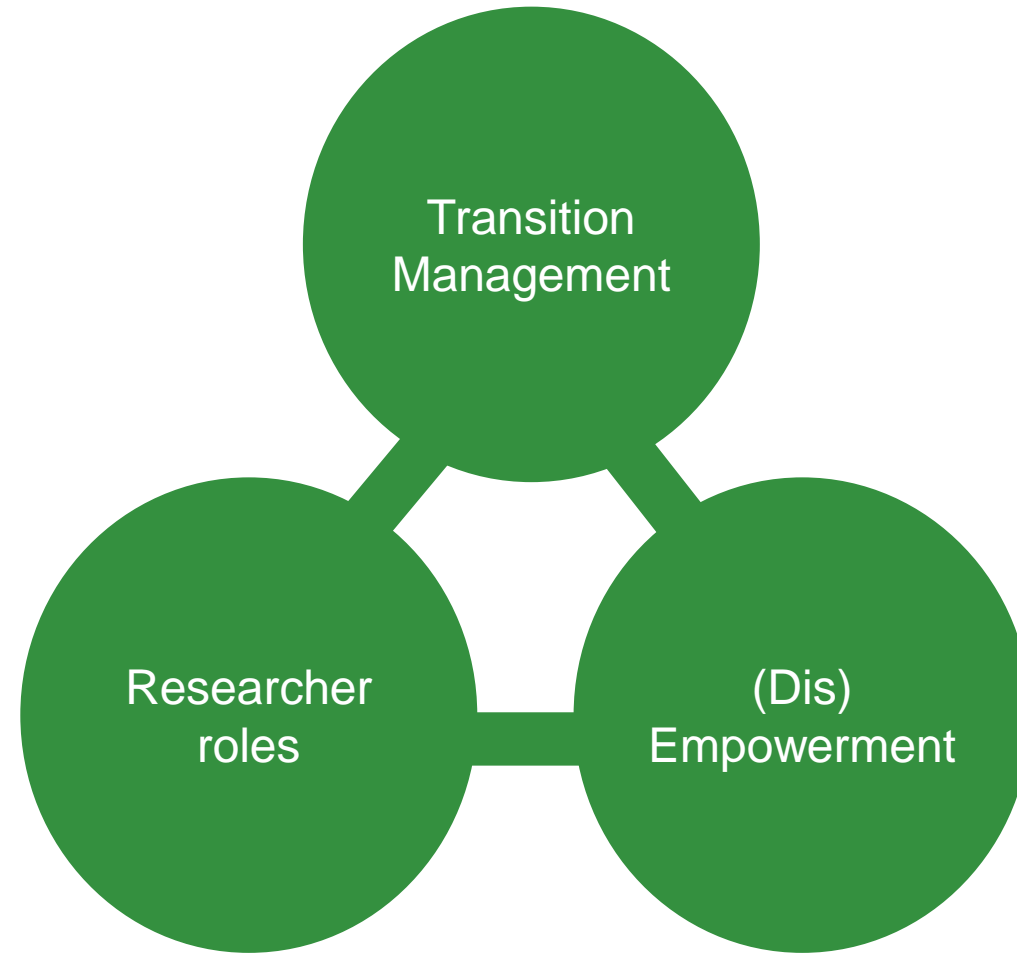


**Transition
pathways**



Experimenting

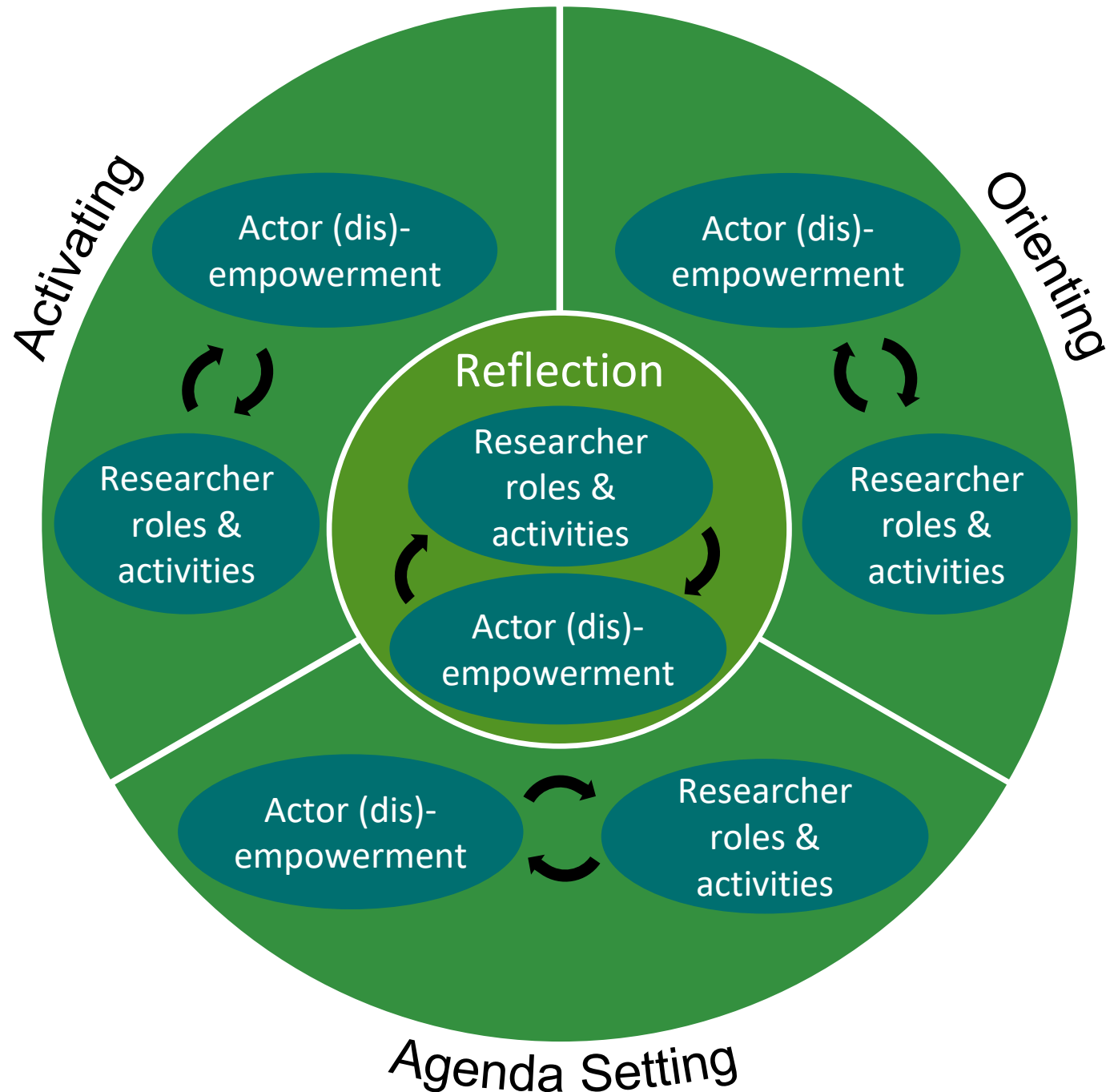
How to design an empowering transdisciplinary transition processes?



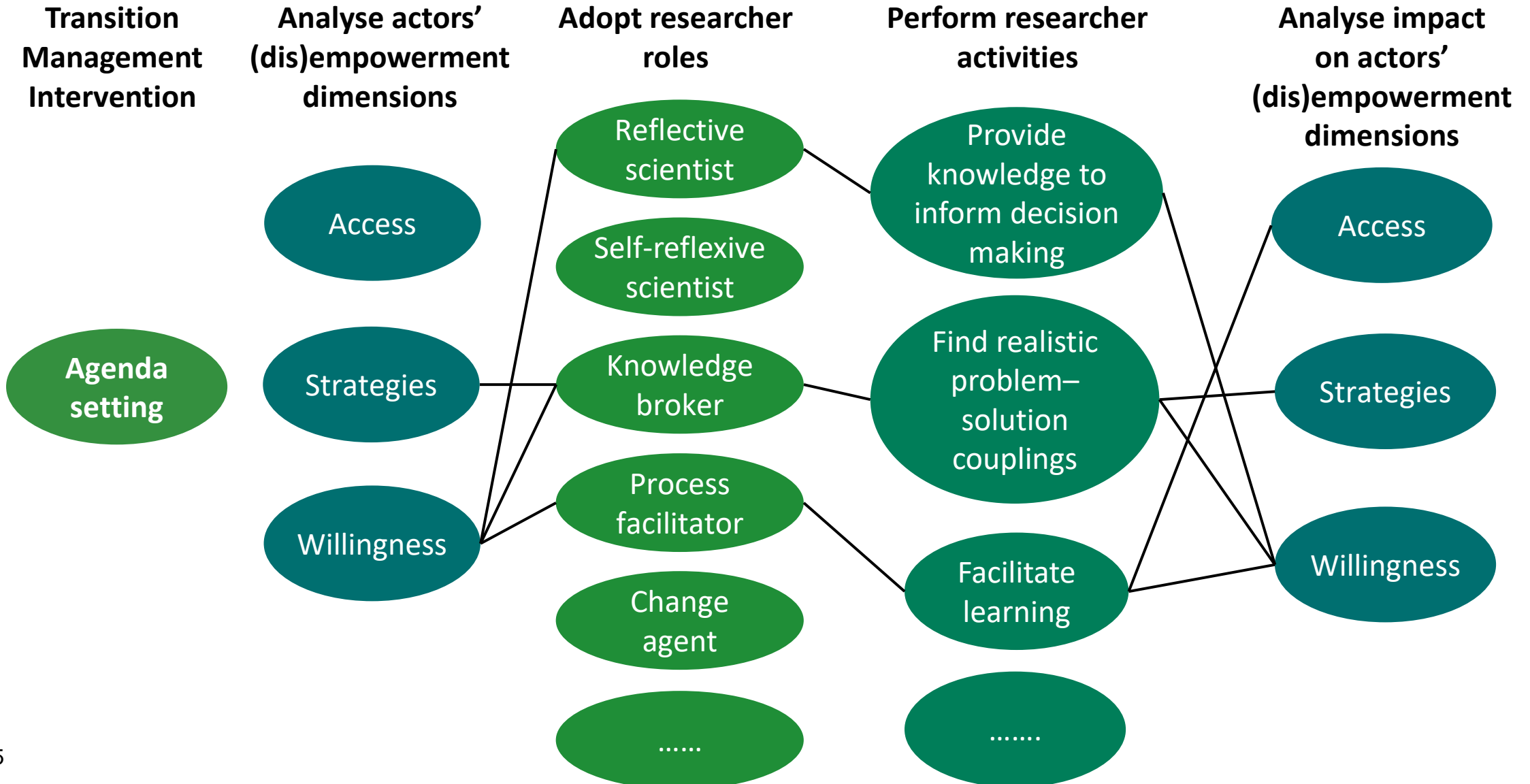
Framework

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 & Schöpke, 2014)
- (dis)empowerment (Avelino, 2017)



Framework



u^b 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	<p>Strategies Uncertainty on where to start?</p>	Knowledge broker	<p>Develop a 'best-practice' card deck</p> <ul style="list-style-type: none"> to provide practical examples 	The best practice examples supported project development
	<p>Willingness Feeling of being alone/a minority regarding climate concern</p>	Knowledge broker	<p>Develop a 'best-practice' card deck</p> <ul style="list-style-type: none"> 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	<p>Willingness</p> <ul style="list-style-type: none"> • 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

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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



Thank you!

Project website:

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



References

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- 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
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Images:

Appendix

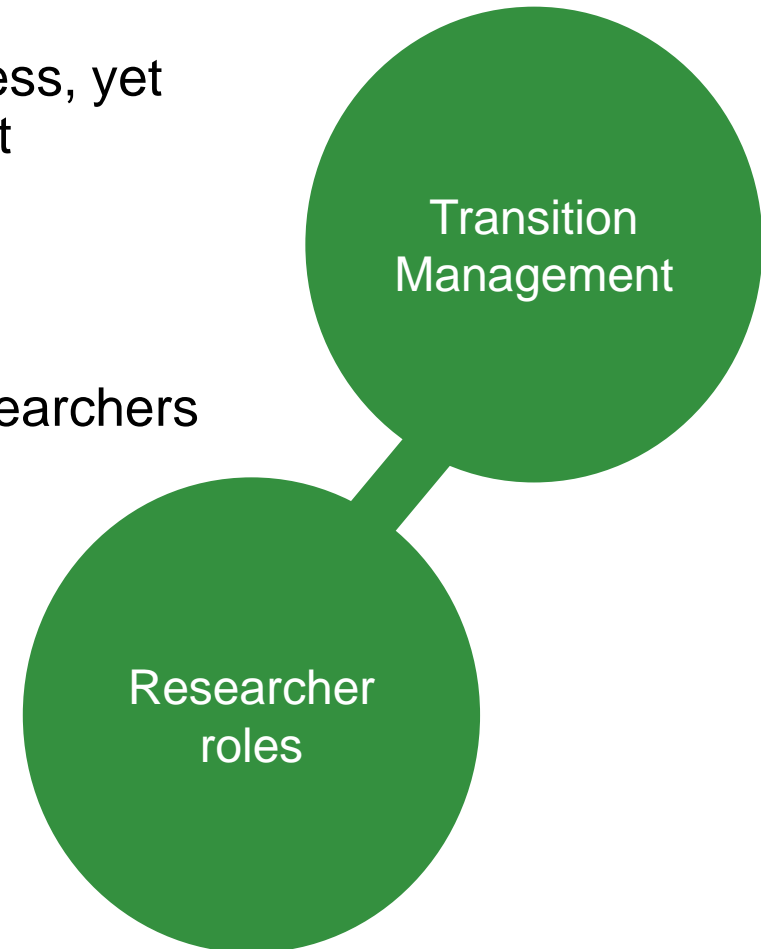
How to design an empowering transdisciplinary transition process?

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 roles and activities researchers can adopt (Bulten et al., 2021; Huning et al., 2021; Wittmayer & Schöpke, 2014). Yet, little attention on how well researchers perform these roles.
- What actually makes a good or bad 'reflective scientist', or 'process facilitator'?



How to design an empowering transdisciplinary transition processes?

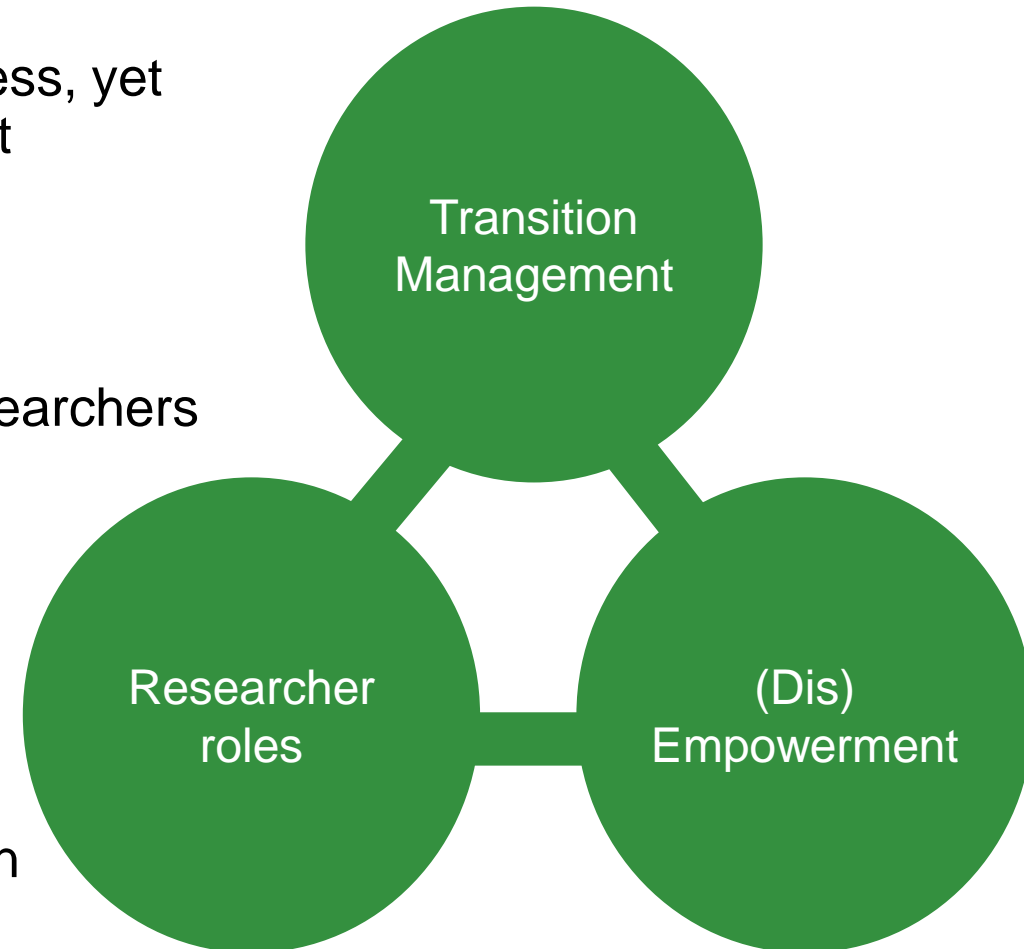
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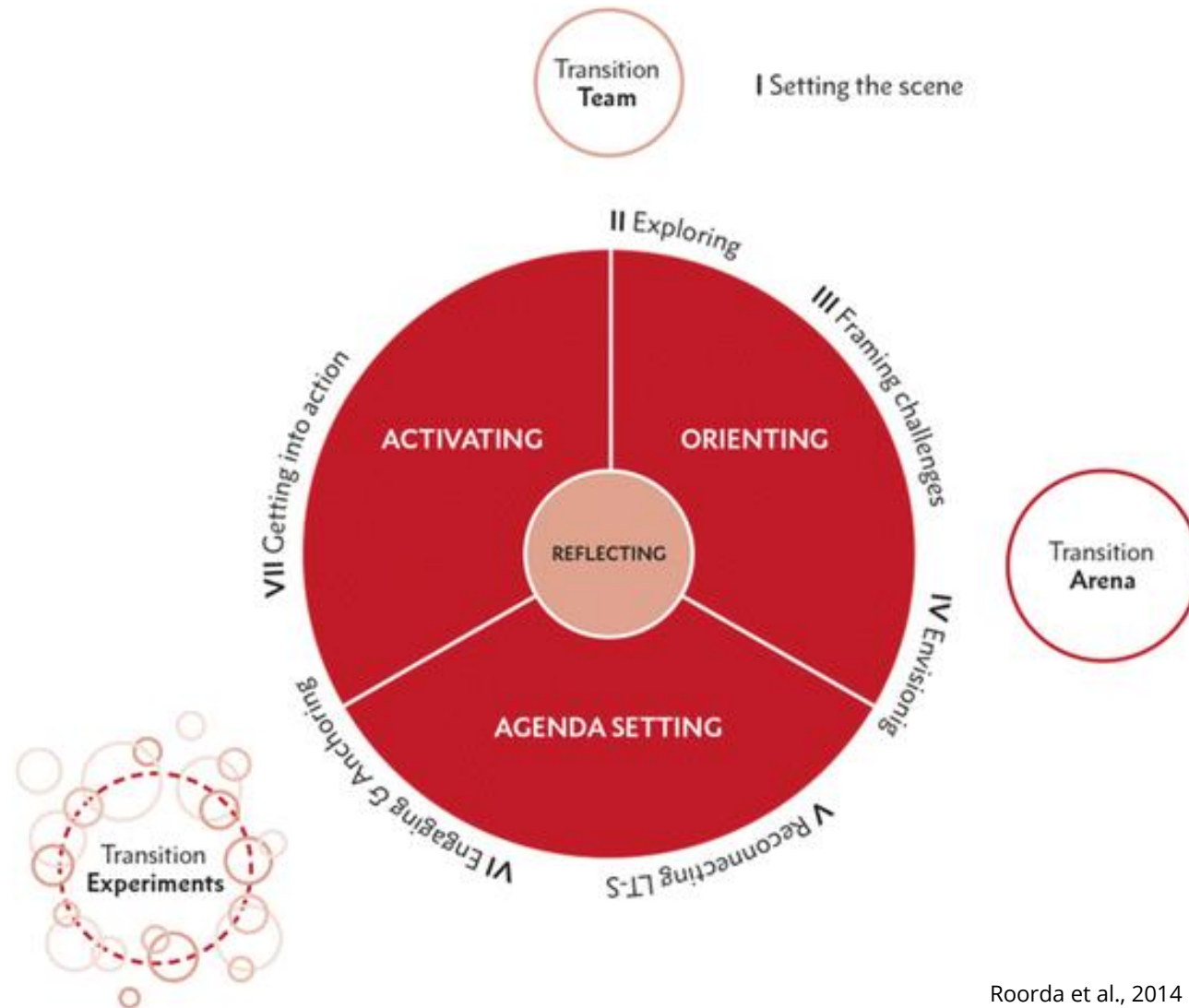
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To enhance the impact and reflexivity of the transition process we added insights on (dis)empowerment (Avelino, 2017).



Theoretical background

Transition Management



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 mediate 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.



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.

