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DETERMINANTS OF RESEARCHERS ROLES IN REAL-WORLD LABS: THE CASE OF WUPPERTAL

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Well-being Transformation
Wuppertal

Center for Transformation
Research and Sustainability
(TransZent)

INTRODUCTION



OUTLINE

- I. Real-world Labs
- II. Research Question
- III. Research Design
- IV. Results
- V. Discussion

REAL-WORLD LABS

- discussion started around 2013, e. g. Science for Sustainability (MWK 2013:30)
- several understandings, “TD research including interventions”
- recently: more coherent understanding and key components

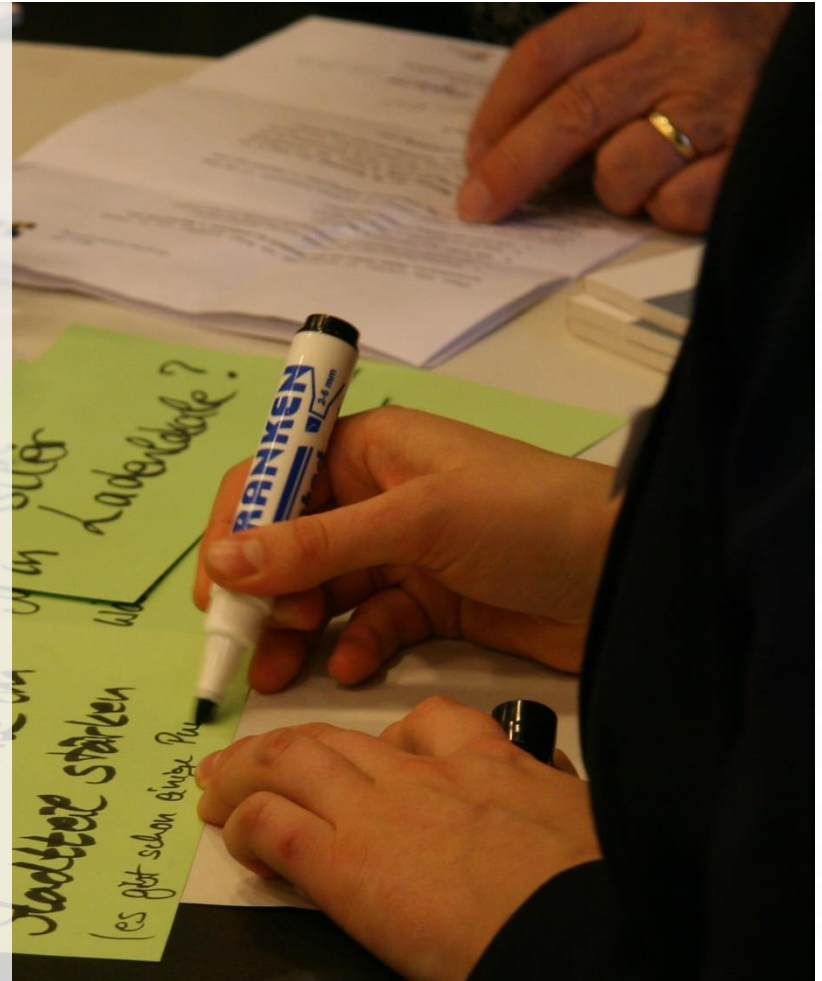
RELATED APPROACHES

- Transdisciplinarity
- Participatory Action Research
- Transition Research
- ...

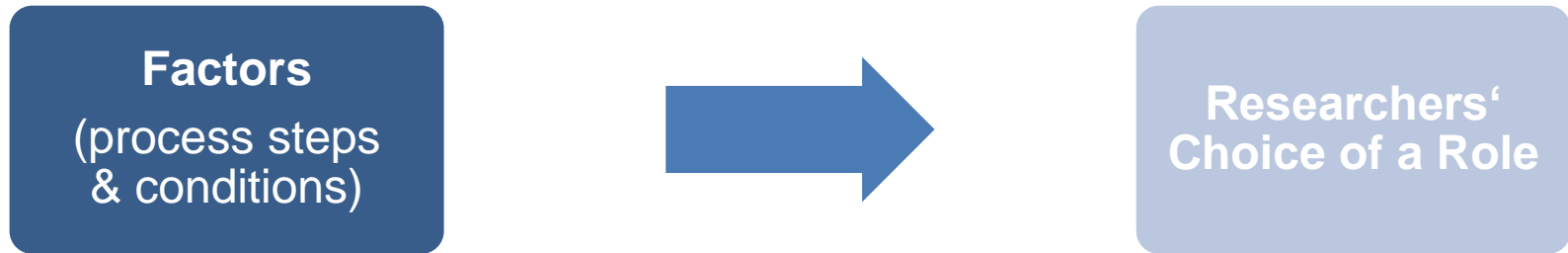
REAL-WORLD LABS . KEY COMPONENTS

1. Normative framing
2. Production of systems-, target- and transformation knowledge
3. Real-world problems as a starting point
4. Boundaries: “Laboratory” demarcations, defined by content and space
5. Transdisciplinary collaboration (co-leadership) with clear roles for practice and science
6. Real-world intervention (often called “experimentation”)
7. Cyclical learning processes
8. Empowerment of change agents and capacity building

(Wanner et al. 2017)



RESEARCH QUESTION . FACTORS AND ROLES



Which factors influence the choice of certain roles of researchers?

WHY FOCUS ON FACTORS?

- Guidance when establishing a RWL
- Adjusting a RWL process
- Establishing a suitable RWL team (special skills and training)

RESEARCH QUESTION . POSITIONING

STREAMS OF RESEARCH ON ROLES

REFERENCE

role of science (& research approaches)
in society

Scholz 2017; Schneidewind et al. 2016; Miller 2013; Jahn et al. 2012; Stoecker 1999

roles of researchers within a science-practice
interaction

Wittmayer and Schöpke 2014;
Pohl et al. 2010;
Stoecker 1999

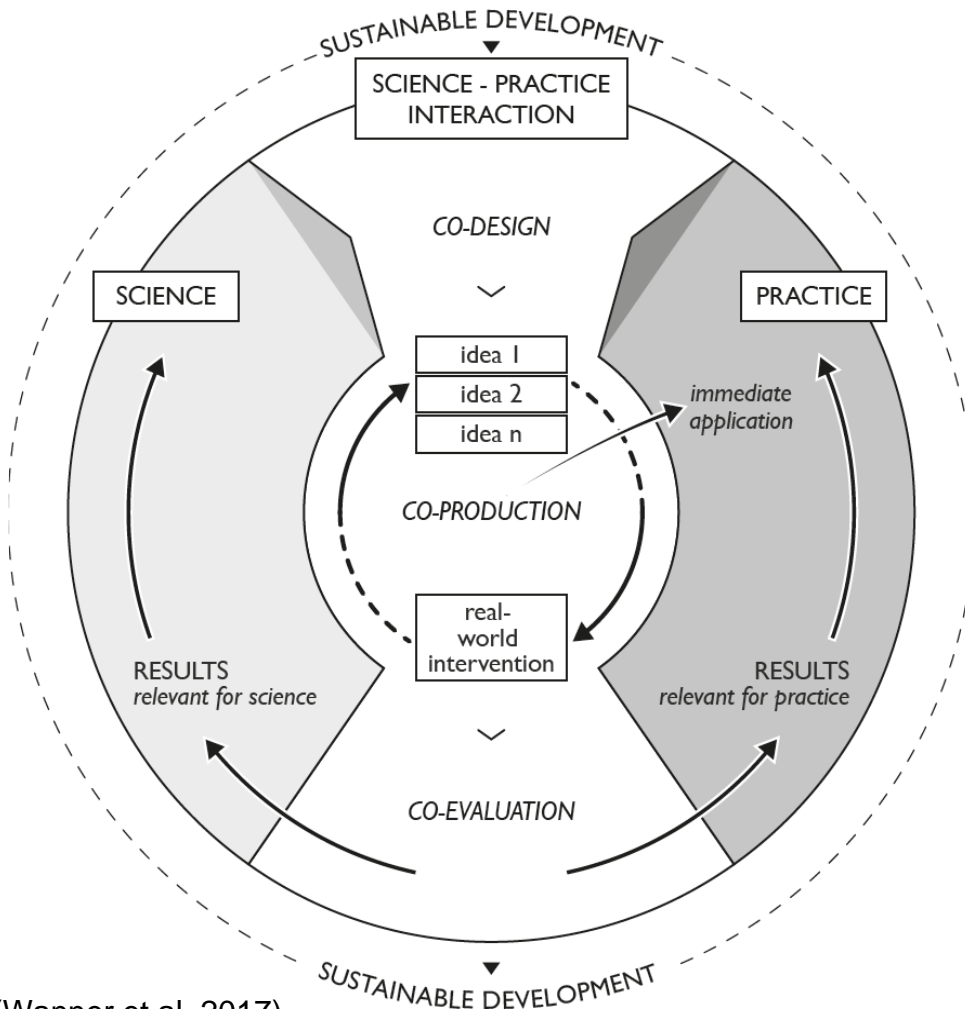
role of (researchers') personality in research
processes

e.g. Carew and Wickson 2010

RESEARCH DESIGN . ANALYTICAL STEPS

1. Joint reflection and definition of guiding questions for case descriptions
2. Detailed sequential case descriptions
3. Analysis of activities and deductive identification of five roles according to Wittmayer and Schöpke (2014) and Pohl et al. (2010)
4. Inductive reduction, adaptation and specification of four roles
5. Extraction and operationalisation of conditions
6. Calibration of the conditions
7. Descriptive Analysis
8. Identification of necessary and sufficient (conjunctions of) conditions for the respective outcome (occurrence of a particular role) with crisp-set Qualitative Comparative Analysis (cs/QCA)

RESEARCH DESIGN . PROCESS & CONDITIONS



RESOURCES

staff, time, financial resources

EXPERIENCE AND KNOWLEDGE

relationship between exp. & knowl. (incl. skills) of collaborating actors

PROJECT GROUP

level of group organisation (on practical side)

EXPECTATIONS

especially external pressure to carry out real-world action

(Wanner et al. 2017)

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RESEARCH DESIGN . EMPIRICAL MATERIAL

RWL IN WUPPERTAL	OBERBARMEN & WICHLINGHAUSEN	ARRENBURG	MIRKE
PRACTICE PARTNER	Local Dev Assoc		Utopia City
TYPE OF PRACTICE PARTNER	sem devel		green-alternative; charitable local organisation
THEMATIC FOCUS	Vacancy reduction	community sourced food for the desctrict	bottom-up participatory district development

DIFFERENT → resources, project group, expectations...

SAME → process stage, starting point, researchers' institutional background...

RESEARCH DESIGN . DATA TABLE

Table H: Data table

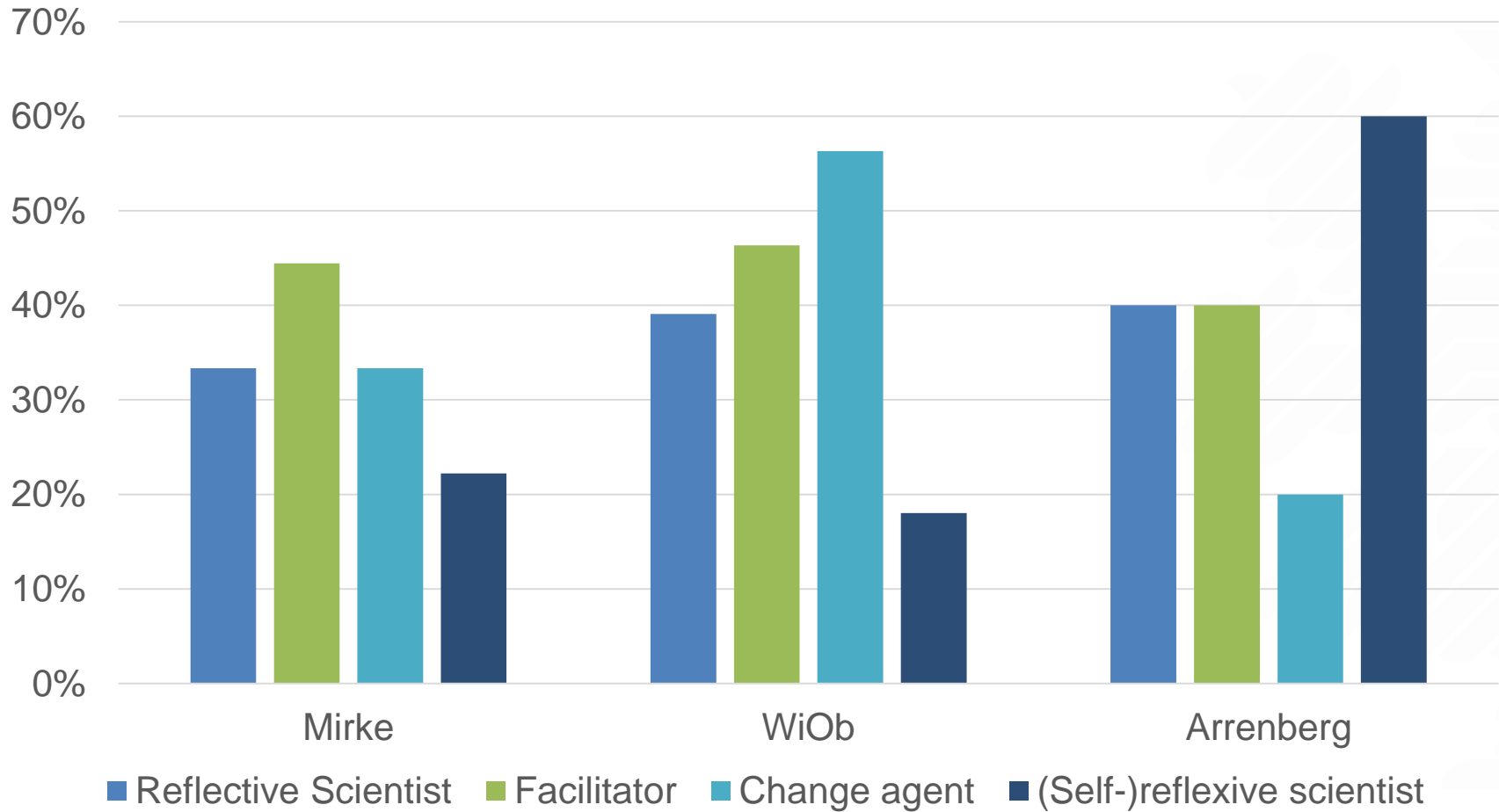
N = 38

Case	R	EK	PG	E	RS	F	CA	SRS
M-CD/TD-Team + <u>Probl. Def.</u>	0	1	0	0	1	0	0	1
M-CD/Syst. Analysis	0	1	0	0	1	0	0	0
M-CD/Ideas	0	1	0	0	0	1	0	0
M-CP/Intervention I	0	1	0	0	0	1	0	0
M-CP/Intervention II	1	1	0	1	0	1	1	0
M-CP/ <u>Reflec.+calibr. I -1</u>	1	1	1	0	0	0	1	0
M-CP/ <u>Reflec.+ calibr. I -2</u>	1	1	1	0	0	0	0	1
M-CD/Syst. analysis	0	1	1	0	1	1	0	0
M-CP/ <u>Reflect. + calibr. II</u>	0	1	1	1	0	0	1	0
W-CD/TD-Team I-1	0	0	0	1	1	0	1	1
W-CP/Intervention 1	0	1	0	1	0	0	1	0
W-CP/Intervention 2	0	0	0	1	0	0	1	0
W-CD/TD-Team I-2	0	0	0	1	0	0	0	1
W-CD/TD-Team I & Ideas	0	1	0	1	1	1	1	0
W-CP/Intervention 3	0	0	0	1	0	0	1	0
W-CD/TD-Team II	0	1	0	1	0	1	0	0
W-CP/ <u>Reflec./Calibrat.</u>	0	1	0	1	0	1	1	0
W-CD/ <u>Env.</u>	0	1	0	1	0	1	1	0
W-CD/Ideas	0	1	0	1	1	1	0	0
W-CP/Intervention 4	0	1	0	1	0	1	1	0
W-CP/ <u>Reflec./Calibrat. 2</u>	0	1	0	1	1	0	0	0
W-CD/TD-Team III	0	1	0	1	0	1	1	0

RESULTS . ADAPTATION OF ROLES

ROLE	ACTIVITIES (Wittmayer/Schäpke 2014)	...ADDED FROM THE RWL STUDIED
REFLECTIVE SCIENTIST	<ul style="list-style-type: none"> Analyse dynamics and actors Provide knowledge Observe, reflect and analyse actions, analyse outcomes 	<ul style="list-style-type: none"> Investigate application-oriented knowledge Reflect on the intervention
FACILITATOR	<ul style="list-style-type: none"> Initiate and facilitate (learning) process and experiment Encourage expressions of all viewpoints 	<ul style="list-style-type: none"> Balance different interests and actor dynamics Mediate between different perspectives and viewpoints
CHANGE AGENT	<ul style="list-style-type: none"> Motivate and empower participants to lead/own the process Network & participate 	<ul style="list-style-type: none"> Establish working structures Develop tools and recommendations Initiate an intervention
(SELF-) REFLEXIVE SCIENTIST	<ul style="list-style-type: none"> Engage in a (self-) reflexive practice with regard to own normative orientation and internal and external power dynamics 	<ul style="list-style-type: none"> Write observation protocols and research diaries

RESULTS . DISTRIBUTION OF ROLES



NECESSARY CONDITIONS

- Most roles → no necessary conditions
- Situational adequate knowledge
 - Necessary condition for reflective scientist and facilitator
 - Least necessary for (self-)reflexive scientist

SUFFICIENT (CONJUNCTIONS OF) CONDITIONS

- Analysed conditions → weak explanatory power
- Change agent
 - Practitioner contribute less resources
 - Researcher is pressured to carry out real-world action
 - No established functional project group
- Not choosing change agent
 - Situationally adequate knowledge
 - Low external expectations

CONCLUSION . RESULTS AND LIMITATIONS

RESULTS

- Four roles in RWL found
- Weak explanatory power of conditions (except CA)
- Almost no process stage effect (as RWL do not run linear)
- Active roles \approx practitioner with low resources and non-functional project group
- Roles disengage from practice \approx low pressure, highly organised group

LIMITATIONS

- Researchers' personality not included
- Interaction between roles (as well those of other involved actors)
- Overlapping roles
- Small number of cases and empirical material (3 RWL)

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