

What type of knowledge is transferred across transdisciplinary case studies? Preliminary results from a study on transferability in transdisciplinary research

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Publication date:

2017-09

Permanent link:

<https://doi.org/10.3929/ethz-b-000224062>

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Funding acknowledgement:

162781 - What counts for transferability of knowledge across cases in transdisciplinary research? (SNF)



What type of knowledge is transferred across transdisciplinary case studies?

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Session 12 - Enhance, transfer, transcend: Challenges for the future of transdisciplinary research
Thursday 14 September 2017

International Transdisciplinarity Conference 2017: Transdisciplinary Research and Education – Intercultural Endeavours
11-15 September 2017, Leuphana University, Lüneburg, Germany

Outline

1. Conceptual background and rationale
 - a) What we *don't* mean by 'transferability'
 - b) Why considerations for transferability in TD research matter?
2. TACIT project: its design, preliminary results/insights, and next steps
3. Summary

1. Conceptual background and rationale

a) What we *don't* mean by transferability

*“If TD researchers want to build on other TD projects’ results, they need to know **under what conditions knowledge produced in one case can be transferred to and applied in another case...***

*...a profound understanding and management of the challenges related to **knowledge transfer across cases are missing”***

(Adler et al. 2017)

So, *what we don't mean by transferability* is the transfer of knowledge :

- Between (or from) **researchers** and (to) **stakeholders**; or
- At the **science-policy interface**, between (or from) science and (to) policy (e.g. ‘speaking truth to power’)



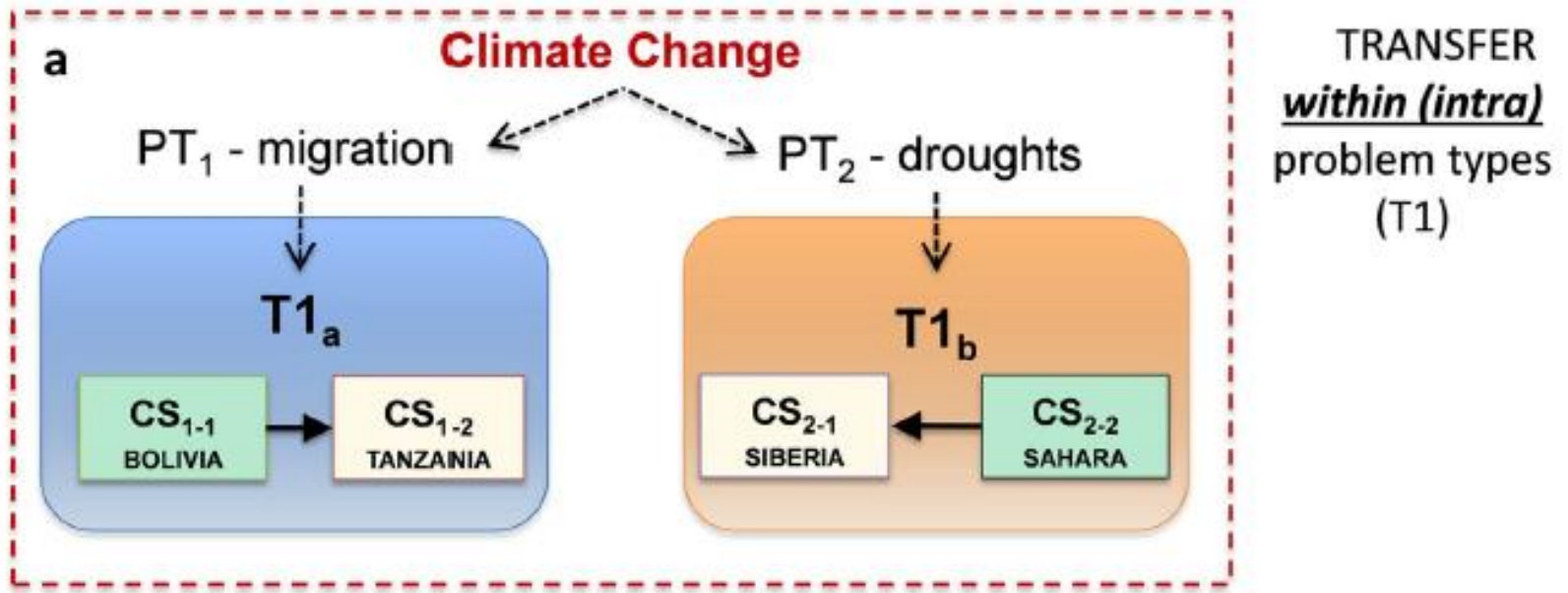


Figure 1 from Adler, C., Hirsch Hadorn, G., Breu, T., Wiesmann, U., Pohl, C. (2017). Conceptualizing the transfer of knowledge across cases in transdisciplinary research. *Sustainability Science*.

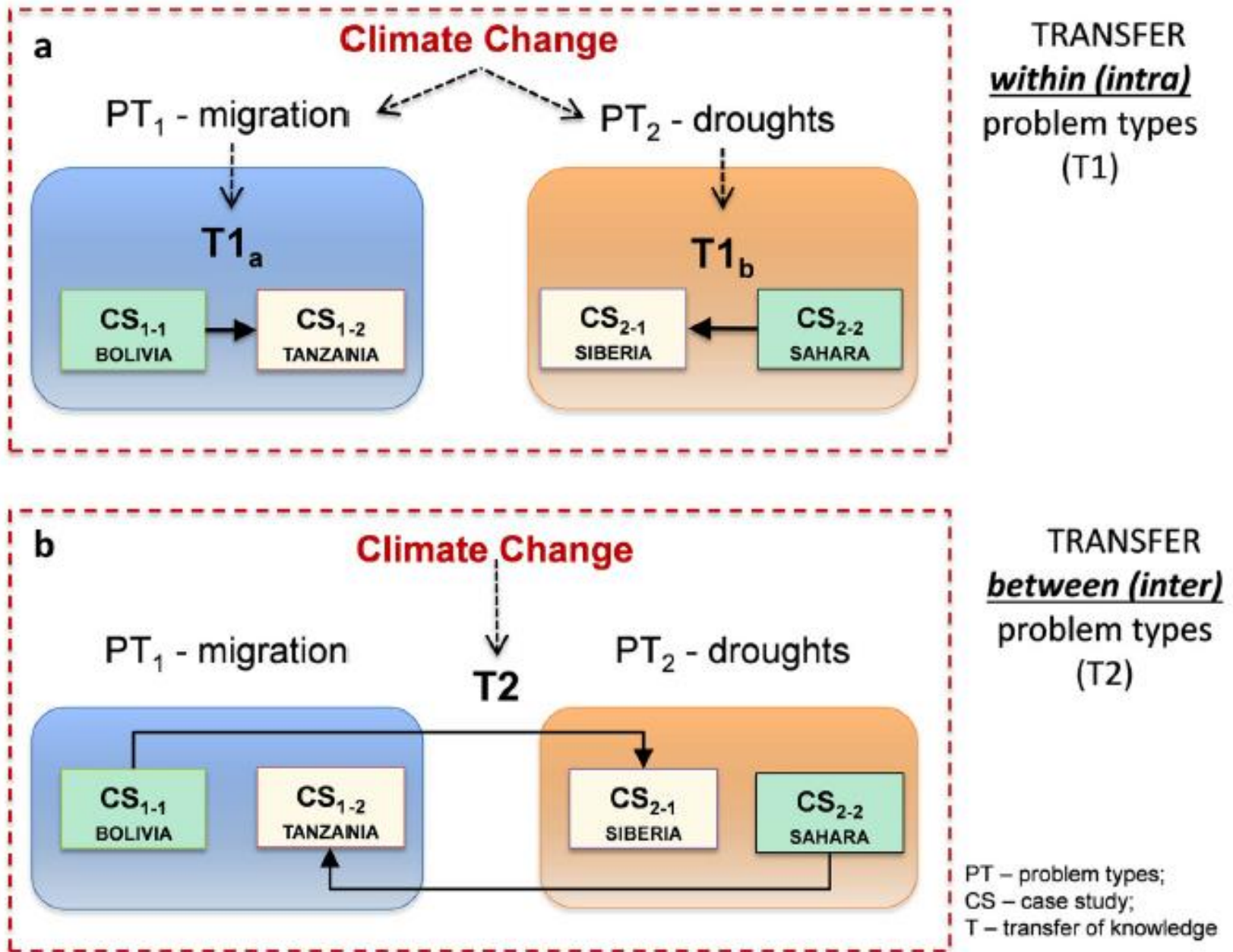
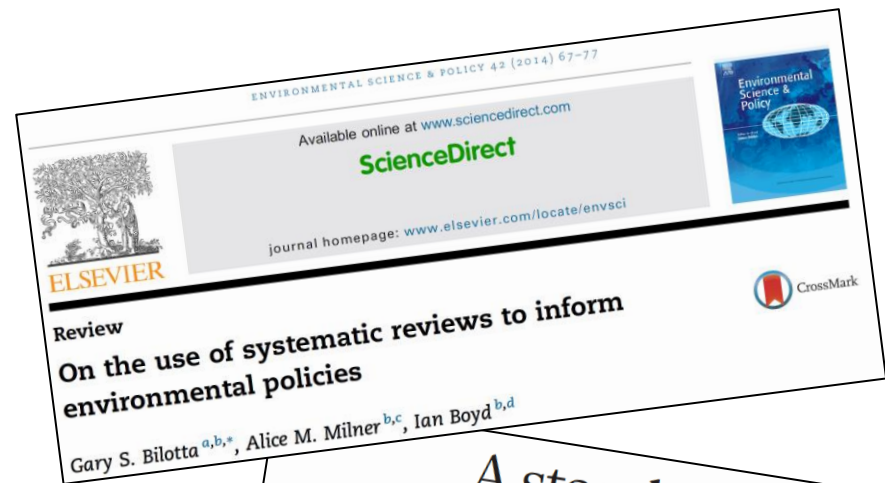


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1. Conceptual background and rationale

b) Why considerations for transferability in TD research matter?

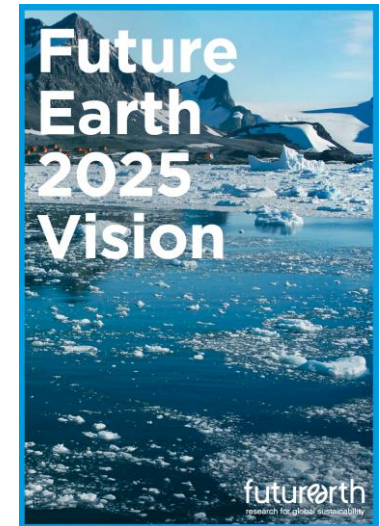
- Calls for **auditability of quality** in TD research, and perception of **inconsistent evidence** when multiple and diverse case studies are used to justify for a policy for a given problem-type, give reasons for concern and interest on the topic;

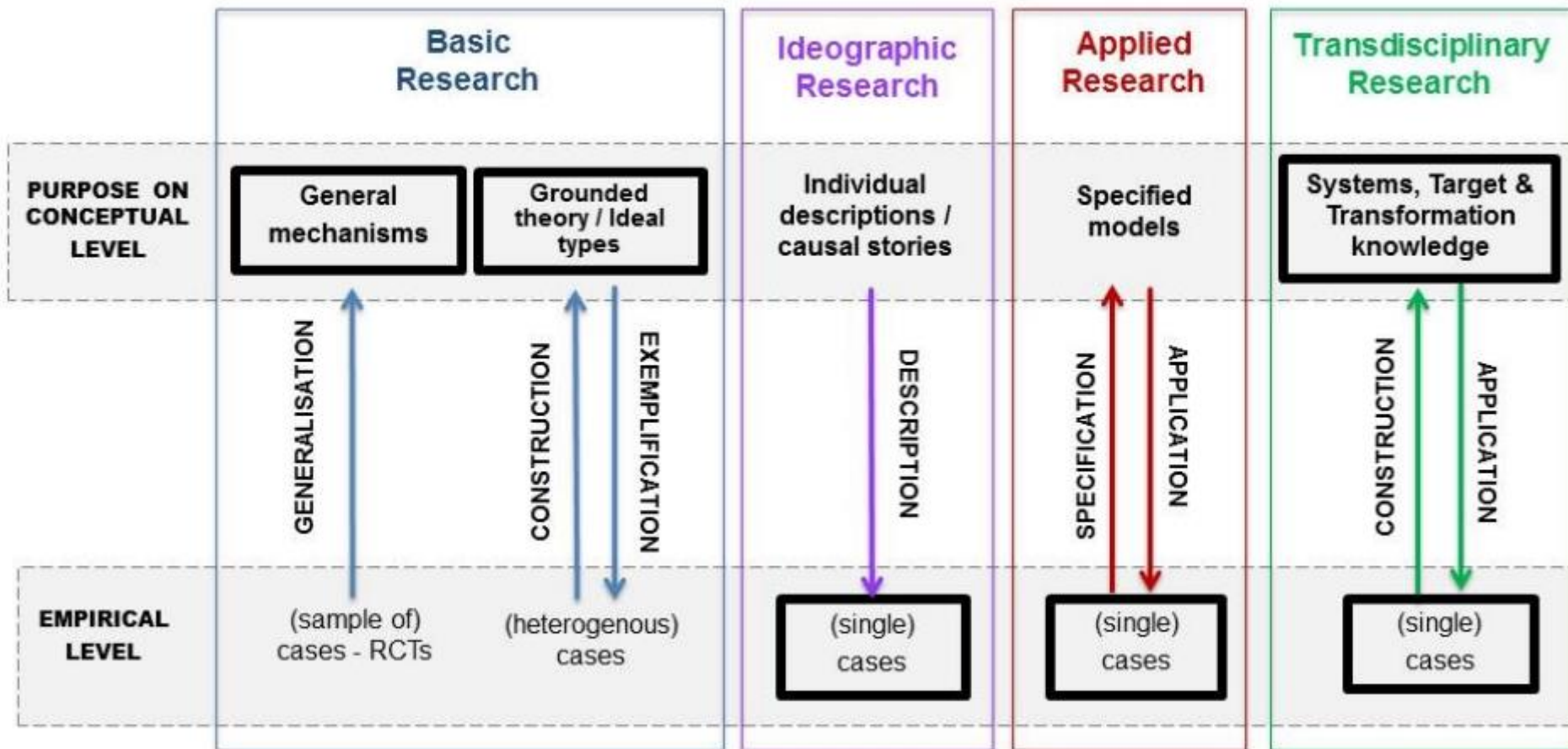


A standard for policy-relevant science
 Ian Boyd calls for an auditing process to help policy-makers to navigate research bias.

- Calls for TD research in programs and research agendas that address global change issues in society (e.g. Future Earth Vision 2025 “...*Central to achieving the vision is a commitment to co-design and co-produce knowledge in collaboration with societal partners*” ...

– So, what can we learn from, assess or scale from and across TD case studies, that we are (increasingly) advocating for?





- “...The relations between the empirical and the conceptual level determine what can be learned from cases, and requirements for transferability”;
- Models of ‘what works’, based on TD case study research [in context], should be used to identify the conditions that speak for or against the effectiveness of [co-produced] knowledge for policy, if it is to be transferred to another case.

Figure 2 from Adler, C., Hirsch Hadorn, G., Brey, T., Wiesmann, U., Pohl, C. (2017). Conceptualizing the transfer of knowledge across cases in transdisciplinary research. *Sustainability Science*.

Concept	Research community / field of research	Example of illustrative quote and reference
Indicators for diffusion of innovations	Policy Sciences	<p>“if a strategy is to be clearly formulated and adequately appraised, the choice of evaluative criteria is critical. These criteria call for specific indicators to supplement information obtained from case studies and experienced judgement”</p> <p style="text-align: right;">(Lasswell 1971, p.173)</p>
Scalability	(Community-based) climate change adaptation	<p>“A successful community based adaptation (CBA) initiative ... is of value to the community involved, but can have little wider impact. If these isolated examples are considered CBA pilots, then how to learn from and scale out the pilot is the necessary next phase”</p> <p style="text-align: right;">(Gogoi et al. 2014, p.368)</p>
Ideal-types for portability	Philosophy of Science	<p>“if we see social mechanisms as ... ideal-type patterns of action and interaction, they can be used for making empirical findings obtained in one context portable to other contexts”</p> <p style="text-align: right;">(Bengtsson and Hertting 2014, p.709)</p>
C-M-O configuration	Philosophy of Science; <i>Realist Evaluation</i>	<p>“Causal [transferable] connections are established via ‘context, mechanism, outcome’ configurations ... all three elements must be considered in order to address the master question ‘what works?’ ... ‘for whom’ [and] ‘in what circumstances?’ ”</p> <p style="text-align: right;">(Pawson 2006, p.25)</p>
INUS conditions	Philosophy of Science	<p>“to move from ‘it worked somewhere’ to ‘it will work here’ you will have to worry about support factors [...] an INUS condition is an Insufficient but Necessary part of an Unnecessary but Sufficient condition for getting a contribution to the effect you want”</p> <p style="text-align: right;">(Cartwright and Hardie 2012, p.63)</p>

2. TACIT project: its design

What counts for transferability of knowledge across cases in transdisciplinary research?

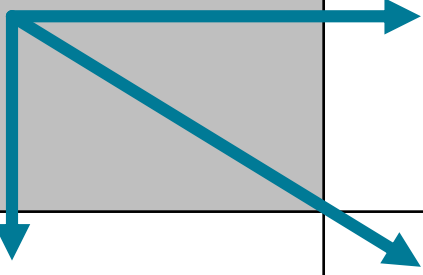
Transferability **A**cross **C**ases **I**n **T**ransdisciplinary research
(2016-2018)

- **Interdisciplinary collaboration:** philosopher of science, (physical and human) geographers and environmental and sustainability scientists, all with knowledge of and experience with transdisciplinary research;
- **Objective:** take initial empirical steps on conceptual '*problematique*' of transferability across cases in TD research, by asking three research questions (*and methods*):
 1. Knowledge - **What do knowledge producers transfer across cases, if at all?** (*qualitative analysis of interviews, literature and other secondary sources of data*).
 2. Considerations - **What considerations do knowledge producers apply when transferring knowledge across cases?** (*qualitative analysis of interviews, literature and other secondary sources of data*).
 3. Ideal-types - Collectively, **what typical considerations or for transfer of knowledge across cases exist in TD research?** (*qualitative analysis of interviews, wshops, and Q-methodology*).

- So far...
 - Sample of **12 TD projects** on diverse topics of global change and sustainability, with Swiss-based PIs/academics and their non-academic project partners (both in Switzerland and abroad);
 - Total of **30 interviews** (face-to-face and telephone/Skype), with a couple more still to be completed;
 - About half to 2/3s of the way through analyses of transcribed interviews to answer the first and second research questions, but for purposes of this talk focus is on first:

1. What do knowledge producers transfer across cases, if at all?

		CASE STUDY/CONTEXT	
		SAME	DIFFERENT
PROBLEM - TYPE	SAME		TD processes/concepts/methods that account for same problem-type characteristics, in new context application ✓ ✓
	DIFFERENT	TD processes/concepts/methods that account for same context conditions, for a new problem-type application ✓	TD processes (abstracted from specific context or problem-type) ✓ ✓ ✓



TD processes/concepts that account for same context conditions, for a new problem-type application

TD processes/concepts that account for same problem-type characteristics, in a new context application

TD processes/concepts abstracted from specific context or problem-type

ABSTRACT

CONTEXT



3. Summary...

- 1) By 'transfer of knowledge' we mean applying substantive knowledge derived in one context (case) to another case or type of problem. By 'transferability' we assert whether such a transfer is appropriate – itself a normative methodological consideration;
- 2) If solutions to societal problems are sought from transdisciplinary case studies, then focusing on conditions and mechanisms for success (what works in one case, and not just on 'outcome' alone) constitutes a basis for transferring knowledge to another case.

- 3) In TACIT (so far), transferability seems 'enabled' when a certain degree of abstraction from the context or problem is possible, with analogies for '*relevant and not too dissimilar*' traits or factors to support justification for transfer.

Thank you!

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And with thanks to colleagues Trude, Gabriela, and Christian, and SNSF (Interdisciplinary Project No. 162781)

