Climate services coproduction How close are we to transdisciplinary knowledge production

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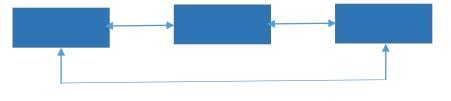
What is transdisciplinarity?

Disciplinarity (specialisation in isolation)

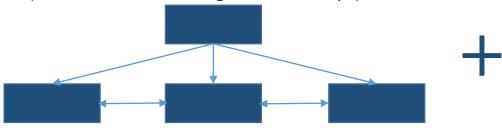
Multidiscilinarity (no cooperation)



Pluridiscilinarity (Cooperation without coordination)



(Coordination from high level concept) Transdisciplinarity



Plurality of knowledge sources (e.g. non-scientific knowledge)

Adapted from Max-Neef, 2004

Multidisciplinary teams in climate services

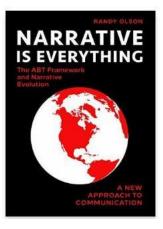


"An integrating synthesis is not achieved through the accumulation of different brains." *Max-Neef, 2004*

What is the connector?

- Well defined common goals co-benefits
- Publications
 - Case studies development
 - Journal publications
- but
 - Journals' criteria for acceptance are often based on significance rather than soundness (how well done is the research)

Narratives





Randy Olson: the right amount of narrative

- Both the scientific method and the communication of science are narrative processes
- Everyone wants to tell a good story

Why then we have *narrative deficiency*

ABT narrative framework

AND

BUT

A **storyline** provides a unity to separate discursive components of a physical or social phenomenon, combining them into a coherent whole, concealing the discursive complexity



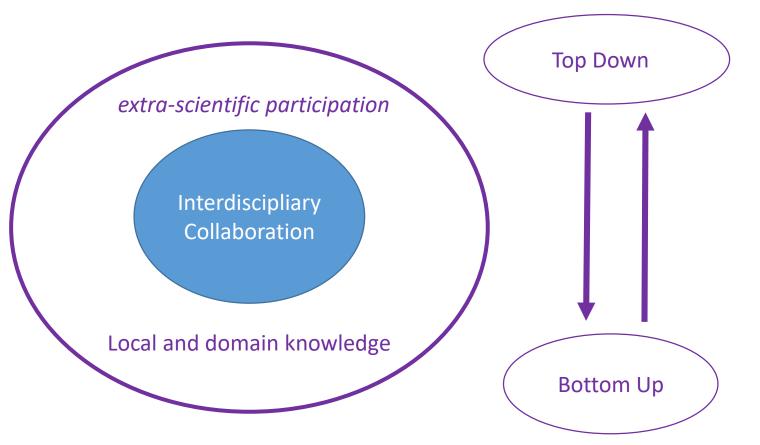
THEREFORE

A **narrative** is a storyline structured with specific actors and their roles



knowledge coordination

by overcoming disciplinary boundaries and taking on board local and domain knowledge



common meaning and solution finding valuing and integrating stakeholders' needs, decision making contexts, and interests at stake

Why is it difficult to achieve a transdisciplinary process?

"In the temple of science are many mansions, and various indeed are they that dwell therein and the motives that have led them thither.

Many take to science out of a joyful sense of superior intellectual **power**...

one of the strongest motives that leads men to art and science is escape from **everyday life**" Albert Einstein

- A transdisciplinary process aims at an inclusive and flexible collaboration, without predetermined hierarchies and power impositions
- "Transdisciplinarity, more than a new discipline or super-discipline is, actually, a different manner of seeing the world, more systemic and more holistic." *Max-Neef, 2005*
- "Transdisciplinairty is a research approach, not a theory, methodology or institution" Jahn et al., 2012

Is there a hope?

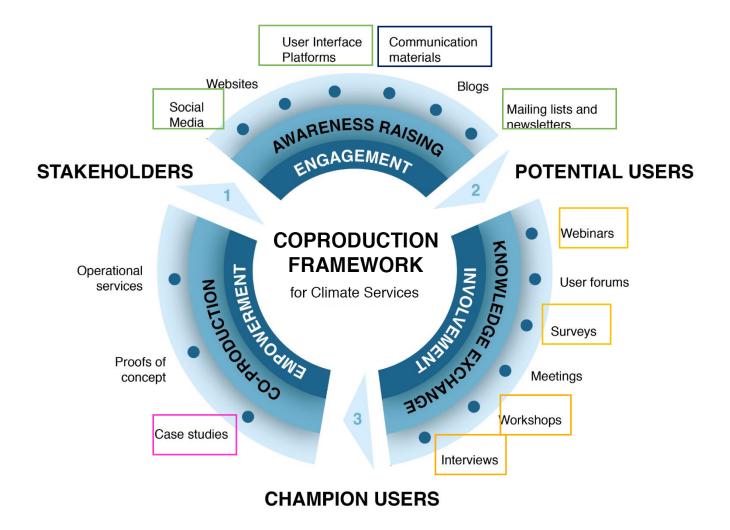
1. Which activity would you prioritise in order to strengthen the linkages between the climate modelling and climate services communities (single choice)?

Joint design of simulations	14%
Implementation of trans-disciplinary approaches	41%
Application of artificial intelligence	4%
Co-development of communication tools (such as storylines, case studies, narratives and decision support tools)	41%

Results from the Climateurope webstival's poll (with \approx 100 participants)

How concepts from social sciences help here?

Coproduction is "a complex meeting place where several **different academic traditions** and **practices** converge, overlap, affect each other, come into conflict, or cooperate" *Bremer and Meisch*, 2017



Thank You!

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