

# Transdisciplinary Competencies



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# Transdisciplinarity: two definitions

## **Klein et al., 2001**

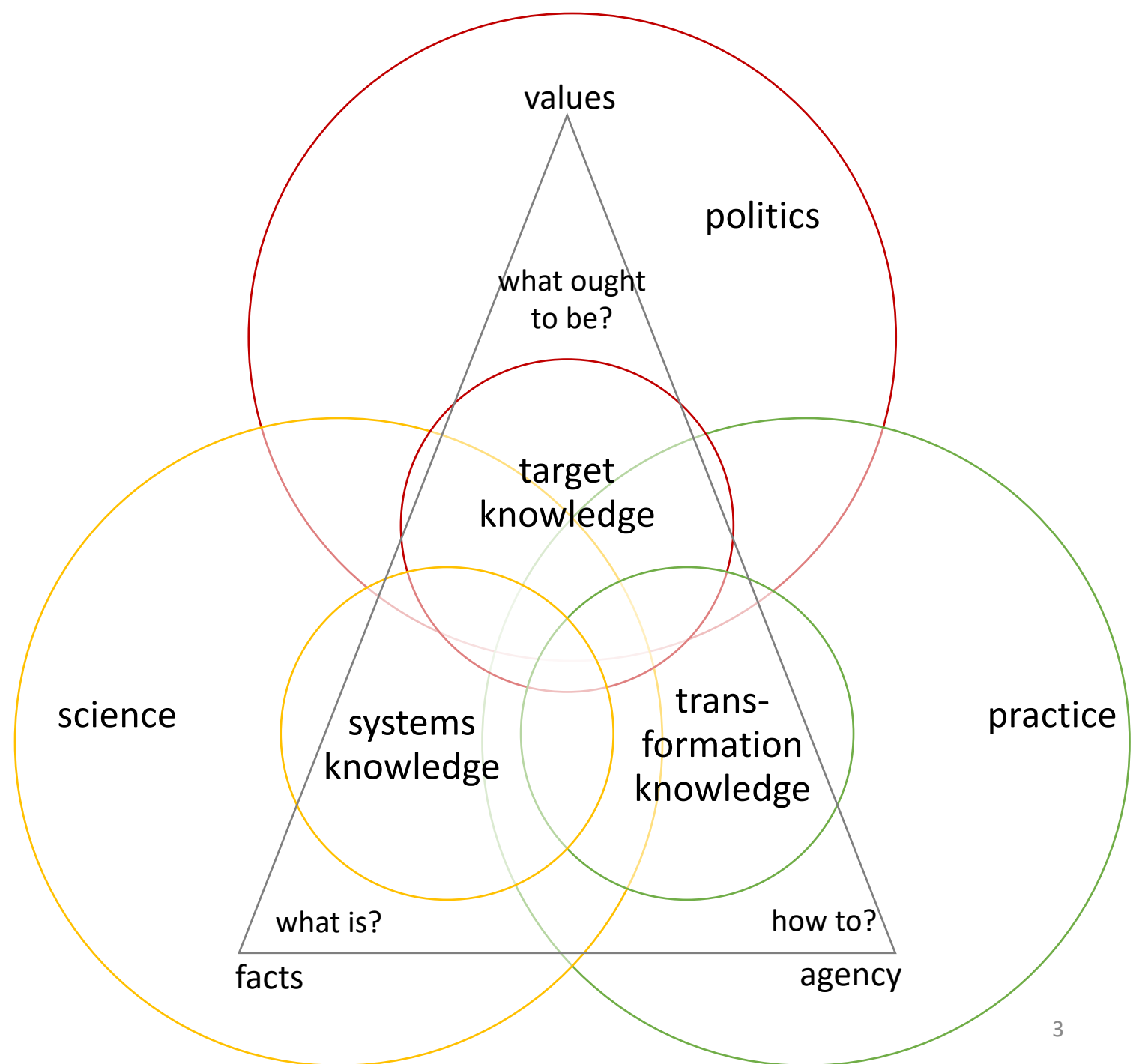
The core idea of transdisciplinarity is different academic disciplines working jointly with practitioners to solve-real-world a problem. It can be applied in a great variety of fields.

## **Lang et al., 2012**

Transdisciplinarity is a reflexive, integrative, method-driven scientific principle aiming at the solution or transition of societal problems and concurrently of related scientific problems by differentiating and integrating knowledge from various scientific and societal bodies of knowledge.

# Ways of knowing: Transdisciplinarity explained

Buser & Schneider, 2021



# What are transdisciplinary competencies?

Various models exist but with considerable overlap

- ETH Zurich, 2023
- University of Calgary, 2022
- University of Tuebingen, 2021
- Holden et al. in Kremers et al., 2019
- Fiala et al., 2018
- Pearce et al., 2018
- Di Giulio, 2017
- Nash et al., 2003

Transdisciplinary  
competencies adopted by  
THE-GLOW

- **Global mindset**
- **Integration capability**
- **Innovative capability**
- **Communicative capability**
- **Collaborative capability**
- **Ethical capability**

# Global mindset

- The ability to step outside one's base culture and to understand there is no universally correct way to do things.
- Reaching beyond one's comfort zone, feeling comfortable, adapting and understanding how to act in each environment; and not being afraid to learn.

# Integration capability

- Being appreciative of the potential value of different disciplinary and non-disciplinary contributions and being able to integrate them.

# Innovative capability

- Research
  - Having the ability to tackle the complementarity of methodologies, such as quantitative, qualitative and transformative approaches and to find the right balance between them.
- Intervention
  - Having the ability to tackle the complementarity of cross-sector strategies and transformative approaches and to find the right balance between them.



# Communicative capability

- Being able to identify similarities and differences in the way different disciplines and stakeholders use language to discuss complex problems.
- Being able to see the value of and learn from different perspectives.
- Being able to integrate different understandings by developing new concepts and ways of representing issues that enable collaborative approaches to problem solving between scientific disciplines and between academia, policy and practice.

# Collaborative capability

- Collaborative networking
  - cultural awareness,
  - acknowledging differences,
  - team playing,
  - trust building,
  - virtuous circles
- Being able to learn with society in different contexts how to develop shared framing, researching and solving of problems

# Ethical capability

- Professional and ethical practices demonstrating
  - research integrity,
  - social responsibility,
  - sustainable development,
  - managing ethical dilemmas,
  - transformational leadership

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