Transforming the Knowledge System to Support Research Integration and Implementation

Jill Jäger

The Underlying Issues

- Accelerating global change
- Planetary boundaries
- Multiple and interacting pressures
- Partial solutions for one problem lead to pressures in another area

Global Environmental Change

Often seen as a series of separate problems with separate priorities and solutions.

Strongly coupled with issues like poverty, inequality and lack of capacity.

The Earth System

But the Earth behaves as a system, where biological and physical processes interact (also with human systems) to determine prevalent global environmental conditions.

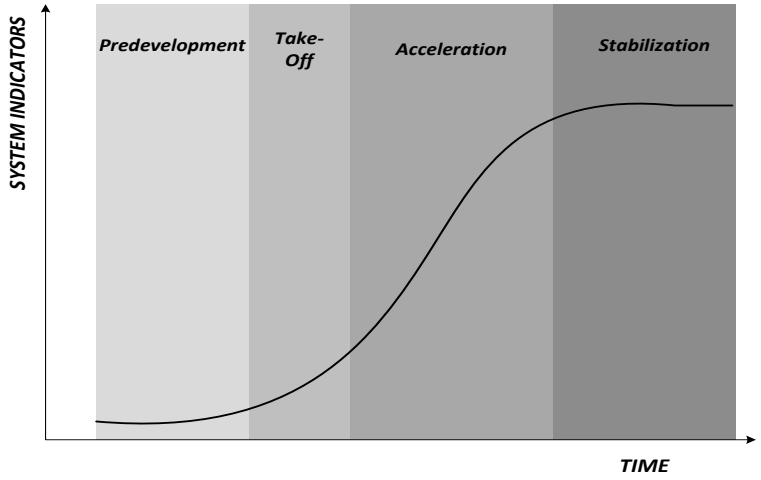
The Challenge

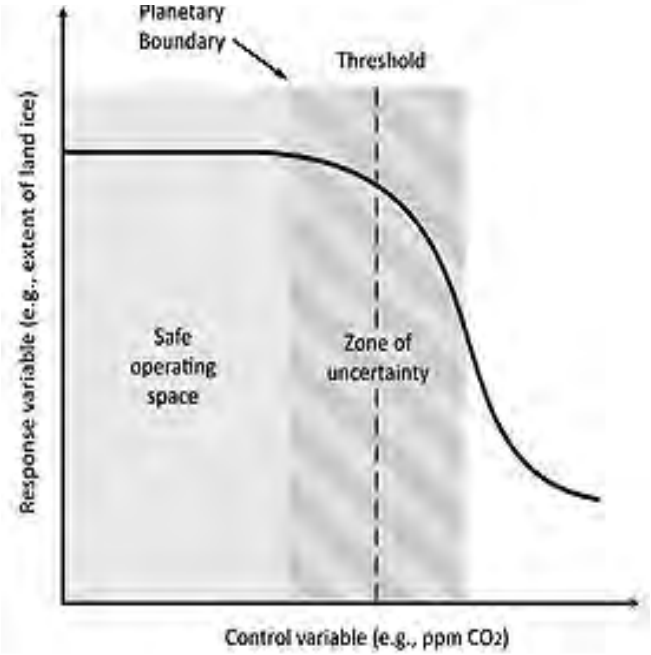
More than 20 years after the Rio Conference, we are faced with persistent problems of unsustainability, which are

- complex
- riddled with uncertainties
- deeply rooted in our societal structures and culture

Business as Usual is not an option

Transformative systemic changes are needed to deal with Earth System challenges

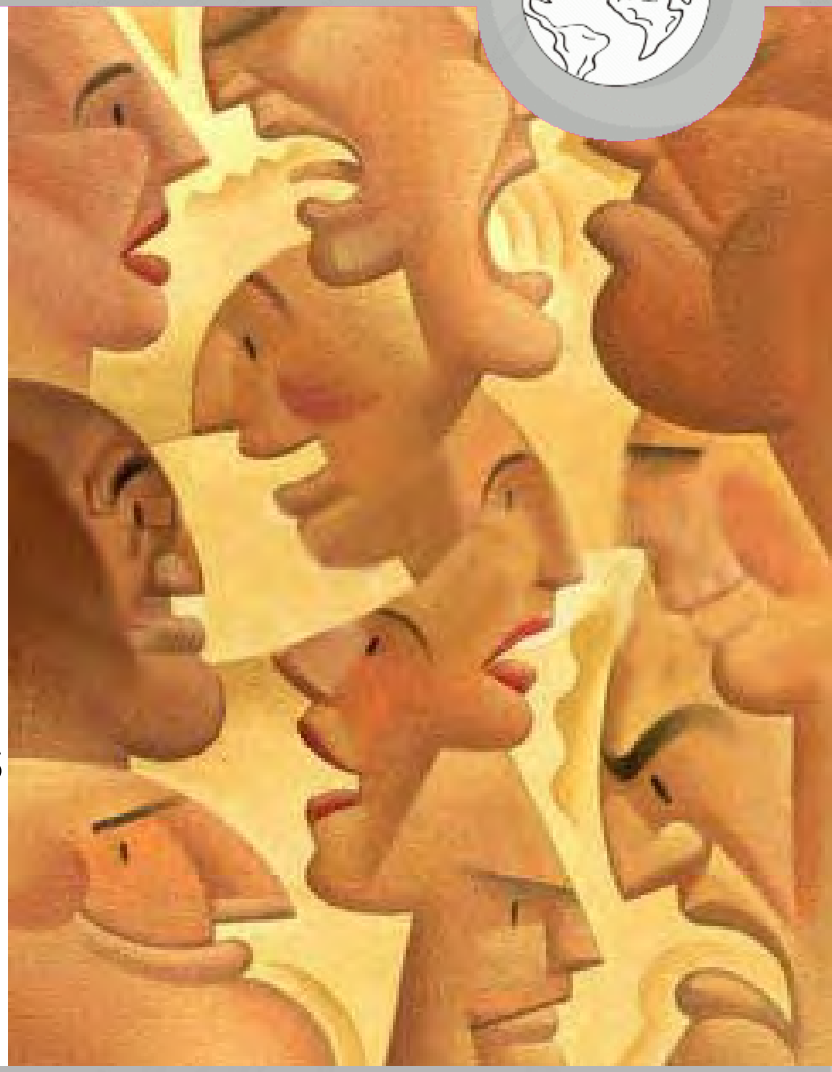




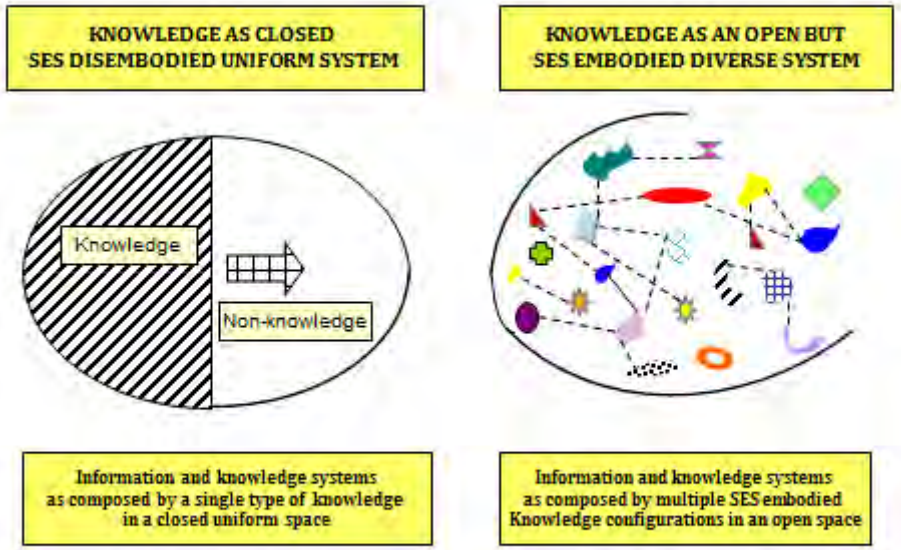
Source of Figures: Jäger and Patel (2012) Global Environment Outlook_5

Meeting the Challenge

- Transformative change is not compatible with the “old model” of “science finds the answers and tells everyone else what to do”.
- Instead we need open cooperation and dialogue between the scientific community and all other stakeholders (those with relevant knowledge for contributing to solutions)



A Transformation of the Knowledge Systems



www.esf.org/RESCUE

Participation in Open Knowledge Systems

- Enhancing the use and validation of local and specialized knowledge
- Providing space for dialogue, communication and learning
- Supporting common framing of issues (place-based, needs-driven)
- Improving the legitimacy of processes
- Supporting “buy in”
- Improving understanding of the socio-ecological system

For Example: InContext

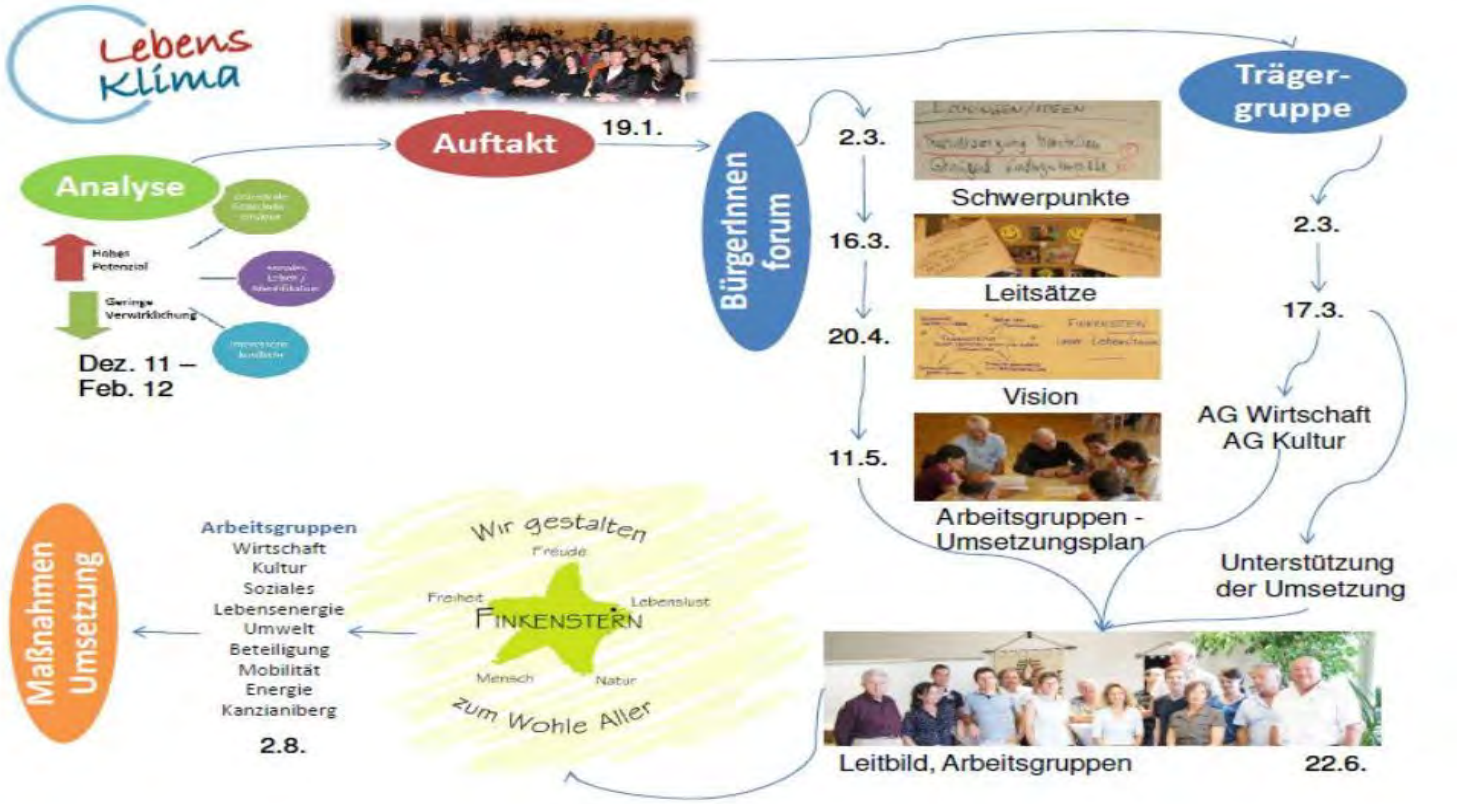


Abbildung 1: Schematische Darstellung des Projektablaufs "LebensKlima in Finkenstein"

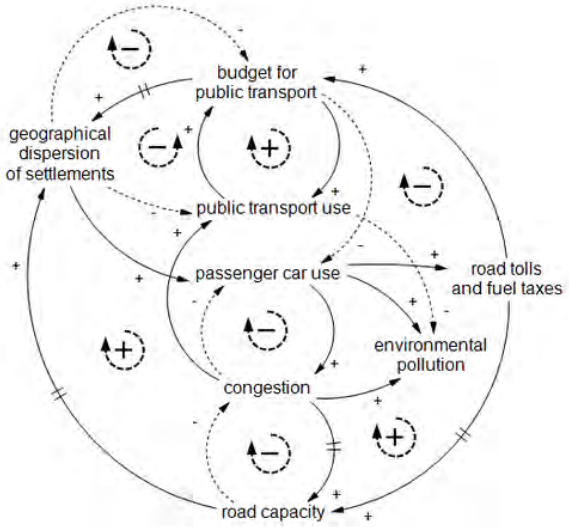
A Transformation in Science

- Broad collaboration, transdisciplinary knowledge integration and understanding;
- Implementation – oriented (supports decisive changes in individual behaviours and collective values);
- A systemic open approach;
- New criteria and procedures for assessing scientific excellence and societal impact.

Example: Knowledge Integration

RESPONDER Project: www.scp-responder.eu

System Mapping as a tool for knowledge brokerage



Example: Implementation -Orientation

InContext Project: http://incontext-fp7.eu/

RESEARCH BRIEF

IN CONTEXT

Action Research for Sustainability
Reflections on transition management in practice

Key points:

- Current societal challenges and discussions on the relevancy of science increase the need and opportunity for action research
- Action researchers pursuing sustainability address real-life challenges and generate theoretical insights.
- (Action) Researchers working in the pursuit of sustainability are not neutral analysts and should engage in self-inquiry and reflection
- The practical experience from InContext shows that transpar-

Authors:

Julia Wittmayer
Niko Schäpke
Georg Feiner
Ralph Piotrowski
Frank van Steenbergen
Stefanie Baasch

HOW CAN WE UNLEASH THE TRANSFORMATIVE POTENTIAL OF LOCAL COMMUNITIES?—THE INCONTEXT PROJECT

In an exemplary manner, InContext has identified framework conditions that enable societal transitions towards an environmentally sound, economically successful, and culturally diverse future. The goal was to better understand how sustainable behaviour is shaped by an interplay between external factors (e.g. social norms, policies, and infrastructure) and internal conditions (e.g. values and beliefs). Research was carried out in four case studies and three pilot projects: The case studies looked

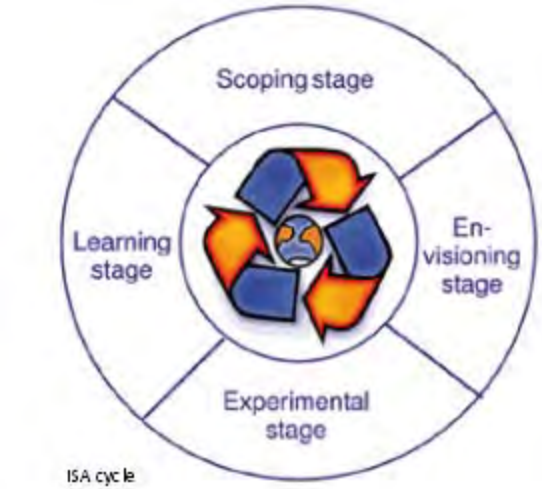
- (Action) Researchers working in the pursuit of sustainability are not neutral analysts and should engage in self-inquiry and reflection

- The practical experience from InContext shows that transparency, trust building and adapting to the local context are crucial in opening up and maintaining communicative spaces

Example: A systemic approach

Integrated Sustainability Assessment

The MATISSE Project: www.matisse-project.net



Example: New Evaluation Criteria

Discussed extensively in the Project VISION RD4SD: www.visionrd4sd.eu

RD4SD-relevant evaluation practices:
An ad hoc study for the VISION RD4SD project

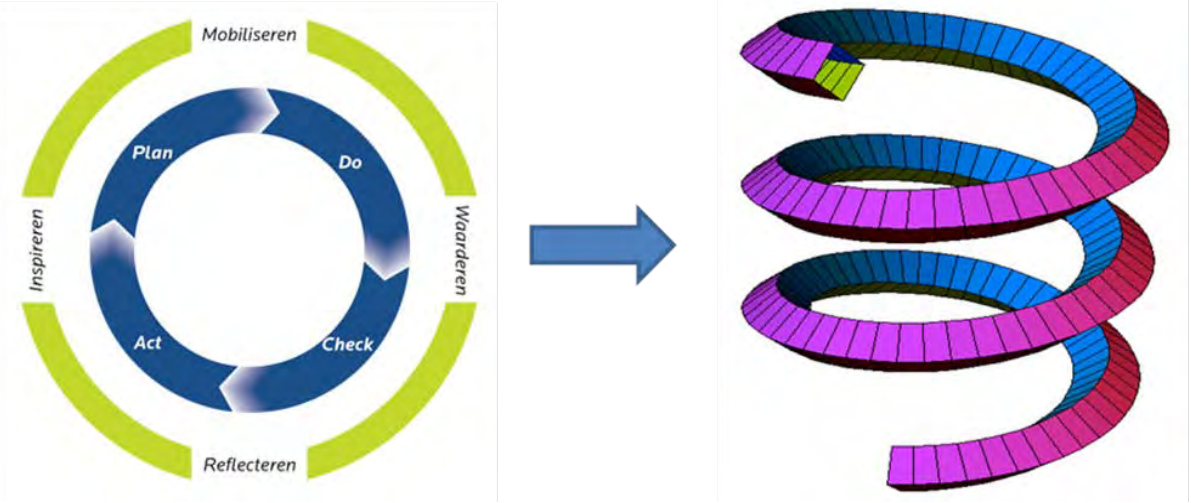
Paul M. Weaver

Moving forward

- Projects need time (fund phases);
- New skills (e.g. facilitation, mediation, system thinking);
- Researchers become a part of the process;
- The outcomes are open;
- “Excellence” refers to success in the process design and implementation and not the number of peer-reviewed papers.

A Transformation of the Knowledge System

- A deep, systemic change in both research and academia.
- Experimentation and learning




Thank you for your attention!