Resilience and efficiency of sustainability in research:

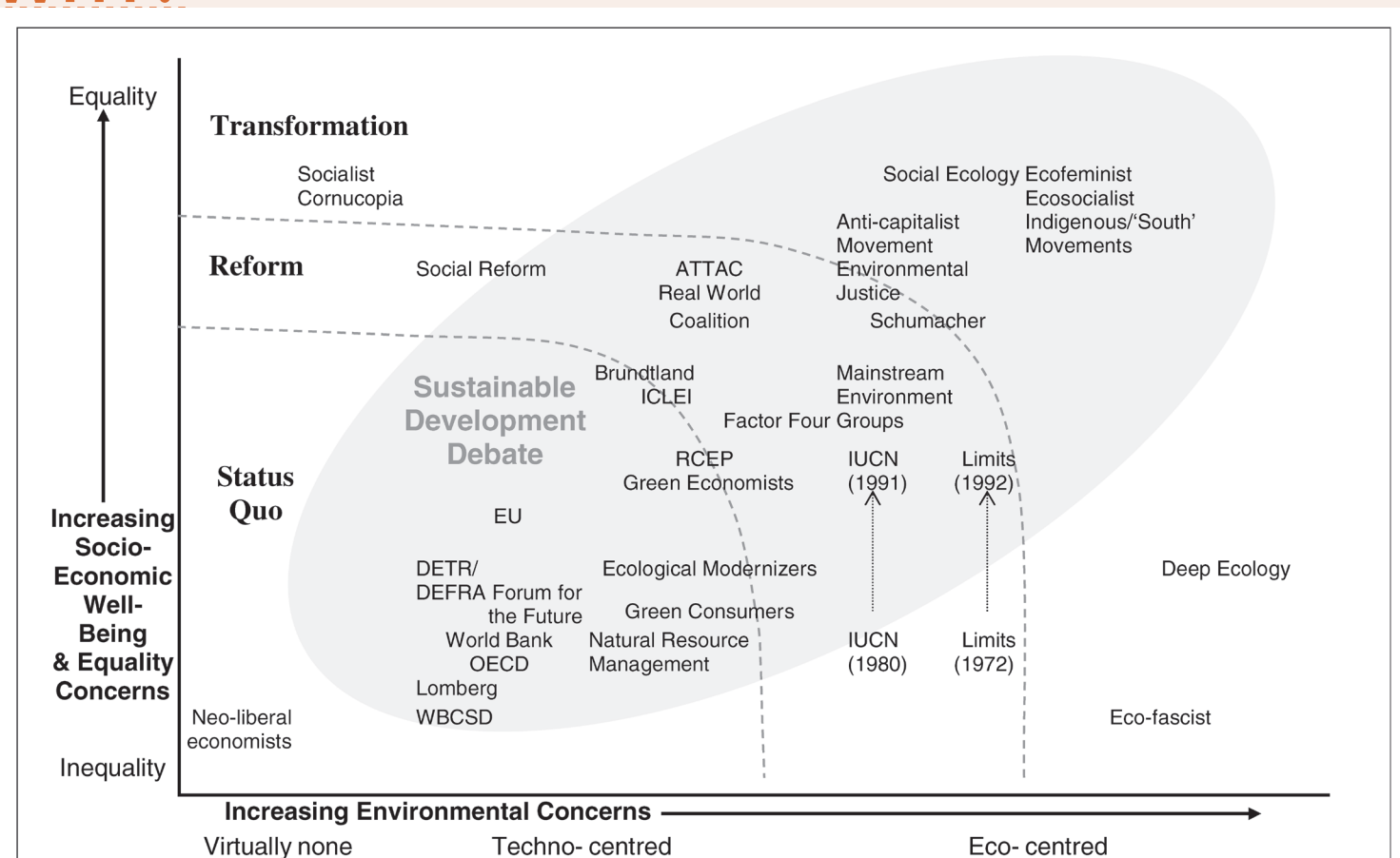## the politics of dealing with feedback loops

Flanders
State of the Art

What can we learn from experiments in structural policy changes for sustainability in the higher education research landscape of Flanders, Belgium?
How should we translate sustainability into tangible and realistic research actions for higher education institutions?

What you need to know
(about how we do things in Flanders, Belgium)

WHY?

This figure illustrates different trends of thought on sustainable development, their political and policy frameworks and their attitudes towards change and means of change. Hopwood et al. (2005)
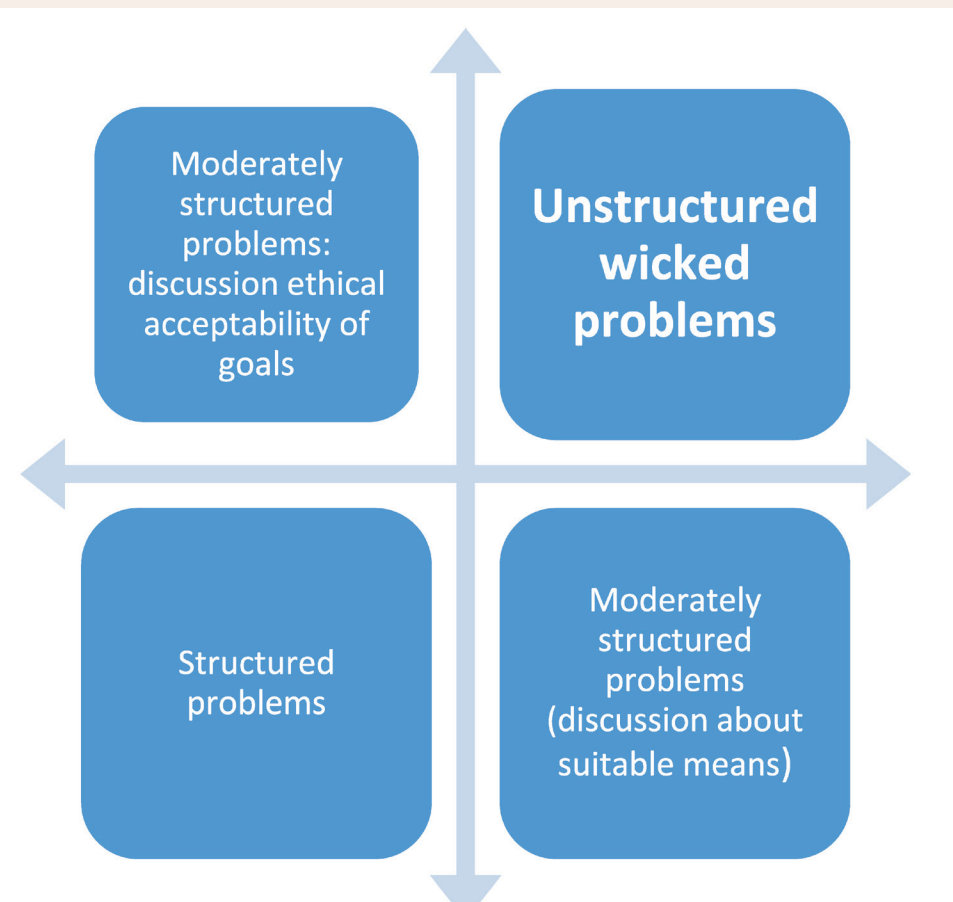

Typology of problems based on the degree of certainty of knowledge and the degree of agreement on values. The X axis represents a continuum of increasing uncertainty on the required knowledge (uncertainty highest on the right end). The Y axis represents a continuum of agreement on norms and values (agreement highest at the bottom). Hugé et al. (2016)

> *Culture eats process for breakfast.*
> Peter Drucker, www.drucker.institute

HOW?

< *Table 1: List of possible 'research for sustainability'-actions (based on a workshop with research managers in Flanders, Belgium). Hugé et al. (2016)*

A conceptual model of transdisciplinarity. The numbers indicate the three phases of the ideal transdisciplinary research process. Jahn et al. (2012)

> *They've been called 'wicked problems' (by Horst Rittel).*
>
> *They've been called 'ill-structured problems' (by Ian Mitroff).*
>
> *I call them 'social messes' (after Russell Ackoff, who simply refers to them as 'messes').*
>
> *What they are not is merely problems. Problems have solutions. Messes do not have straightforward solutions.*
> Robert Horn, 2001

WHAT?

We regularly call for, set up and support pilot projects on sustainability in research at different HE institutions, in which we focus on different types of actions, in (1) research funding, (2) research & career evaluation, (3) research organization, (4) capacity building, and (5) policy (Table 1). Together with these HE institutions we aim at creating the much-needed space for both resilience and efficiency, when working towards the 2030 Agenda.

Such pilot projects are currently underway at four institutions, with HoGent University College pioneering in 2015-2016:

- PXL University College
- Artevelde University College Ghent
- University College Leuven-Limburg
- Howest, University College West Flanders

WHAT DO WE LEARN?

The top leverage points:

- Think (wicked) problem driven instead of discipline driven
- Enthuse people by a shared understanding of what an unsustainable future looks like
- Create a long term perspective (in funding, HR, ... and the research question itself)
- Develop a shared language/jargon between disciplines to put sustainability central in your research
- Tell a story
- Educate, teach and communicate about your research in a more transdisciplinary and systemic way
- Reorganize funding based on (wicked) problems (cf. H2020)
- Be transparent in your research, eg. about the values and motivation behind choices made
- Compose multidisciplinary teams to rate research (grants)
- Share results to advance
- Show your (learning) process
- Hire an external process manager
- Reflect on and clearly identify the societal return of your research (not to be reduced to its economic component)
- Link insights of fundamental research to applied research, and vice versa
- Attract a diverse group of stakeholders and clearly identify roles and responsibilities of everybody involved
- Improve mobility between university (college), society, and companies
- Create an urban academy on sustainability themes that involves your town and its citizens
- Create multidisciplinary institutes and research groups at university (college) level
- Experiment freely at a small scale, in a safe space
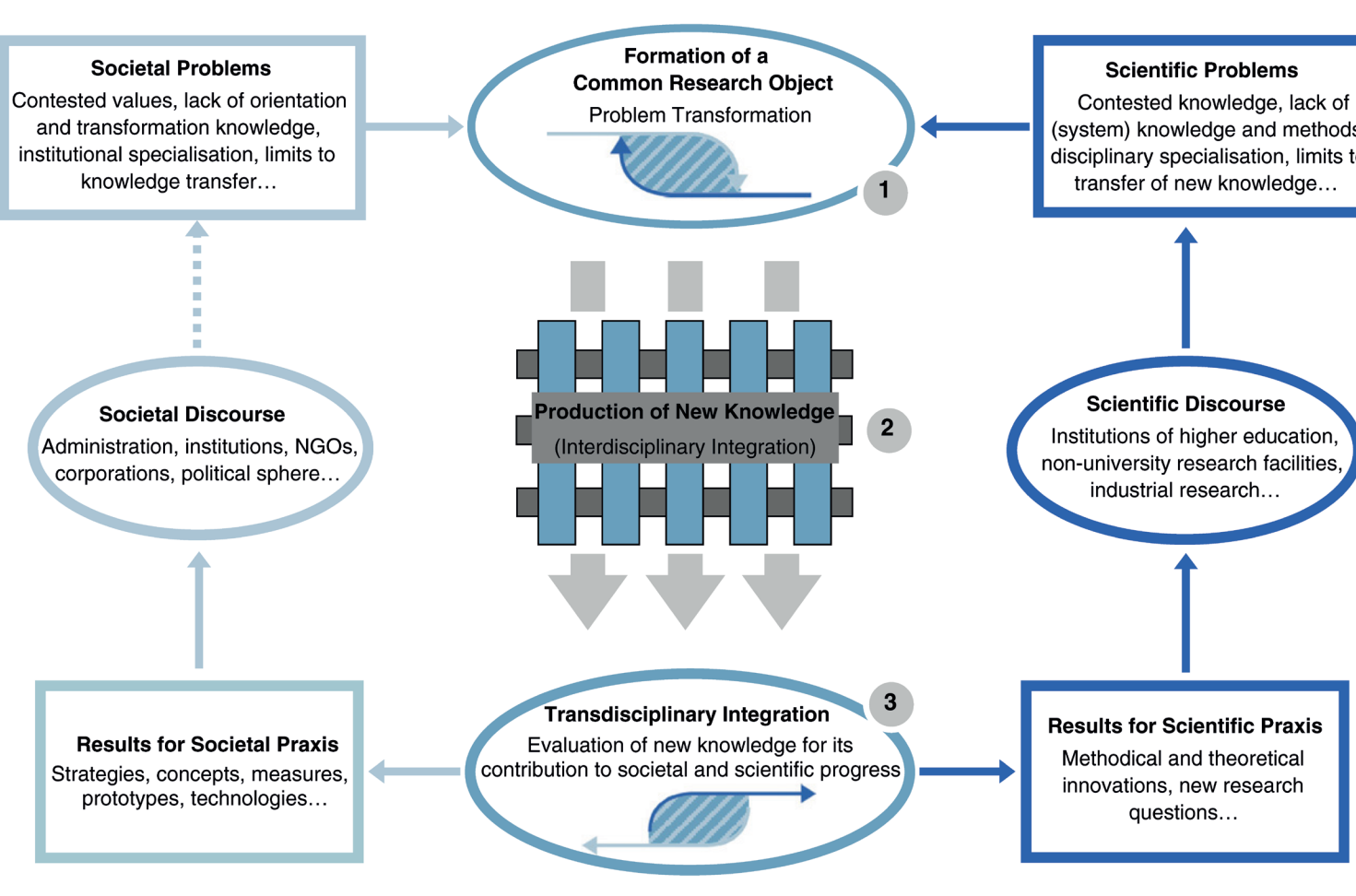
What you need to do
(if you want to get involved)

- Contact us! filip.colson@vlaanderen.be, leen.audenaert@vlaanderen.be, ecocampus@vlaanderen.be
- Become a buddy to one of our pilot projects: get first hand experience and exchange ideas on where to go next
- Join us in Brussels 17-19 October 2018 for FUTURE FORWARD, our SUMMIT ON SUSTAINABLE HIGHER EDUCATION www.futureforwardsummit.com/ (If you are really really good... maybe you can hold a talk there yourself!)
- Visit us! www.lne.be/ecocampus
- Send us an email to ask for more info or regular updates on the progress of sustainability research in Flanders, Belgium

Ecocampus is a programme of the Department of Environment & Spatial Development, Government of Flanders, Belgium. Flanders is a region of 6.5m inhabitants with a diverse higher education landscape that consists of 5 universities and 13 university colleges with a total of 235k students. With Ecocampus, we aim to promote a debate on Sustainable Higher Education and to work towards structural policy changes that enable the long-term viability of Sustainable Higher Education.

References and sources:
- *Ecocampus, Sustainability in Research, interview film; https://youtu.be/nirZ5gBR82I, Government of Flanders, Department of Environment (now Department of Environment & Spatial Development) (2016)*
- *FoTRRIS, a Horizon 2020 Research & Innovation programme: http://fotrris-h2020.eu/*
- *Hopwood, Mellor, O'Brien. Sustainable Development: Mapping Different Approaches. Sustainable Development 13, 38-52 (2005)*
- *Hugé, Block, Waas, Wright, Dahdouh-Guebas. How to walk the talk? Developing actions for sustainability in academic research. Journal of Cleaner Production 137, 83-92 (2016)*
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- *Responsible Research & Innovation (RRI): https://www.rri-tools.eu/about-rri*

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