



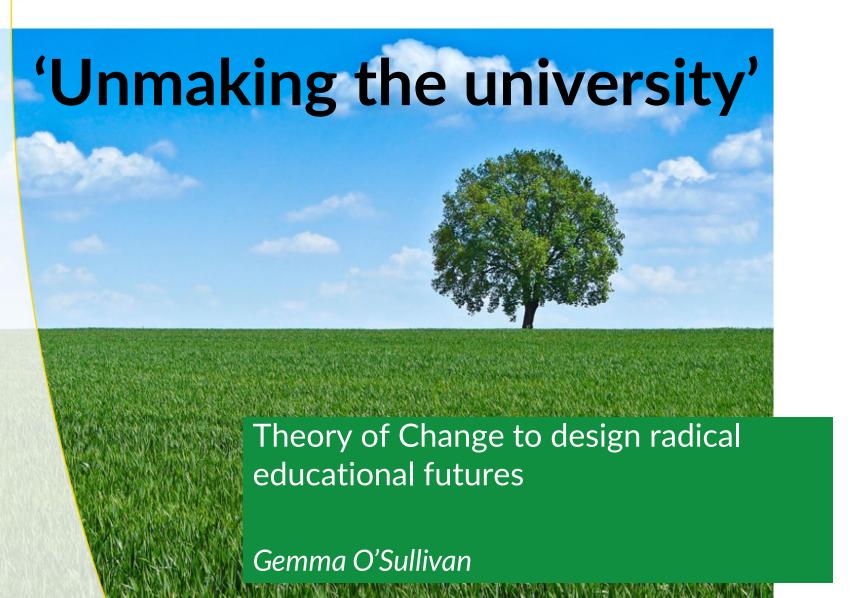


"

We're going to move to the new paradigm like the other Phoenix. It's like a metamorphosis... We are moving and we are in the middle. I mean I'm quite sure that this is going to be the future for learning and the future for research. [iB2]

1)







Dr Giuseppe Feola – Unmaking, a research programme on the disruption of capitalism in societal transformation to sustainability



The concept of 'unmaking'

a diverse range of interconnected and multilevel (individual, social, socioecological) processes that are deliberately activated in order to 'make space' (temporally, spatially, materially, and/or symbolically) for radical alternatives that are incompatible with dominant modern capitalist configurations

Feola, G., Vincent, O. Moore, D. (2021). (Un)making in sustainability transformation beyond capitalism. *Global Environmental Change*, Vol. 69, https://doi.org/10.1016/j.gloenvcha.2021.102290.

Feola, G. (2019). Degrowth and the Unmaking of Capitalism: Beyond 'Decolonization of the Imaginary'?. ACME: An International Journal for Critical Geographies, 18(4), 977–997. Retrieved from https://acme-journal.org/index.php/acme/article/view/1790





Transformation via **addition** vs **subtraction** (or: construction vs deconstruction)

By addition

- Innovation (social, technical, cultural)
- Prefiguration

Mechanisms

- Competition
- Windows of opportunity

By subtraction

- Decolonisation (of the imaginary)
- Disruption
- Exodus (autonomy)

Mechanisms

- 'Making space'
- 'Breaking out'

Feola, G., Vincent, O. Moore, D. (2021). (Un)making in sustainability transformation beyond capitalism. *Global Environmental Change*, Vol. 69, https://doi.org/10.1016/j.gloenvcha.2021.102290.

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Making space; collective narrative (identity formation); reimagining time; actors x spaces that facilitate prefiguration; competency development

O'Sullivan, G. (2023). *Shaping transdisciplinary, challenge-based education using knowledge creating teams from five European universities: A realist evaluation* University of Dublin Trinity College]. Dublin, Ireland.

Although disciplinarity is important.... this is about effectiveness. Maybe I don't use this word effectiveness but otherwise it's just an intellectual exercise. We need to add to this intellectual exercise an interest and motivation that translates into engagement and excitement and active thinking. [iH2]

You put some scientific people around the table. You have a lovely discourse. You write a paper apart from that. And that's all. And then you say goodbye. Well, it's a university sport. [iE1]



Eric Jantsch



h (1929 - 1980)

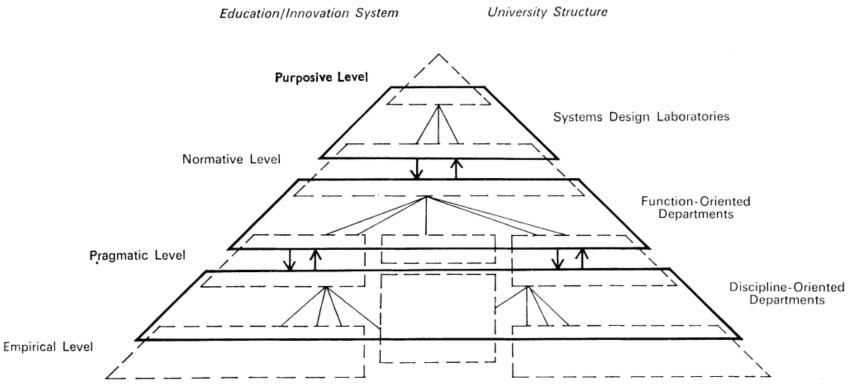
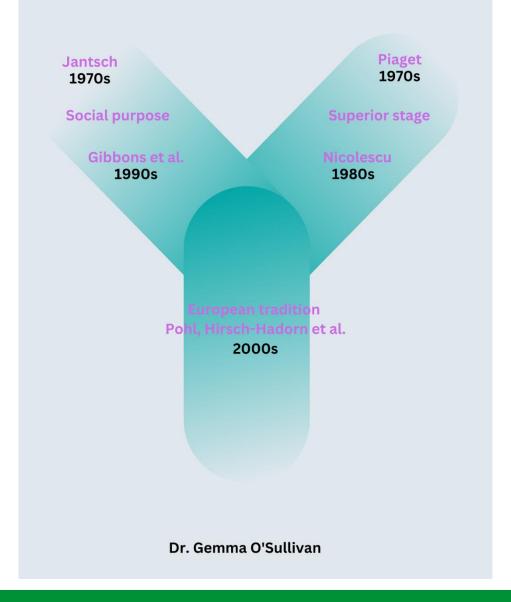


Fig. 3. Transdisciplinary university structure. The three types of structural units —— focus on the interdisciplinary links between the four levels of the education/innovation system ---.



Transdisciplinarity

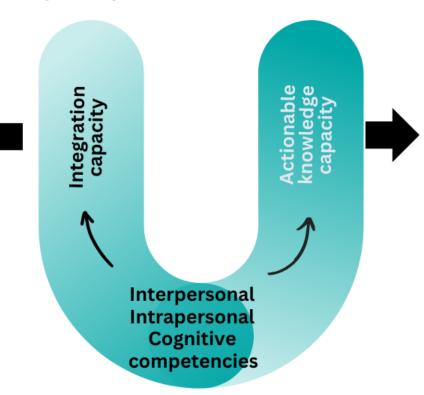




Transdisciplinarity as U-shaped learning

Interacting in a defined problem-solving process, students/researchers, academic and extraacademic actors learn as a group to develop or enhance competencies to integrate knowledge and bridge the knowledge-action gap (Gibbs, 2017; Klein, 2018; Fam et al., 2018; O'Sullivan, 2023).

- Co-produce and integrate knowledge;
- Show how knowledge from multiple disciplines must be brought to bear in order to solve a problem;
- Frame complex problems using diverse perspectives;
- Jointly formulate problems with extraacademic actors.



- Implement and assess societal and scientific outcomes;
- Develop solutions for real-world problems;
- Apply concepts in the real world.

This term is proposed based on a literature review of transdisciplinary curricula design in higher education 1970-2022 (O'Sullivan, G., 2023)*





Professor Karin Rebel, Director of Education, Chair in Sustainability Science & Education

Two interdisciplinary Bachelor's and five specialised Master's programmes; several sustainability minor programmes (in Dutch). Approx. 1800 students



to help accelerate the transition to a sustainable society

Special Interest Group on Justice, Power and Transformative Action in Sustainability (JUPITA)



Professor Flor Avelino

Looking back at the Mixed Classroom on just transitions
Turning the classroom into a social movement?





Professor Maarten Hajer – Urban Futures Studio

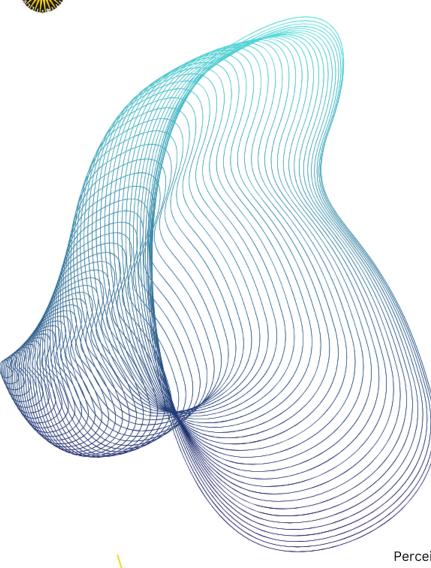
Copernicus:

- transformative education;
- new ways of thinking and doing;
- change agents of the future;
- partner with actors and stakeholders to produce rigorous knowledge;
- transdisciplinary research and education



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Research Question Seeds of Change

Enhancing inter- and transdisciplinary education
Copernicus Institute of Sustainable
Development 2024

Perceived as a new paradigm that can systematise sustainability education: develops key competencies to work in and contribute to the field of sustainable development (Tejedor et al., 2018)



Teaching change

learning spaces relationship building institutional change pedagogies content competencies skills educational mission educational research & experimentation

Student change

skilled analysts skilled communicators develop creativity inspire own their own learning process critical thinking multiple perspectives intrapersonal relationship competencies (check unlearning) values change agent transdisciplinarity

Societal change

co-learning relationship building multi-perspectivity dealing with complexity reflexive society capacity building inclusive collaborative, society evidence-informed society sustainability-oriented change hopefulness integrated solutions see people as integrated



... from transition to transformation

Four Pathways

- 1. Relationship Building
- 2. Integrating Multiple Perspectives
- 3. Empowering society with evidence
- 4. Empowered to act

Enablers

Teacher change
Teaching activity or method
Curriculum change
Institutional change

Disablers Interventions

Affective, relational pedagogies, competencies



Thank you