

Building transdisciplinary and interdisciplinary research and education ecosystems at UCLouvain

Panel session with:

Prof. Agnès Guiderdoni (Research Pro-Rector)

Prof. Marthe Nyssens (Transition Pro-Rector)

*Charlotte Breda, Amaury Peeters, Prof. Jean-Philippe Visscher
(Transdisciplinary Research Seminar)*

Prof. Tom Dedeurwaerdere (Moderator)

Presentation of the Transdisciplinary Research Seminar

Prof. Jean-Philippe De Visscher

General Objectives

The Transdisciplinary Research Seminar aims to deepen understanding of the ethical, epistemological, methodological, practical, and institutional challenges of transdisciplinary research through a cross-analysis of experiences conducted within the various research teams at UCLouvain.

This seminar is intended for all UCLouvain researchers who wish to share, deepen, and strengthen their transdisciplinary research practices.

Team

Scientific Committee

SSH

Prof. Mathieu Berger (IACS - Institut d'analyse du changement dans l'histoire et les sociétés contemporaines)

Prof. Tom Dedeurwaerdere (JURI - Institut pour la recherche interdisciplinaire en sciences juridiques)

Prof. Florence Degavre (IACS - Institut d'analyse du changement dans l'histoire et les sociétés contemporaines)

Coralie Helleputte (LIDAM Louvain Institute of Data Analysis and Modeling in economics and statistics)

Prof. Julie Hermesse (IACS - Institut d'analyse du changement dans l'histoire et les sociétés contemporaines)

SSS

Prof. Isabelle Aujoulat (IRSS - Institut de Recherche Santé et Société)

Charlotte Bréda (IRSS Institut de Recherche Santé et Société)

Michel De Jonghe (IRSS Institut de Recherche Santé et Société)

Cécile Ponsar (IRSS Institut de Recherche Santé et Société)

SST

Prof. Jean-Philippe De Visscher (LAB Louvain research institute for Landscape, Architecture, Built environment)

Prof. Sandra Soares Fraão (MMC Institute of Mechanics, Materials and Civil Engineering)

Caroline Michellier (ELI Earth and Life Institute - Royal Museum for Central Africa)

Prof. Daniela Perrotti (LAB Louvain research institute for Landscape, Architecture, Built environment)

Prof. Sophie Vanwambeke (ELI - Earth and Life Institute)

Prof. Marnik Vanclooster (ELI Earth and Life Institute)

Prof. Marthe Nyssens (Pro-rectrice Transition et Société)

Amaury Peeters (Louvain Coopération - IRSS Institut de Recherche Santé et Société)

Coordination

Pierre Mersch (ADRE), Prof. Jean-Philippe De Visscher (LAB)

Past Seminars

31.10.2024

Retour sur le projet Metrolab Brussels

avec Prof. Mathieu Berger et Louise Carlier (UCLouvain, SSH-IACS)

14 participants

28.11.2024

Conférence sur la recherche interdisciplinaire et transdisciplinaire «Transition et Développement Durable»

21.03.2025

Retour d'expérience de recherche transdisciplinaire dans le secteur de la santé

avec Prof. Isabelle Aujoulat (UCLouvain/IRSS) et Charlotte Bréda (UCLouvain/CAMG/IRSS)

14 participants

24.04.2025

Retour d'expérience de recherche transdisciplinaire par Louvain Cooperation

avec Amaury Peeters, Michel Kokou Gnon, Zoulikha Faraj (Louvain Cooperation)

20 participants

05.06.2025

Citizen Science - Circle U. Climate and Environment Day

avec Caroline Michellier (UCLouvain-AfricaMuseum), Muki Haklay (Université Paris Cité), Annelies Duerinck (Scivil), Yannick Agnan (UCLouvain)

86 participants (including on-line Circle.U participants)

Past Seminars



Retour d'expérience de recherche transdisciplinaire par Louvain Cooperation, 24.04.2025

Evolving and co-constructed key questions

FRAMEWORK

- * What are the constraints imposed or opportunities allowed by the research agreement? How should relationships, power dynamics, timelines, evaluations, and communication modes related to this framework be managed?
- * What is the structure of the research team? How does it promote transdisciplinarity?
- * How can the university offer support and enhance the value of transdisciplinarity?
- * How to reward (financially) the participants?
- * How to maintain long term relations with partners, beyond the limited timeframe of research projects?
- * How to involve partners that are not (and can't be) structured as a group ?

VALORISATION

- * What are the different types of results produced? For whom and/or regarding what issues do they hold value?
- * What is the difference between the intended objectives and the achieved objectives? How can failures and unexpected benefits be valued?
- * How can results be disseminated to different partners? How can their adoption be encouraged?
- * What is the value of different results beyond the specificity of the case study? How can they be scientifically leveraged?
- * How can individual contributions of co-researchers be credited in the research outputs?
- * What are the disciplinary benefits of transdisciplinary research?
- * How to valorize long term and indirect benefits?

ETHICS

- * What are the differences, inequalities, and power dynamics between the partners? How can they be managed?
- * What are the potential impacts and benefits of the research for the various partners? How can they be regulated?
- * How can the rights of all parties be protected?
- * How can trust and mutual respect be established and guaranteed?

EPISTEMOLOGY

- * What underpins the rigor of transdisciplinary research?
- * How can different types of knowledge (disciplinary, academic, experiential, etc.) be valued and connected?
- * How can the ability for mutual communication and understanding be developed?
- * How to discuss the different normative backgrounds among the partners and transform those «bias» into sociocultural richness?
- * What are the common interests that unite the various partners?

METHODOLOGY

- * How to determine the type(s) of objective aimed for: problematization, knowledge production, experimentation, dissemination, capacity building, etc.?
- * How to guarantee fair and just access to participation for all ?
- * How to design and manage the different levels of involvement and participation of various stakeholders at the different stages of the research?
- * What participatory tools and methods should be used, for what purpose, with whom, and at what stage?
- * How to manage the bias of working with representatives (citizen associations, administration representatives, private lobbies, etc.) ?
- * How to organize monitoring and self-reflection throughout the research process?



Analysis of transdisciplinary research experiences at UCLouvain

Charlotte Breda and Amaury Peeters

An Inductive & Qualitative Approach

Methodology:



Qualitative method



Inductive approach



Thematic Analysis

Subject:

Discussions during meetings of the community of practice of UCLouvain researchers involved in interdisciplinary or transdisciplinary research



CONFERENCE ON INTERDISCIPLINARY AND TRANSDISCIPLINARY RESEARCH FOR SUSTAINABLE DEVELOPMENT _ 21.11.25

Data Collection:

1) Discourse Data :

- Recording of 4 seminars: 12 h. / 186 p.
- Transcription: 83 h.

2) 8 Short stories of motivation from community of practice members (online form)

Data Analysis:

- Coding (NVivo): 117 unique codes
- Cross-thematic analysis
- > 70% of Discourse Data analysed
- Preliminary results > Focus on relevant codes for Conference Plenary Debate

"The scope of the questions I was exploring made it essential to integrate the viewpoints and methods of other disciplines. It was not about seeking a form of completeness among them, but rather recognizing that **answers gain in richness and robustness** when **multiple disciplines** confront and engage around the same subject."

"No one can synthesize **complex questions** alone. Transdisciplinarity, which allows us to **collectively build answers** based on the specificities and skills of each of the healthcare actors or those working on care and health issues, seemed to me to be an approach to better master"

Public Action / Public Policies / Societal Impacts / Complex Problems

"This transdisciplinary approach is what **makes me get up** in the morning to come to work..."

"Our concerns for this work, which is both interdisciplinary and transdisciplinary [...] also arose from a sort of **dissatisfaction** with how sociology conceptualized the relationship with the city."

Values / Meaning

And then, in fact, there are indeed virtues and values behind these approaches that we recognize, **a kind of resolution of injustice**. And the participants themselves, it's like when we involve them in ethnographic research. There is a **valorization of the perspective of the person and the voice of the person** that is not found in other mechanisms

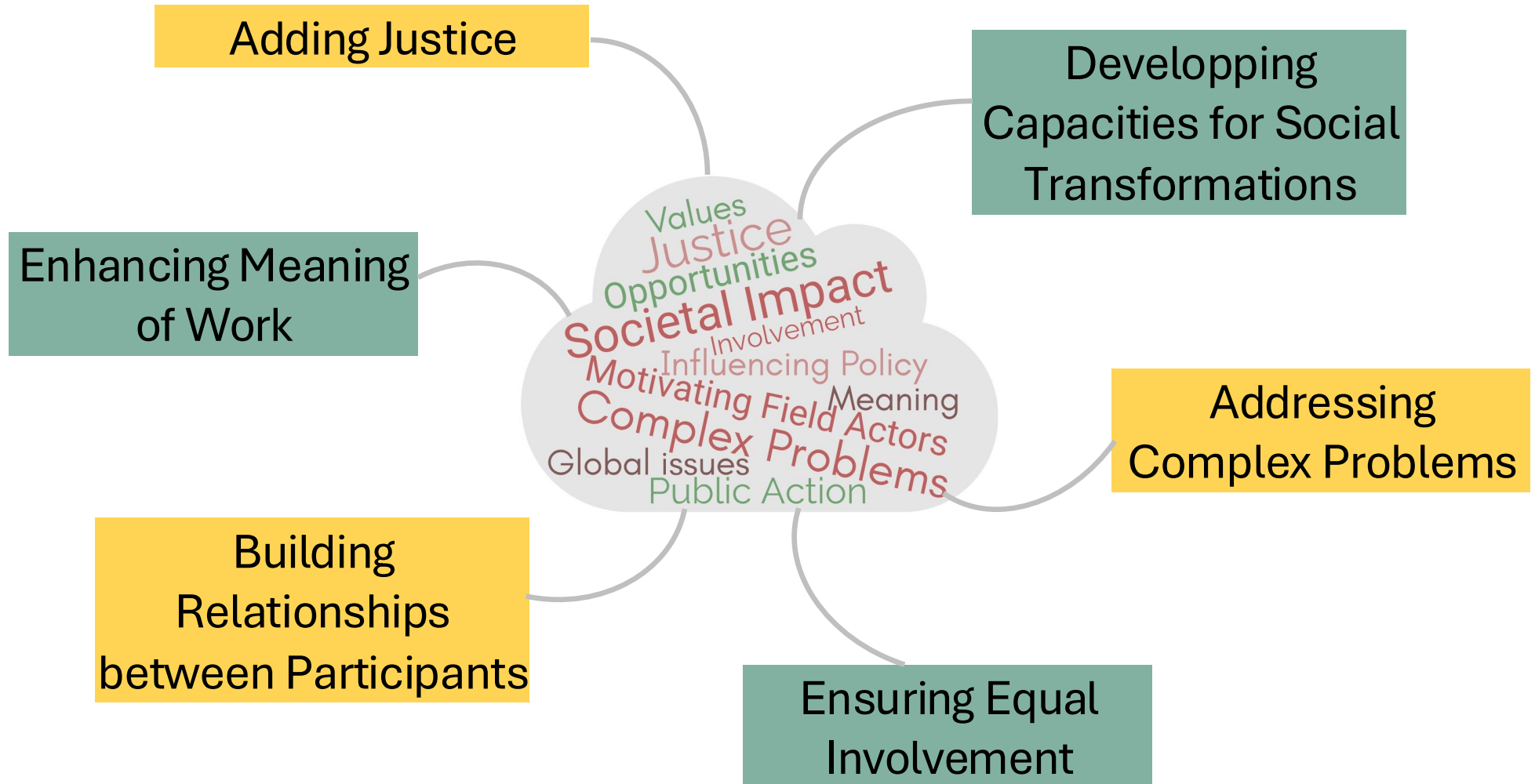
It is often the case too, when we do transdisciplinary research, that we have people who, ultimately, have completely **different social statuses**. And what is valid for them is often related to experienced injustices. It's us, indeed, I think, who have somewhat put ourselves in that position. But what are we dealing with as well? **We are also addressing an injustice when we do transdisciplinary research**. It is not often made explicit; it was somewhat within, but we would almost need to do a mapping of that, because **it is part of the motivations with which people come in, and it guides the team, it guides the valuation, it guides the method, it guides a lot of things**, actually, regarding that.

Justice



Motivations are Rooted in Meaningful Values, Ethical and Relational Considerations

Results 1 – Motivations



"Instead of taking two days, **it took eight missions** because there is a lot of misunderstanding."

"We need to give ourselves **time to overcome or address or talk about these irritations and misunderstandings**, but we must not delegate this responsibility to someone else. Each person must remain **personally responsible**."

Tensions / Communication /
Trust / Time / Responsibility

"We also stepped a bit off the beaten path. A bit out of convention, at times, to develop field research, with aims of proposal, but which was done somewhat **off the of the project**, and in a slightly more engaged way concerning the situation of migrants"

Ethics / Off-Project / Evolutive
Design / Commitment

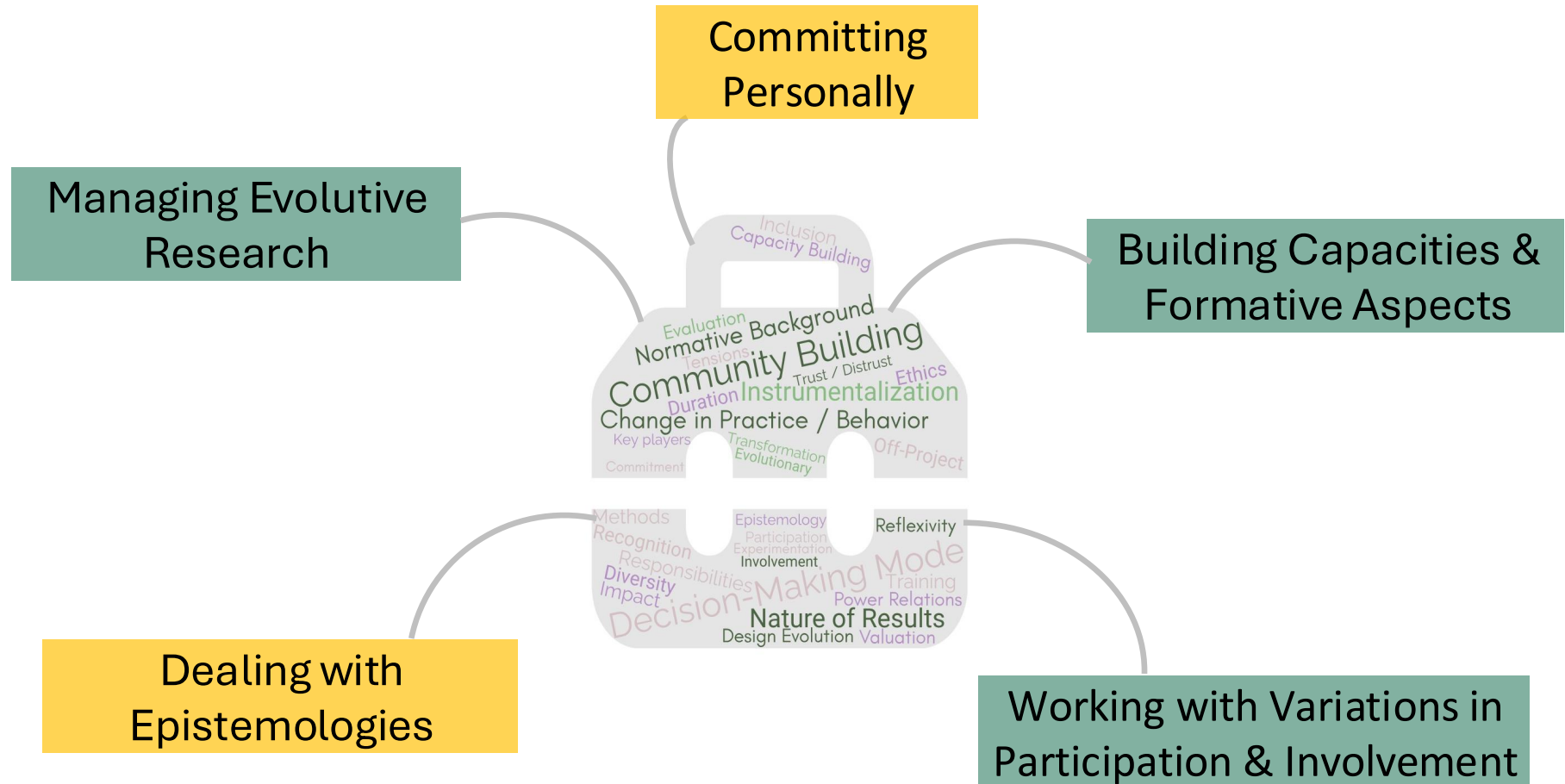
"...this is what the students, the participants were encouraged to work on, which led to different proposals that were both linked to the idea of **opening governance models** to audiences **that had not been taken into account until then or redesigning** the sites in order to open up to audiences **that had not been considered before**. The masterclass as a form of **pedagogical experimentation**."

Evolutive Design / Training /
Capacities / Skills / Experimentation



Valuable Practices and Methodology for Innovative Experimentation, Learning and Transformations

Results 2 – Practices & Methodology



"It is necessary to have a minimum of **financial support to bring people together**. [...] And from the moment these means are no longer there, if it is not integrated into a more institutional structure, **there can be, if not incorporated into a rather institutional structure, a really rapid effect of structures**. Therefore, **sustainability is always an issue**. [...] From the moment budgets are no longer available to purchase the minimum, then **the network can collapse**, fall apart very quickly."

Sustainability / Funding / Institutional Structure / Networks

"If you expect a direct impact, you are mistaken, in illusion on multiple levels. First, because **the impact is often indirect**. It is **delayed**. It is more mediated than immediate. And also because these impacts, sometimes, if you aim in one direction, you will actually find **unexpected effects** elsewhere... and some of these effects are **unintentional** and are **not targeted**"

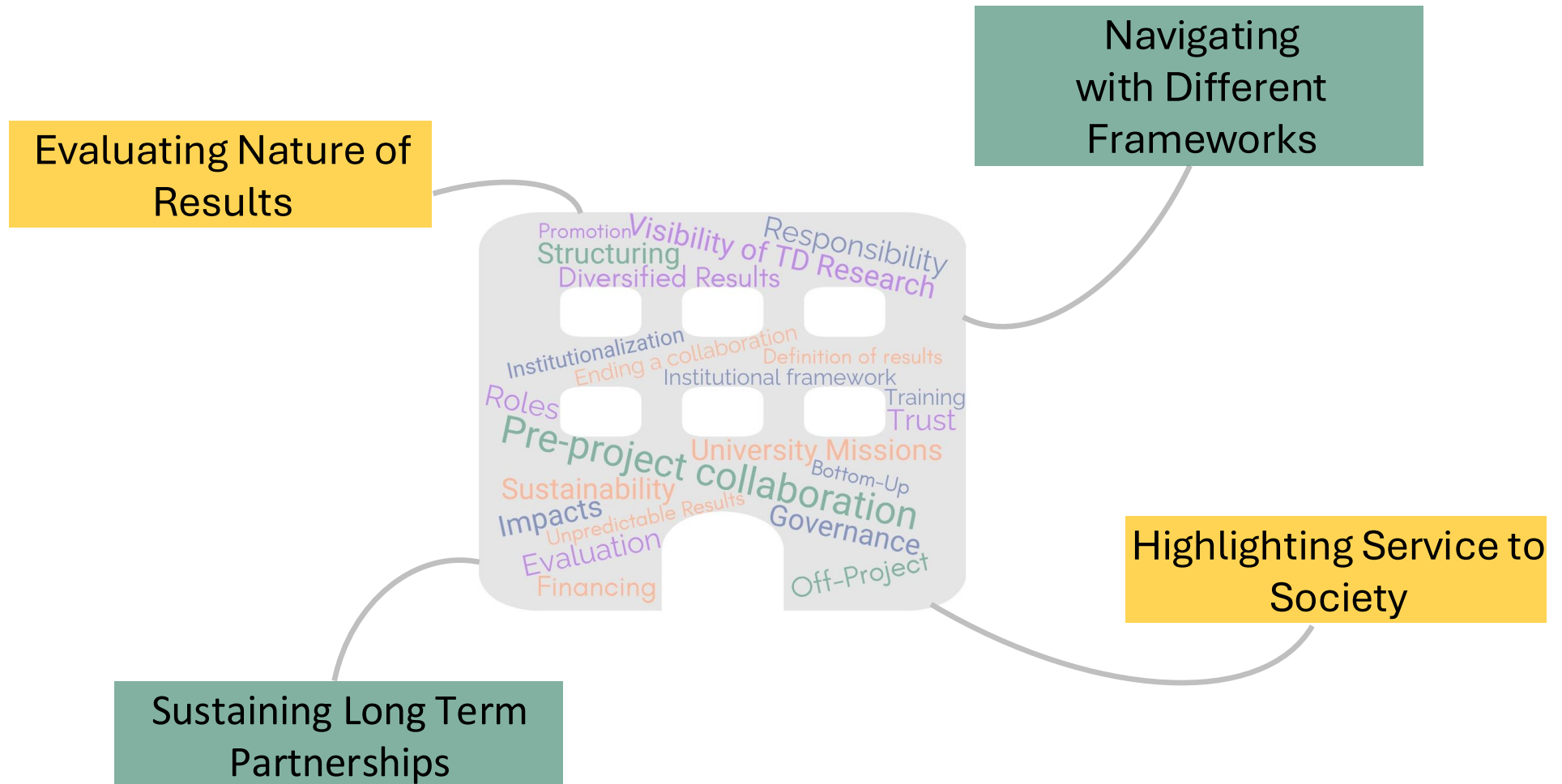
Pre-Off-Post Impacts

Results 3 – Institutional Framework



Sustainable Transformative Collaborations Require Institutional Framework Support

Results 3 – Institutional Framework



Reflexions on transdisciplinary and interdisciplinary research and education ecosystems at UCLouvain

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01 *Motivations of transdisciplinary researchers*

How can academic career paths better recognise (and assess) researchers' engagement and the societal impacts of their work?

How can conventional quantitative criteria (citations, funding levels) be complemented or enriched?

02 *Challenges encountered in the practice of transdisciplinary research*

In what institutional frameworks and with which resources can researchers (and students) be trained in the issues and methods of transdisciplinary research?

What place can such training occupy within the current structure of sectors, institutes, and Louvain4?

03 *Obstacles to creating an enabling environment for transdisciplinary research*

How can long-term societal partnerships be supported (and funded) in ways that allow trust to develop, uncertainties to be addressed, and long-term as well as unexpected outcomes to be valued?

What alternatives exist to short-term, project-based research funding—especially with regard to pre-, off-, and post-funding work?

Thank you!