



MULTISPECIES SUSTAINABILITY IN THE CLASSROOM

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Aalto University
School of Arts, Design
and Architecture

NÔDUS
Sustainable Design
Research Group

A?

Aalto University
School of Arts, Design
and Architecture



Solutions for sustainability

We help solve grand challenges in and across our key areas.



Radical creativity

We build an outstanding creative community for new thinking.



Entrepreneurial mindset

We foster an inspiring entrepreneurial culture.

Crosscutting Themes of Aalto's Strategy

6th in QS World
University Rankings by
Subject: Art & Design

Creative *Sustainability*



120 ECTS

60 Advanced major studies

30 Electives

30 Thesis

ARTS

CHEM

BIZ

systems thinking

multidisciplinary
competences

change making

sustainability in
material use

design thinking

sustainability
management

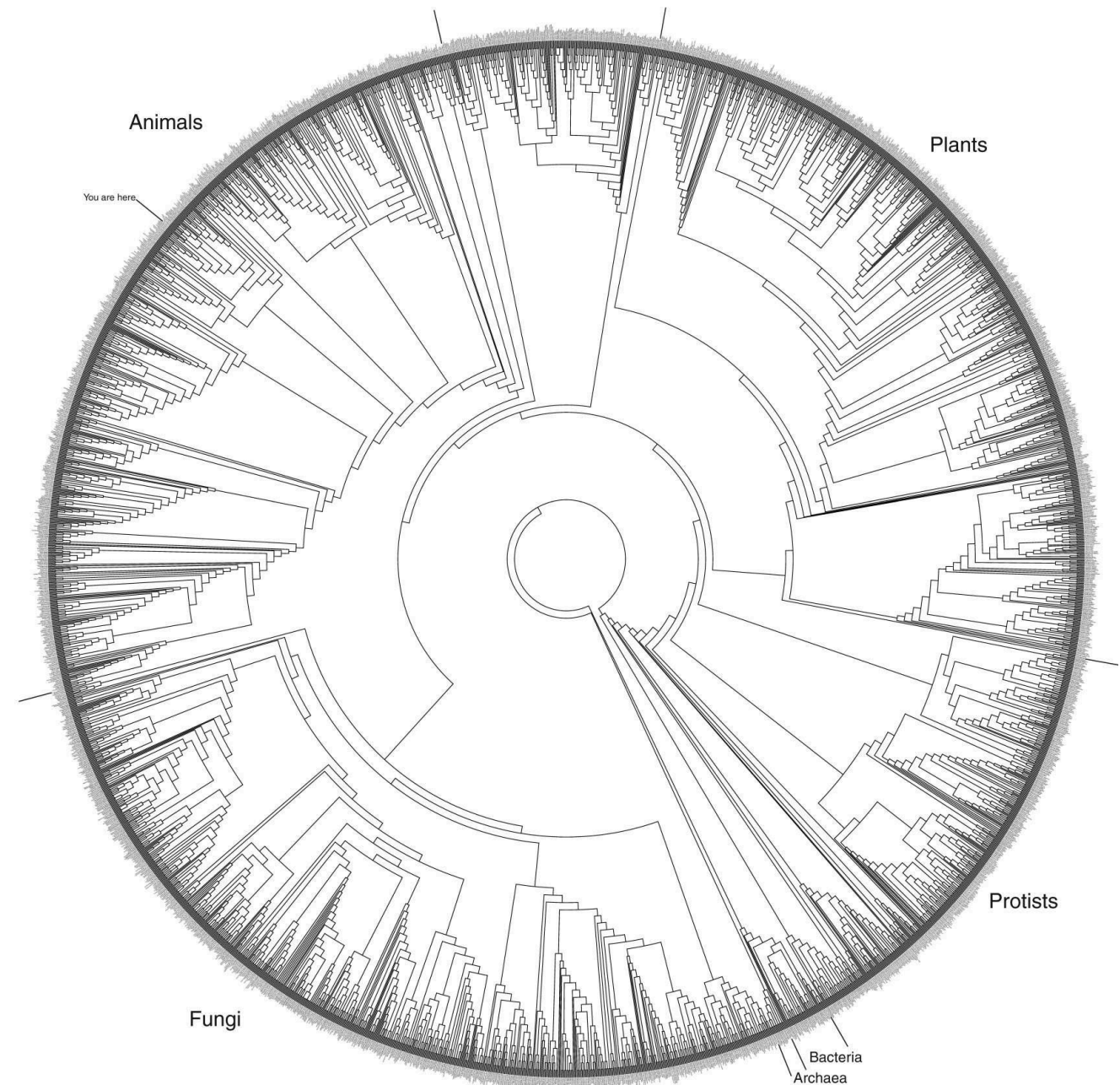


SUSTAINABILITY TRANSITIONS AND FUTURES

Creative *Sustainability*



- 6 ECTS
- Since 2017
- 2 rounds of curriculum development
- Interdisciplinary cohort of students
- Project-based, hands-on
- Group poster; individual reflective essay



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SUSTAINABILITY TRANSITIONS AND FUTURES

Creative *Sustainability*

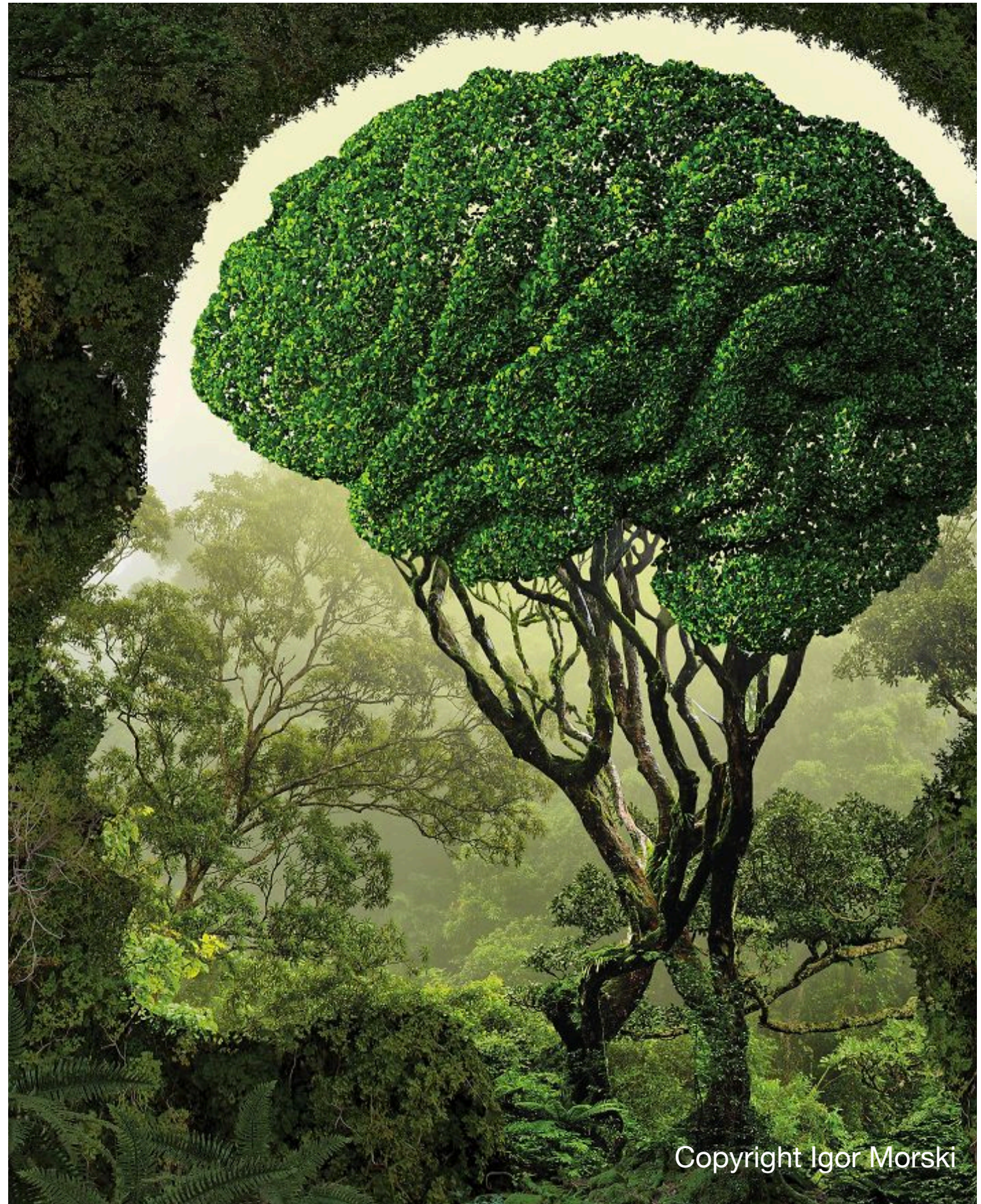


- Sustainability transitions as design challenges;
- Basic understanding of how sustainability transitions projects unfold in practice;
- Mini transition arena;
- 2017-2021 focused on low-carbon transitions in urban contexts



HUMAN-NATURE CONNECTION

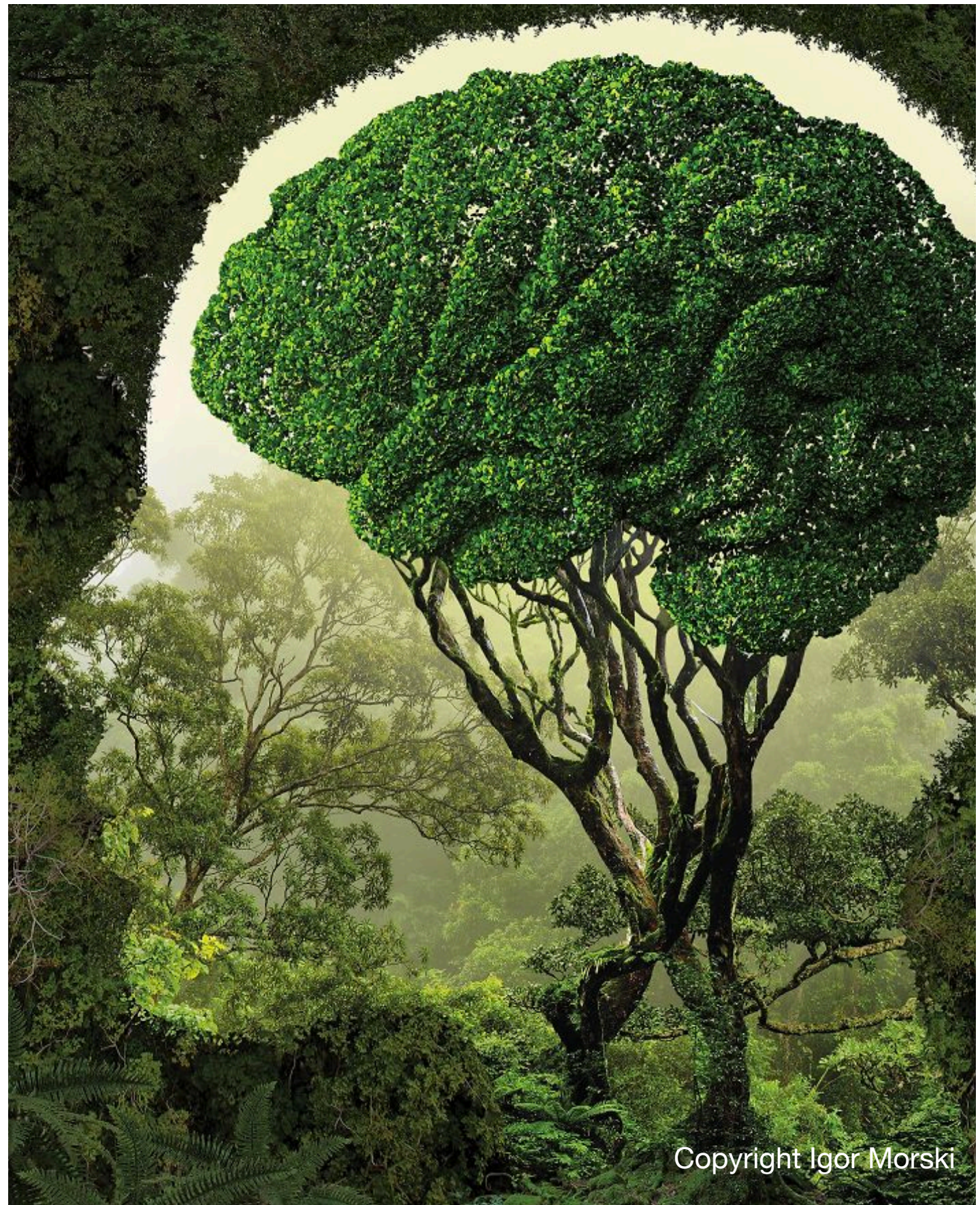
Sustainability science has been studying human-nature relationships for a while and the importance of nature and ecosystemic health for human wellbeing is well established.
(Ives et al., 2017)



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HUMAN-NATURE CONNECTION

However, such research has not been able to transform the value system that has created the mindsets, structures and patterns of the predominant utilitarian perspective.



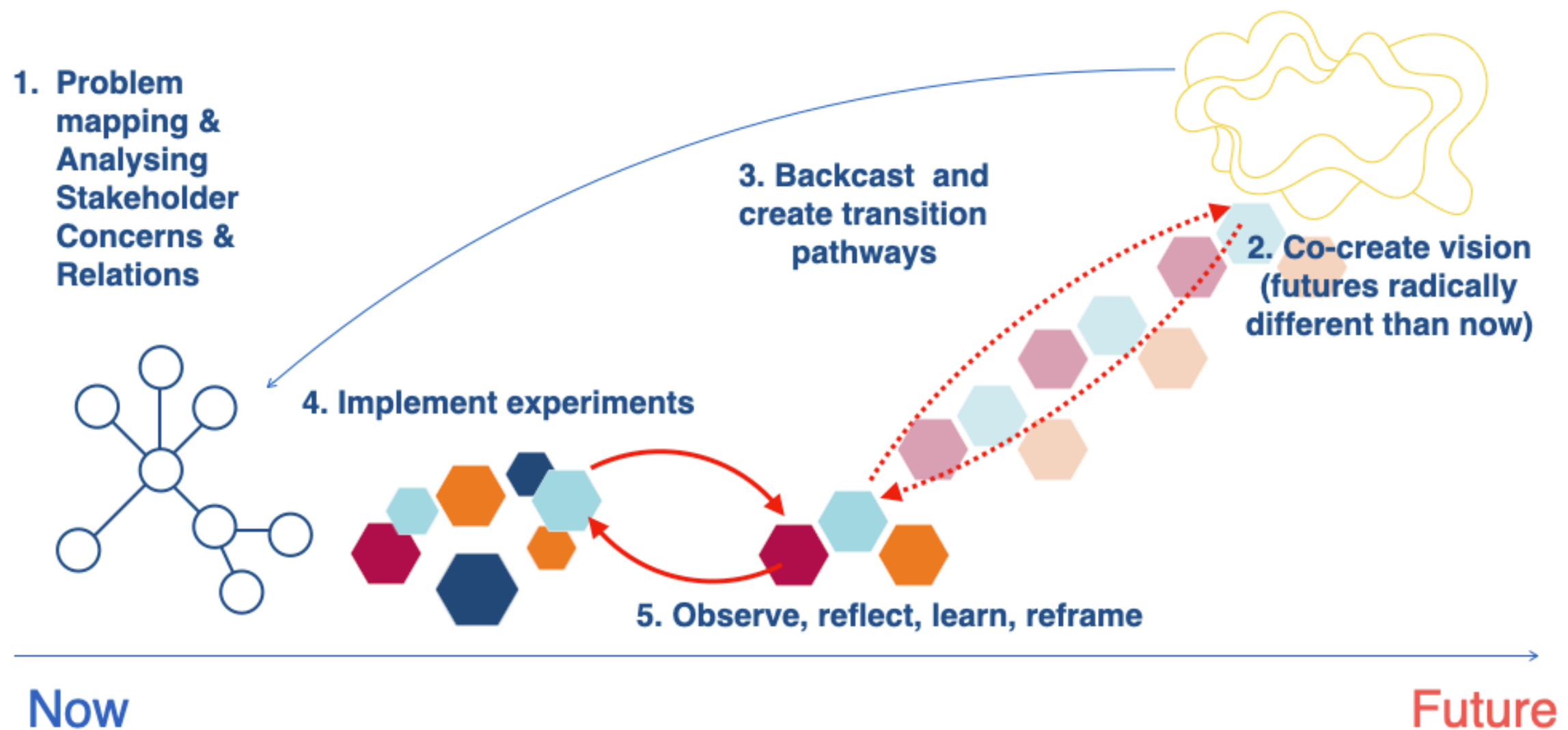
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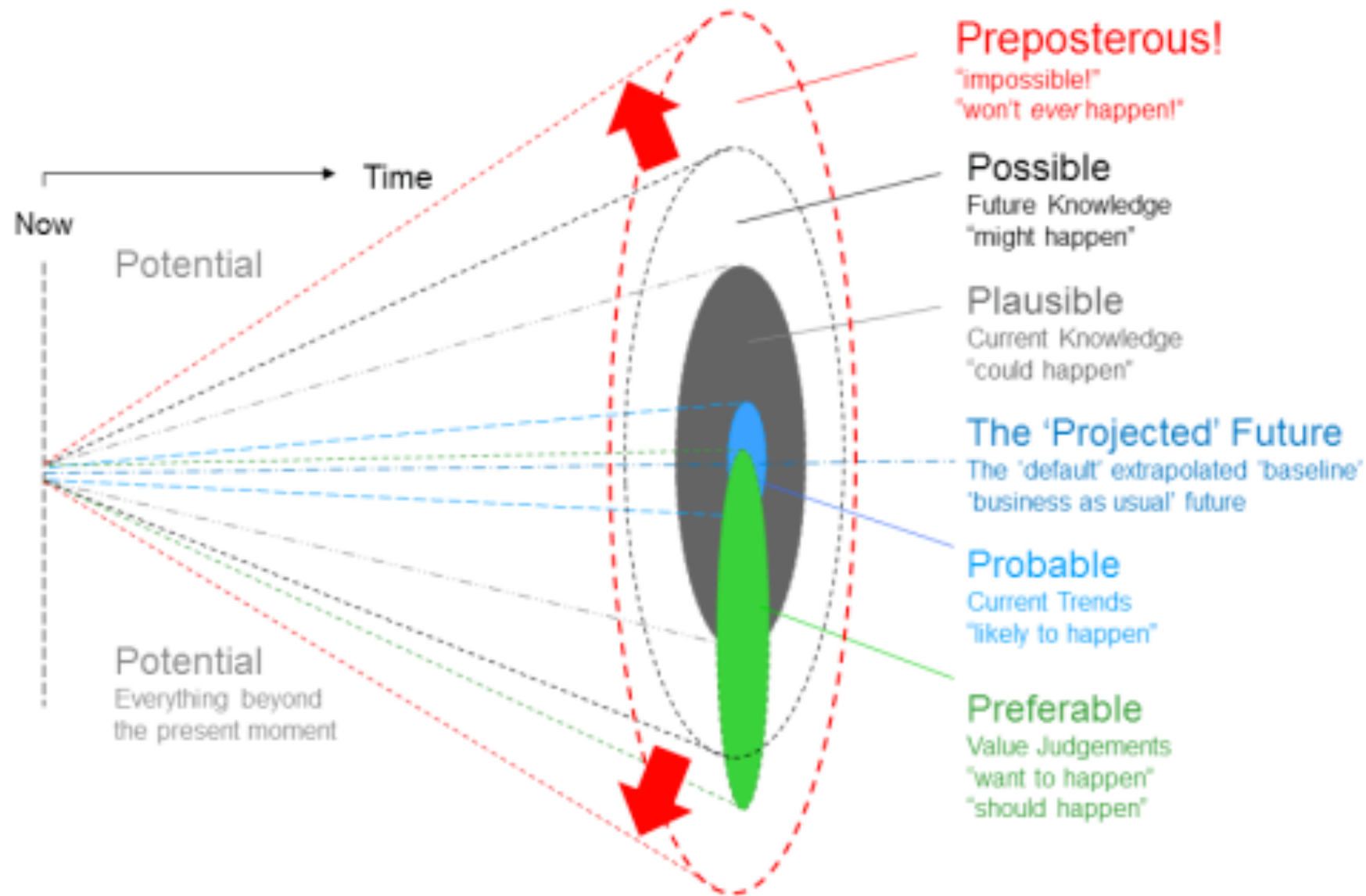
Multispecies sustainability:

“Meeting the diverse, changing, inter-dependent, and irreducibly inseparable needs of all species of the present, while enhancing the ability of future generations of all species to meet their own needs.” (Rupprecht et al., 2020)

PROJECT PROCESS



PREPOSTEROUS FUTURES



Futures cone: (Voros, 2003; 2015)

Theory loading & practice had to go hand-in-hand



7 guest lectures
+1 Aalto campus ecology

*Multispecies perspectives
from:*

Anthropology

Law

Systemic design

Planning

Philosophy

Urban ecology

Urban futures

Multi-species Sustainability Futures for Otaniemi

Human Corridors

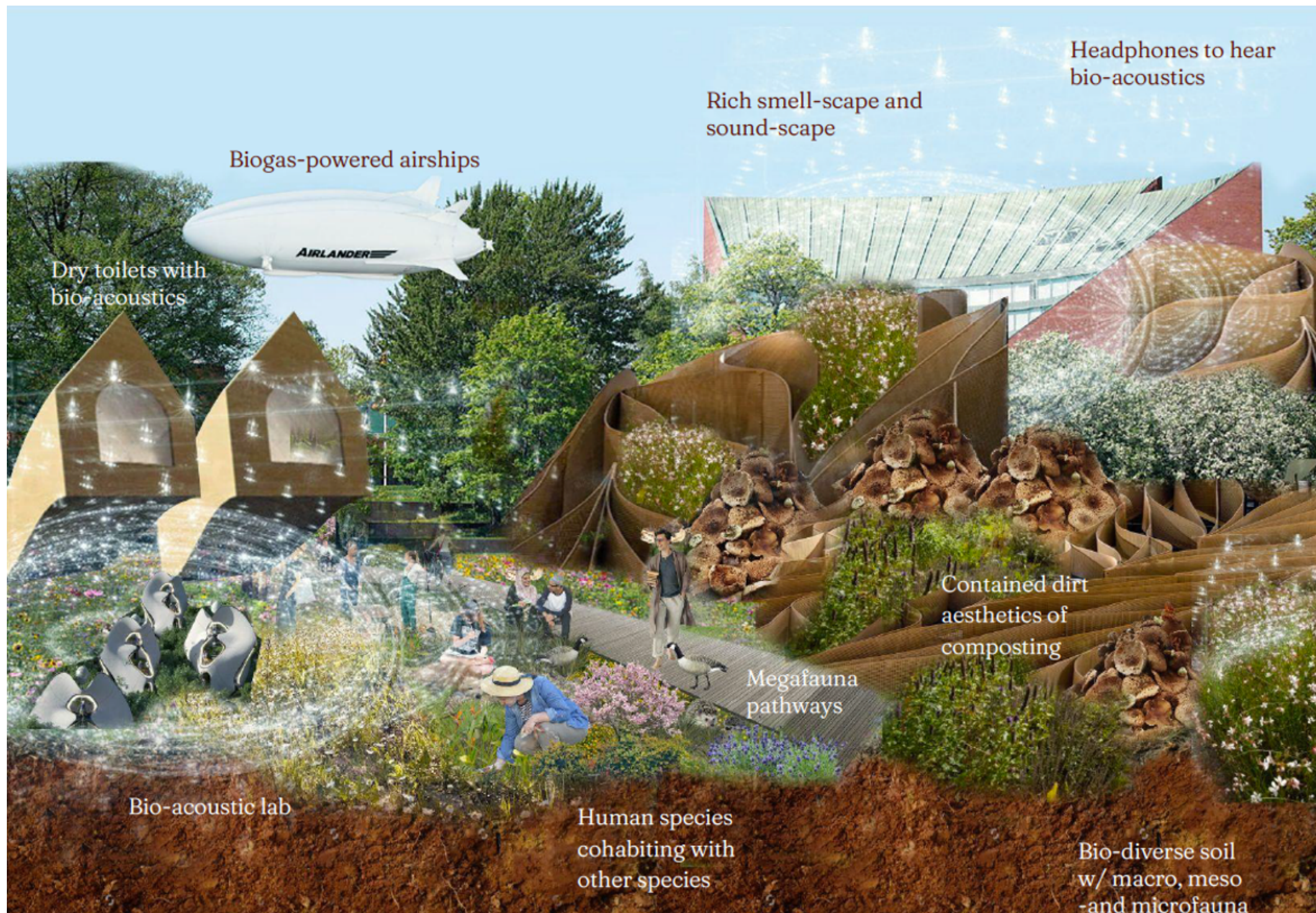
Change of aesthetics

Limited human access

Multispecies biosensors

Unmanaged environment

Copyright of: Janni Lindgren, Radhika Motani, Eve Nieminen, Kaisa Roover



Dry toilets' bio-acoustics



Copyright of: Valtteri Siikasmaa, Rinna Saramäki, Ruta Jumite, André Helgestad

Otanieni pluriversity

A training ground for coexistence



Key vision aspects

FUZZIFICATION OF BELIEF SYSTEMS,
KNOWLEDGE AND PRACTICES
PERMEABILITY OF STRUCTURES AND CONCEPTS
DECENTRAL ORGANISATION
DISCIPLINARY BLENDING
SHARED MAINTENANCE AND CARE WORK
DIGITAL TECHNOLOGY IN INTERSPECIES COMM
SEASONALITY

Weak signals

#NEW-SOCIAL-RELATIONSHIPS
#LIQUID-GENDER
#NEW-COHABITATION-MODELS
#RETURN-OF-THE-SPIRITUAL
#CRISIS-EXHAUSTION
#WAYS-OF-KNOWING
#INDIGENOUS-COSMOLOGIES
#EXISTENTIAL-QUESTIONS
#ECOLOGICAL-WORLDVIEW
#ATTITUDES-OF-RESTRAINT
#CIRCULAR-TECHNOLOGIES
#FOCUS-ON-NONHUMANS
#AI-TO-HEAR-NATURE
#FOOD-TECHNOLOGIES
#PERMISSIVE-ARCHITECTURE
#COOPERATIVE-OWNERSHIP
#POLITICS-OUTSIDE-POLITICS
#RIGHTS-OF-NATURE

2022: EXPERIMENT

The first seed of the pluriversity

"Creating for a Multispecies Future" is a hands-on course which takes place in 2022 at Aalto construction sites. In this course, students will design and prototype multispecies infrastructure. The aim of the experiment is to create and facilitate concepts and spaces for learning about multispecies flourishing by collectively building and envisioning possible campus futures. CMF is a hands-on, communal, engaging and fun way to both learn, understand and create together. Its intervention is meant to trigger a new way of thinking, learning and envisioning on campus, which corresponds with the mindset of the pluriversity. At the same time, the course prepares for the long-term aim of creating a multi-species pop-up lab that can migrate from construction site to construction site.

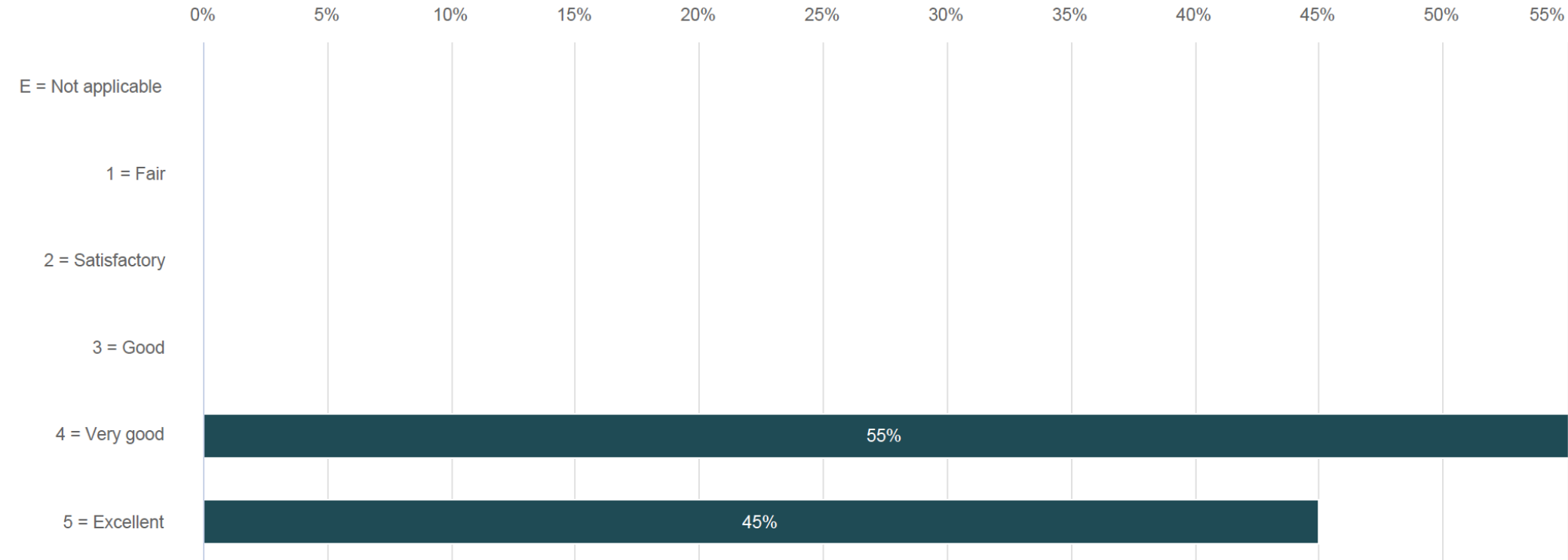


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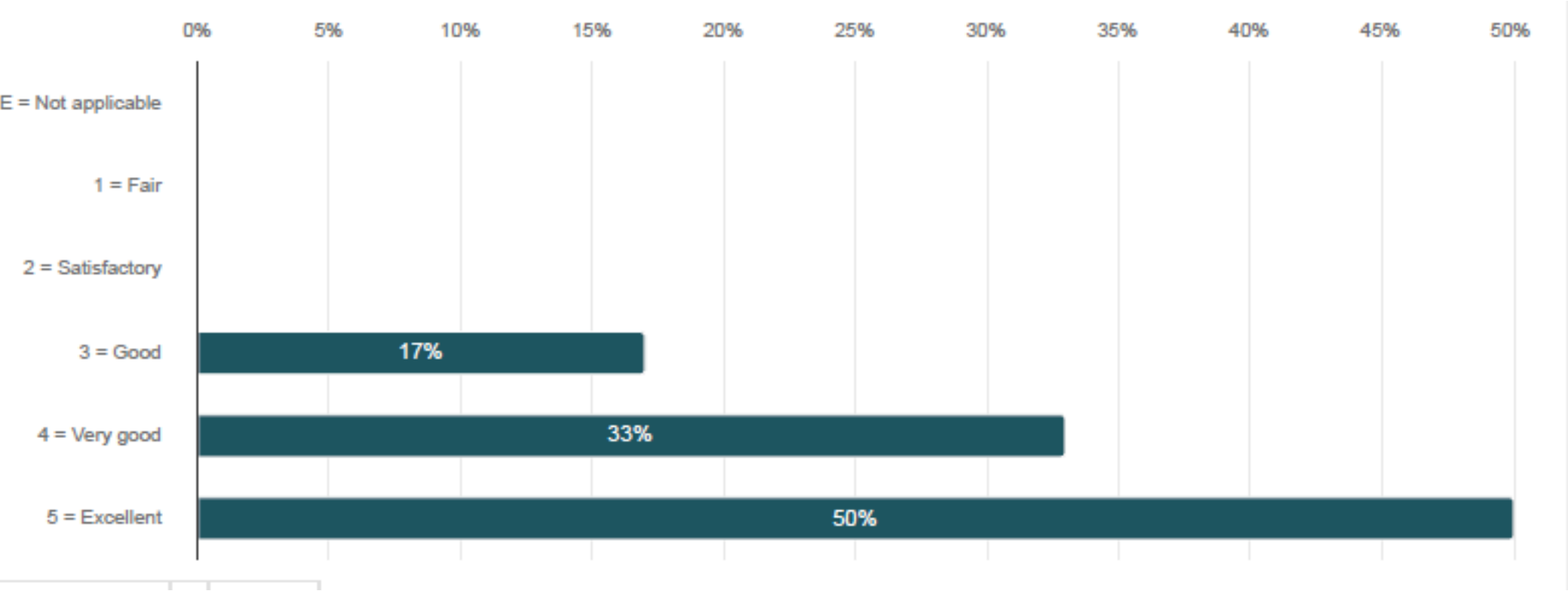
2021-2022

1. My overall assessment of the course

Vastaajien määrä: 11



2022-2023



Increased professional agency, confidence

I have felt tentative to draw ‘non-designerly’ topics into design, but now feel more confident in articulating that systems that are not commonly understood as designed actually are.

I feel encouraged to advocate for a more broad understanding of stakeholders and to keep on introducing the interconnectedness of designed systems, and to engage in the discussion about materials, where they come from and of whom they are made from, and how they are visually represented and framed.

Despite initial skepticism towards the multispecies framework, I recognise that having an explicit focus on other-than-human considerations as project framing facilitated major creative outputs for the future vision.

Fellow students had a much more critical point of view, which led me to reconsider my understanding of ‘modern’ and ‘progressive’. Through discussions and balancing between the perspectives of “going backwards to the good old times” versus adapting to change through innovations or other interventions, there was actually a nice, almost timeless, creative zone created.

Design imposes its excellence and takes credit for taking a human-centric approach, but should design reconsider its human-centricity in all design practices? Who and what is design advocating for? As design penetrates so many other fields, it needs to be self-reflective to its value propositions.

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Critical perspectives on impact of practice

I will carefully think about which discourses to work with and why in my upcoming masters thesis and later in my professional life

The perception of how I view images shifted a bit during the course to read into them more carefully. In the Acre Campus vision images (Fig. 3) non-human animals are either objects of attraction, or remote and far away.

From an anthropocentric point of view, dwindling species are lost from future people, and their experience of the world is different and altered, but more widely lost strains of evolution are also gone from the world and from time, and even more importantly from themselves

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Sensitisation about the assumptions underlying (futures) imagery

Another interesting point in Marcus's presentation was the notion that the imagery of futures projections usually present humans as the only species among technological infrastructure and perfectly crafted lawns and tree sculptures. The same issue came as an insight also within our team as we did desktop research on the imagery of future visions, with the exception of solar punk.

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Professional disempowerment and paralysis

However, I reckon that to apply the multispecies perspective in my future projects, I could use a further detailed set of tools and limitations - to not be overwhelmed by feelings of helplessness out of empathizing with every involved non-human in the process.



THANK YOU

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