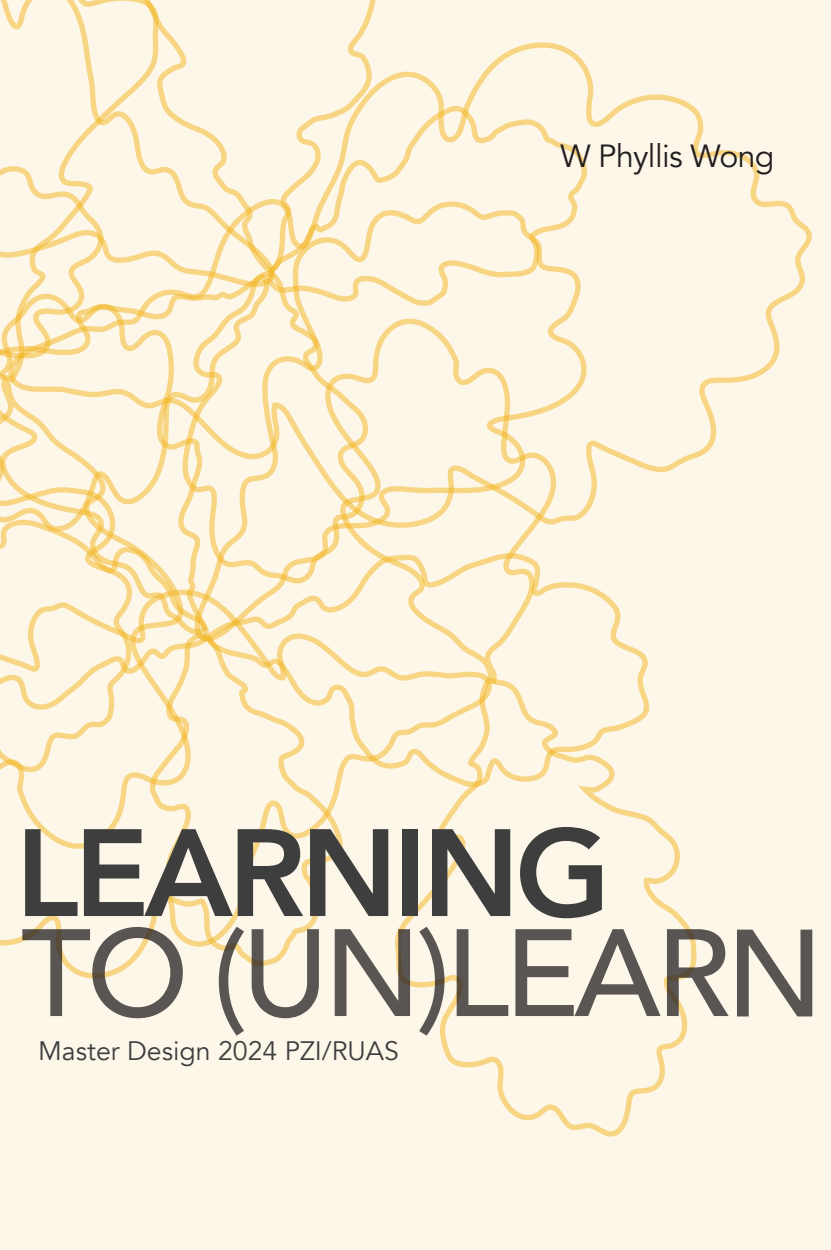


The background of the entire page is a dense, chaotic network of thin, hand-drawn orange lines. These lines form a complex web of loops and curves, filling the space and creating a textured, organic feel. The lines vary in thickness and are distributed across the entire page, with some areas being more densely packed than others.

W Phyllis Wong

LEARNING TO (UN)LEARN

Master Design 2024 PZI/RUAS



LEARNING TO (UN)LEARN

A Regenerative Design Framework



LEARNING TO (UN)LEARN

A Regenerative Design Framework

p^w/W Phyllis Wong

For the completion of
MA in Master Design 2024

Piet Zwart Institute /
Rotterdam University of Applied Science, NL

Design Research Title:
Learning to (Un)learn
A Regenerative Design Framework
(to be read subsequent to Mending Open Wounds)

There is No Point of No Return
Arne Næss

Design questions:
~How can I, as a designer and educator, design accessible and innovative methods to help transition into Regenerative Practice?

~How can I develop a reformed mental framework to unlearn cognitive skills influenced by an industrial growth-driven society?

~How can I design participatory tools and exercises to narrow the gap between Human and NonHuman species?

~ How can Regenerative Practice be integrated and enhanced into the Higher Arts & Design Education curriculum?

Keywords
#practise-of-care #redesign-cognition #affectivity #potential
#interconnectedness #learning-to-unlearn #systems-change
#nonhuman #more-than-nature #Regenerative-thinking

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INTRODUCTION

In a flash, a significant portion of this research has deepened and established itself over the last few semesters. Starting from semester 2, where the foundation of my research began to take shape, I embarked on identifying the intrinsic motivation behind what the research means to me. This journey has led me to rediscover who I am, what I stand for and most importantly, my broader sense of purpose.

The whole is greater than the sum of its parts

Aristotle

Reflecting on the past, while not knowing how the various components of my research would unfold, I find myself content here, realising that the entirety of my work thus far has provided me with a profound understanding that the whole can indeed be greater and more powerful than the sum of its parts. This realisation has enriched my perspective, both personally and professionally, demonstrating how my entirety, in turn, can contribute to a more meaningful and impactful outcome for others I will cross-path in the near future.



This Design Research documentation is a glossary of iterations and exercises that culminate as the Final Design, which is a learning or educational module leading to Regenerative Design. It is crafted to be applicable to Higher (Arts & Design) Education and the Ecological and Regenerative professional field. Key iterations are explained and reflected upon in the following chapters. As noted in my ST publication, my research iterations were designed and implemented by guiding two semesters of Regenerative Practice with 2nd and 3rd-year students (2023/24) from Willem de Kooning Academy, majoring in Transformation Design. The diverse and insightful input from these two groups has enriched my understanding of the limitations and potential of Regenerative design principles in educational contexts.

Note that before proceeding with reading my Design Research documentation, please begin first with my ST publication, *Mending Open Wound*, where the thinking and analysing process of the research is explained.



LEXICON

Earth*: Humus-rich soil, comprising clay, minerals and organic matter, is fundamentally essential for sustaining all life forms and ecosystems.

Holding Space: To create and harness a non-judgemental and supportive mutual space that allows transformative change and restoration to occur.

Interconnectedness: The term refers to the recognition and appreciation of the complex web of relationships and interactions that exist within our ecosystems, societies and economies. Hence, the health and well-being of one part of the system is closely linked to its related parts.

Learning to Unlearn: Consciously evolving cognitive perspectives to embrace diverse species and contexts, unlearning biases for holistic understanding.

More-than Nature: The interconnected ecosystem comprises all living organisms, including humans, other life forms and their environments, fostering mutual dependencies. It resembles ecologist David Abrams' term "More-than-Human World". It is to supersede the word "Nature" cultivated in an industrial growth-driven society, which regards a context excluding the human species.

"Will NonHumans benefit, like Humans, from the promise of salvation? In other words, will NonHumans be resurrected too?"

Bruno Latour

NonHuman: A term that is more specific than 'other than Human' species and refers specifically to living organisms that are not classified as humans. It predominantly encompasses animals, although it can also extend to other life forms like plants, fungi, bacteria and other microorganisms. NonHuman species are defined by their biological characteristics and evolutionary relationships distinct from Humans

Potential: A fundamental principle of Regenerative development emphasizes that potential embodies the intrinsic capability and capacity for growth and transformation. Potential can be realised, whereas problems can only be solved. Potential direct its focus forward, while problem-solving often looks backwards.



Gunter et al 1990, 27

Imaging: The role of imaging, also known as mental immersion in this research, draws inspiration from Confluence teaching, a concept pioneered by George Isaac Brown and Stewart B. Shapiro in the 1970s. It holds a crucial position by enriching participants' comprehension and involvement across various contexts. Alternatively known as Humanistic and psychological education, it evolved with the belief that education should simultaneously cater to learners' intellectual and emotional development. Typically, *educators structure lessons with objectives categorised into cognitive, affective and psycho motor domains. Cognitive objectives entail acquiring knowledge, affective objectives involve nurturing attitudes and emotions, while psycho motor objectives pertain to mastering manipulative and motor skills.* Integrating with Confluence education, mental immersion encompasses inner visualisation methods to place images in the mind while projecting deeper comprehension. This approach enhances accessibility and relatability, especially when grappling with intricate concepts in Regenerative practice.

In iterative settings, mental immersion helps participants grasp abstract ideas by connecting inner representations with prior knowledge and experiences. They contextualise information by vividly picturing concepts, promoting engagement and deeper learning. This method pushes for critical and creative thinking by encouraging the exploration of multiple perspectives. Envisioning scenarios enables individuals to anticipate consequences, enhancing potential-driven skills.

Educators guide individuals through inner visualisation from personal landscapes to project outcomes to enhance emotional processing and resilience. Similarly to meditation, participants are prompted to delve into their inner understanding, often with eyes closed, to minimise external distractions and information. Each immersion session focuses on a single focal element, facilitating a journey towards empowerment as participants access their unique inner resources. This mental immersion aids in applying knowledge across various settings, catering to holistic development. Participants are encouraged to engage in these practices autonomously and privately to encourage self-observation and self-awareness, crucial for personal progression.

DESIGN RESEARCH QUESTIONS:

- Q¹.** How can I, as a designer and educator, design accessible and innovative methods to help transition into Regenerative Practice?

The Regenerative movement is widely practised across various industries, including agriculture, the built environment and medicine. However, there is a noticeable gap in educating people about what Regenerative Design entails and its significance. Therefore, I view my role as a catalyst for raising awareness, guiding understanding and facilitating the transition to Regenerative principles. By bridging the gap between theory and practical application, I aim to inspire and empower individuals and communities to embrace Regenerative design, ultimately contributing to a more sustainable and resilient future.

- Q².** How can I develop a reformed mental framework to unlearn cognitive skills influenced by an industrial growth-driven society?

While drawing from and analysing the works of various influential authors, ranging from environmental activist Joanna Macy (Works that Reconnects) to systems theorist Fritjof Capra (The Systems View of Life) and from philosopher Roman Krznaric (The Good Ancestor) to practitioner Janine Benyus (Biomimicry 3.8), a common theme emerges: the urgent necessity for our cognitive abilities to embrace new mindsets in order to enact life-sustaining differences within the intricate web of our living systems. Incidentally, the three most prominent cognitive concepts that highlight the practice of care are Empathy, Reciprocity and Long-Term Thinking. This is where the framework “Learn(ing) to Unlearn” begins.

- Q³.** How can I design participatory tools and exercises to narrow the gap between Human and NonHuman species?

The practice of care is central to the design of the tools and exercises in this research. It emphasizes the three interconnected and essential cognitive traits mentioned in **Q²**. Participants engage in this process using curated methods to facilitate the practical implementation of the exercises. By incorporating imaging and emotional elements into the design process, they can deepen their understanding and achieve significant outcomes that resonate with personal experiences and feelings towards NonHuman species. This element is crucial for learning within our More-than Nature context.

- Q⁴.** How can Regenerative Practice be integrated and enhanced into the Higher Arts & Design Education curriculum?

As explained in **Q¹**, there is an urgent need to educate on the concepts of Regenerative Practice, particularly to our generation of future custodians in tertiary education. This urgency arises as neurodevelopment is still taking shape within this age group and their evolving maturity begins to grasp complex issues. Engaging students through art and design encourages creativity, critical thinking and problem-solving skills essential for addressing societal challenges. By integrating these disciplines, students not only acquire practical skills but also develop a profound understanding of the interconnectedness between human and NonHuman environments. This understanding can inspire innovative ideas that prepare them to collectively lead in building a Regenerative future.

TOWARDS THE WHOLE; THE FINAL DESIGN

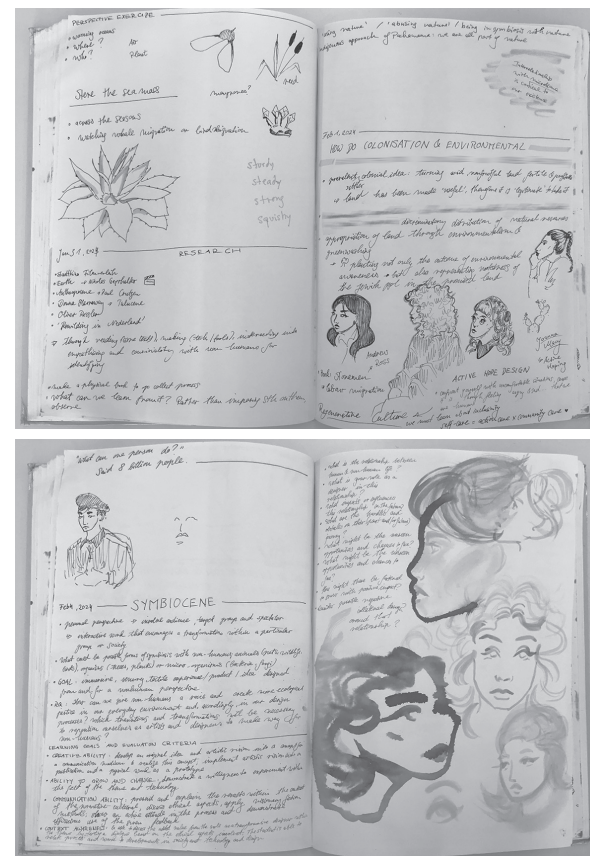
The Final Design, representing the culmination of the research, comprises a series of interconnected and participatory exercises. Its goal is to generate a growing impact, enabling a transition towards a Regenerative practice paradigm. This transition was evidenced in the semester projects of the student participants, where collaborative, sustainable and innovative design within their communities played a pivotal role. For documentation of the student projects, refer to my ST publication, "Mending Open Wound," pages 52-67.

The subsequent pages outline the 'methodology' and 'tools' devised to encapsulate my final design, including a module map that integrates the activities. Additionally, 'concepts' and 'stimuli' derived from Regenerative Practice are provided as supplementary information that guided the teaching process.

At the start of the semester, student participants engaged in a reflective exercise by maintaining a routine journal. This practice aimed to monitor new learnings and document incremental steps towards a mindset shift. Keeping a record of written entries and/or visuals is crucial for identifying self-observations (with changes) and self-actualisation (with goals). Journaling caters self-awareness, reflection and clarity, all of which are essential for Regenerative thinking. It aids in recognising patterns, encourages creativity and supports the development of an evolving perspective, facilitating the emergence of both inventive and compassionate solutions.

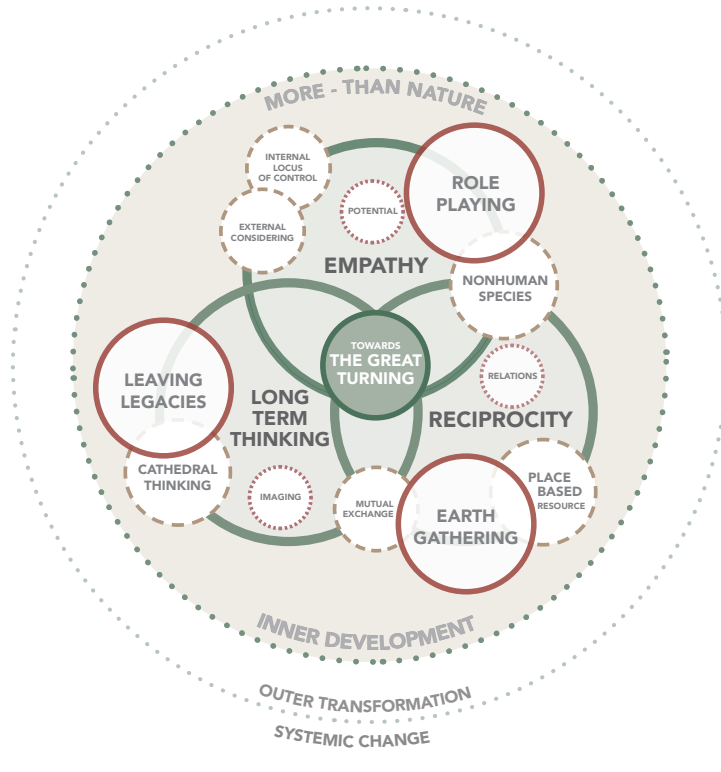
reflection on participants' journal:

During the semester, a range of journals, both analog and digital, were established. Journals persist as powerful instruments for monitoring participants' understanding and comprehension, particularly concerning abstract concepts. Participants can revisit these journals at the term's conclusion and delve deeper if they wish.



Pages from a journal written by student participant Lena provides insights into her thoughts and understanding of her surroundings

A REFORMED MENTAL FRAMEWORK



The Learn(ing) to Unlearn model focuses on modifying our cognitive traits of Empathy, Reciprocity and Long-Term Thinking that are shaped by a society structured by Industrialism and exponential growth. This model reflects the Regenerative principle where, to allow a positive systemic change in our outer sphere (society), our inner development must first be altered, especially along with More-than Nature characteristics. Instruments are designed to associate with each trait. They are interconnected, supporting and enhancing one another through the relationships that bond them.

This framework is designed to respond to design question *Q1*, How can I, as a designer and educator, design accessible and innovative methods to help transition into Regenerative Practice? and design question *Q4*, How can Regenerative Practice be integrated and enhanced into the Higher Arts & Design Education curriculum?

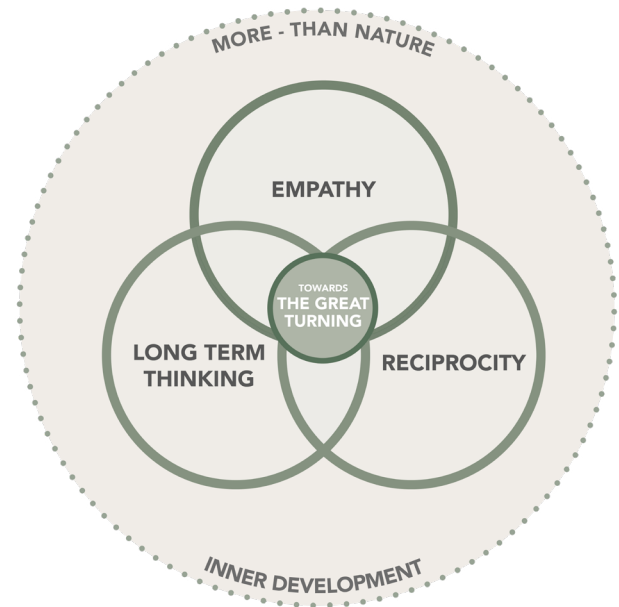
-  Methodologies (key areas of cognitive relearning)
-  Tools (participatory exercises or activities relating to respective methodologies)
-  Concepts (of Regenerative practice and development)
-  Stimulus (extra anecdotes)
-  Goal (Towards a Regenerative and Life Sustaining society or "The Great Turning")
-  Context (inner development that aligns with More-than Nature)
-  Context (outer environment where systems change takes place)

ON METHODOLOGY

The methodology of my final design underscores the significance of cognitive transformation through the practice of care. It derives and emphasises the three interconnected and essential cognitive traits mentioned earlier. Participants engage in the journey of Learn(ing) to Unlearn using designed instruments and tools to experience the practical outcome. By infusing affectivity or the influence of emotions during the participation process, they can cultivate pathways towards deeper understanding and impact that resonate with individuals' sentiments and experiences.

The convergence of the three cognitive traits is a step closer to the goal of inner transformation. It is named "The Great Turning," a term coined by psychologist Craig Schindler who believes humanity's self-inflicted threats to our lives require an transformative shift in our thinking and behavior. Environmental activist and author Joanna Macy popularised the same term through her lifelong devotion, *The Work That Reconnects*. Macy believes a global movement towards ecological and social healing has already commenced. She defines "The Great Turning" as an ongoing era where pioneering practitioners strive for a sustainable and just world by living against a extractive and growth-driven society.

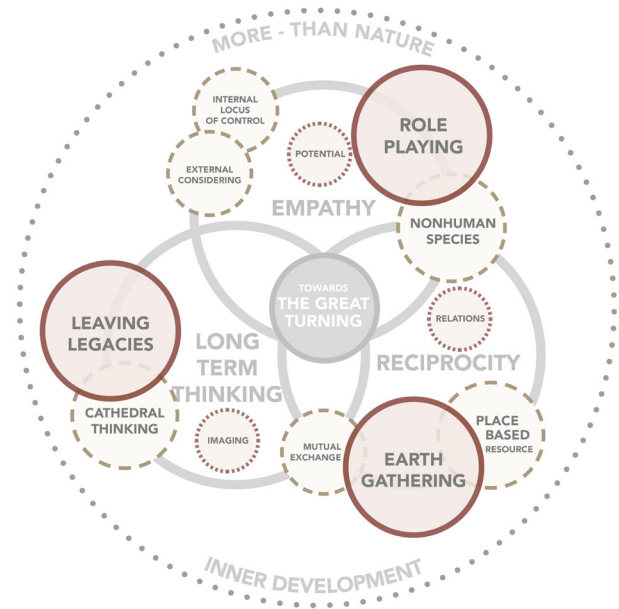
This methodology is designed to respond to design question Q2, How can I develop a reformed mental framework to unlearn cognitive skills influenced by an industrial growth-driven society?



ON TOOLS

This stage encompasses designing instruments or tools, ranging from exercises to activities, to underpin and expand the methodology of the research.

The tools are designed to respond to design question Q3, How can I design participatory tools and exercises to narrow the gap between Human and NonHuman species?



ROLE PLAYING

This is an impersonation card game where players step into the role of a NonHuman species to experience its threats. This game is by far the most interactive and successful. Participants are able to understand both the physical and mental objectives of the game. Empathy becomes tangible as the game becomes personal when participants are instructed to investigate a NonHuman species (their persona) that is meaningful to them.

EARTH GATHER- ING

The simplest act of 'excavating and seeking' symbolises the cycles of nourishment and renewal that sustain life. A handful of earth witnesses this give-and-take. Referencing the theme of reciprocity in the research, this exercise represents the interconnectedness of all members in this living system, emphasising the need for harmonious coexistence. This activity is conducted after the Guild Formation exercise, where participants gain a better understanding of the relationships and conditions pertaining to their chosen NonHuman species and what it ultimately means.

LEAVING LEGACIES

Adapting Joanna Macy's Double Circle ritual to assist participants in developing long-term thinking, it encourages envisioning decisions and actions considering their impact on seven generations into the future. Participants gather to reflect on their interconnectedness with past and future generations, recognising the consequences of present choices on future societies and ecosystems. This ritual urges individuals to act as stewards of the Earth, encouraging a more sustainable and equitable world for generations to come.

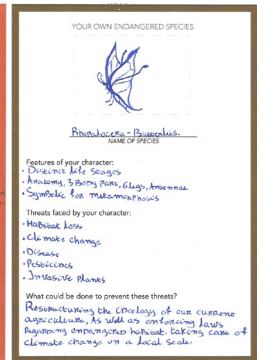
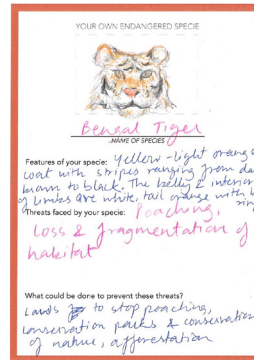
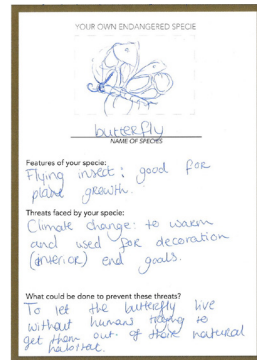
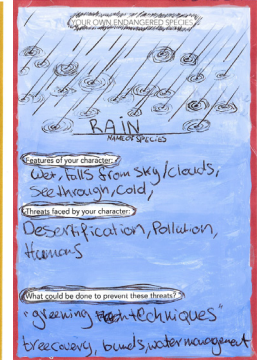
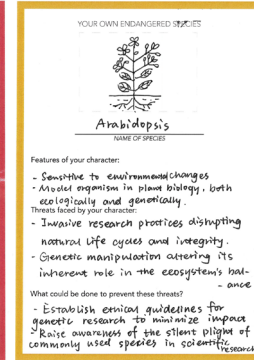
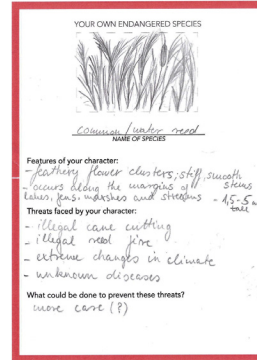
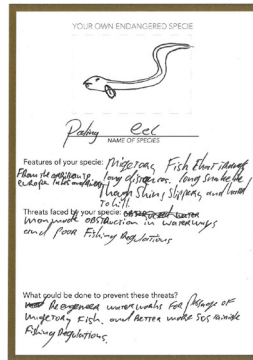
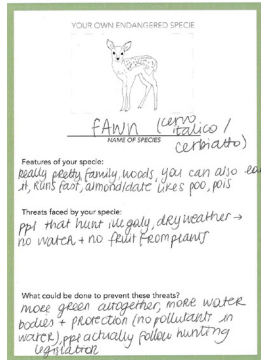


Student participants play and explore the Role-Play card game

ROLE PLAYING CARD GAME (EMPATHY)

on tools





reflection on role playing card game:

This game is an efficient ice-breaker for participants and their peers. It is light-hearted and easy to navigate, yet can become confrontational when participants find it challenging to represent or think like a NonHuman species. It acts as a stepping stone to raise awareness about this dilemma and the inability to show empathy due to a lack of attention to the More-than-Human sphere.

EARTH GATHERING (RECIPROCITY)

on tools



reflection on earth gathering exercise:

It is very refreshing to see participants getting hands-on and curious about one of the most mundane yet vital materials in our ecological living system: soil. The expertise of local forest rangers helps participants gain external insights into the shared topic of regeneration, especially when applied to its place-based principle

32 in the local woods of Rotterdam, where most of us reside.

on tools

Earth* Gathering exercise at play

33



Field trip to Kralingse Bos for Earth* Garthing exercise

on tools



Student participants' findings and observations

LEAVING LEGACIES (LONG-TERM THINKING)

on tools



reflection on leaving legacies exercise:

The moral dialogue exercise is overly confrontational, emotional and dense. The design of the ritual is insightful and its simplicity makes the practice memorable. However, participants find it difficult to answer the moral questions between generations and some struggle to understand how they can contribute. There is potential to redesign and simplify the depth of the questions for future iterations.

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on tools

37

ON CONCEPTS

Concepts are principles central to Regenerative Practice and some include designed exercises to help participants bridge theoretical understanding with practical application.



The internal locus of control refers to the control that originates from within ourselves. This encompasses exercising personal control over our behaviour and having agency over our lives and actions. External considerations extend from empathy and the practice of consciously and proactively taking others (including NonHuman entities) into account.



As stated in the Lemmas, the term is more specific than 'other than Human' species and refers specifically to living organisms not classified as Humans. Primarily, it encompasses animals, although it can also extend to other life forms such as plants, fungi, bacteria and other microorganisms. NonHuman species are defined by their biological characteristics and evolutionary relationships distinct from Humans.



Place-based resources consider the genius loci, or the prevailing influence of a specific location, typically the geographic place most closely related to an individual. It involves deeply appreciating and cultivating the finest quality and potential of what the place can nurture and sustain.



As the words suggest, mutual exchange activities are practised using the plant care or plant swap exercise, which usually takes place at the beginning of the semester. Another similar exercise is Guild Formation, which is a crucial process to understand the relationships of a particular species and how it assists in exchange to achieve a balanced ecosystem. Accounts and reflections of both exercises can be found on the following pages.



Cathedral Thinking is a mindset that embraces long-term vision, where metaphorically, the brick masons lay the foundation knowing they will not witness the completion of the building in their lifetime. It involves transcending personal interests to extend benefits to future generations and beyond.

PLANT CARE EXERCISE (MUTUAL EXCHANGE)

To incorporate NonHuman species into our More-than Nature environment in all aspects of (design) considerations, student participants were each assigned a small houseplant to care for from the beginning of the semester. These houseplants can be either provided by educators/schools or exchanged with other peers from existing collections. Students are instructed to nurture and monitor the growth and needs of their assigned plants. This mutual exchange exercise aims to demonstrate their practice of reciprocity and compassion.



reflection on plant care exercise:

An enjoyable and lively ,quick and dirty' iteration with long-term effects that bring delight to participants. This simple yet responsible task highlights the principles of care and reciprocity. It adds a playful touch to the complex and sometimes abstract topic of Regenerative Practice. Furthermore, this exercise has the potential to foster a sense of community within the class and build bonds through collective plant care-taking.

40

on concepts

ON STIMULUS

Stimuli are additional anecdotes designed to assist participants in comprehending the various constructs of Regenerative Practice.



Regenerative development lies in viewing situations from the perspective of potential rather than problem. Potential represents an inherent ability to effect change, foster growth and bring about outcomes that have yet to be realised. It involves envisioning what something could become and understanding how fulfilling its purpose contributes beneficially to a larger system. The "Letter to my potential" exercise (on the next page) helps participants identify their own capabilities and consider how these abilities can enhance overall quality.



Relations are the connections through which two or more species/characters (Human or NonHuman) are mutually linked and intertwined. They enable us to comprehend that reciprocal acts of relating benefit many rather than individual contentment alone. The state of survival and sustenance relies on the healthy state of relations to foster and nurture flourishing. The Guild Formation exercise is designed to assist participants in understanding the ecosystem surrounding their NonHuman species.



Imaging is the capacity to conjure visuals or images in our minds, enabling a concentrated effort to perceive accurately from within our minds as if it were real and operational. When imaging a situation or system, personal emotions or reactions come into play and our mental vigour responds, allowing us to envision potential outcomes.

A letter to my Potential

I'm not sure if I have A potential, I would rather say that I have a few ~~small~~ qualities that could be considered as such. Being emotional, emphatic and understanding what I would consider as one of my biggest one. I believe that this quality helps me communicate ~~but~~ better and gives me the ability to build bridges. I would also say that I am a BRIDGE.

but I truly believe that once I will embrace this and ~~not~~ fully own it, it will become a powerful tool / potential? which will be able to help others (human and non-humans as well.)

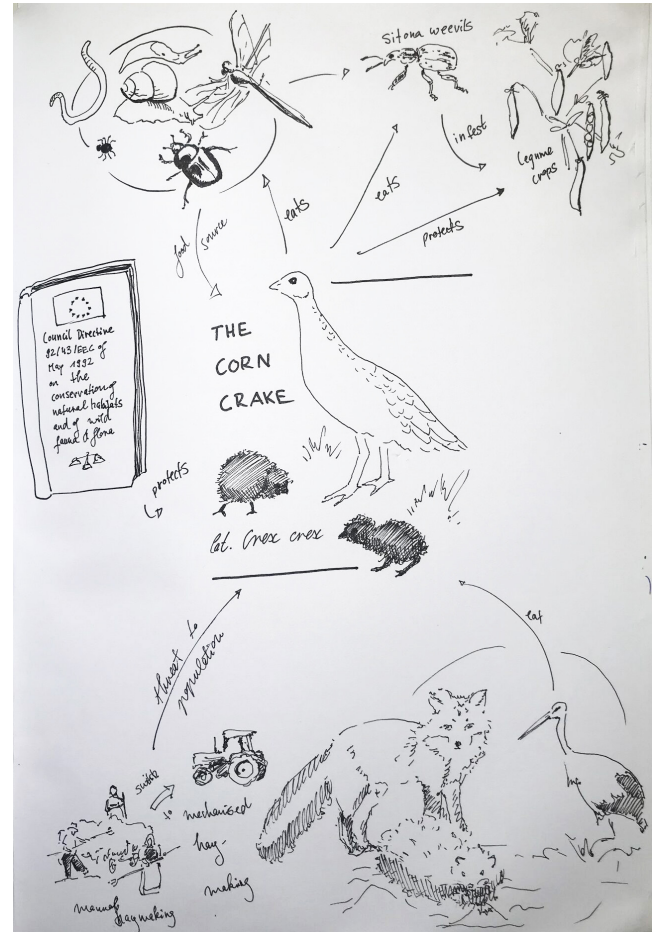
The "Letter to my potential" exercise from a student participant denotes a self-observation aspect that monitors personal changes and development towards the Regenerative development paradigm.

GUILD FORMATION (RELATIONS)

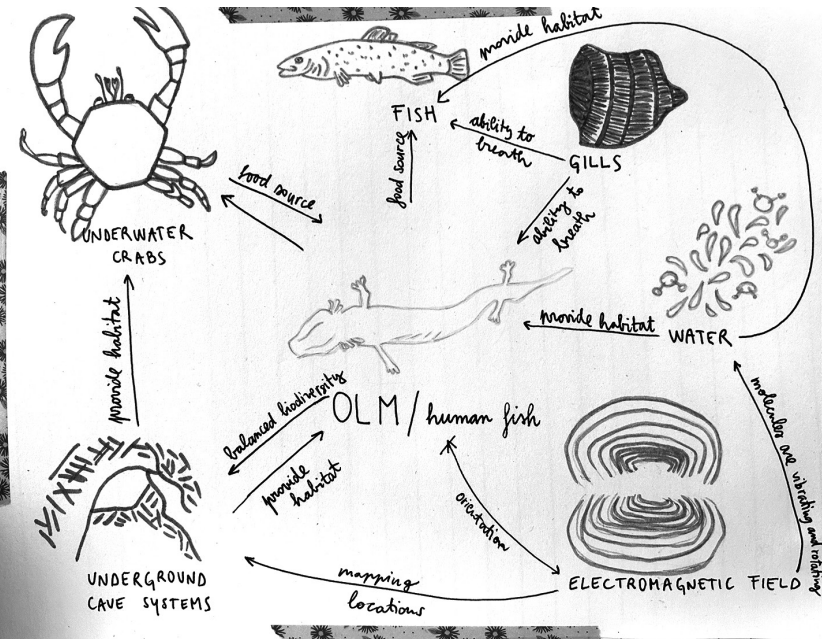
A guild is a network of systematically reciprocal exchanges that unites a diverse range of entities as co-creators of the whole that sustains them. Employing the principle of Guild Formation exercises helps participants recognise the essence and importance of Mutual Exchange within our ecosystems.

reflection on guild formation exercise:

This exercise presents participants with a valuable opportunity to delve beyond their current knowledge of NonHuman species. They gain an appreciation for the broader ecosystem and the diverse roles each member plays in sustaining its vitality. Moreover, this exercise allows participants to broaden their understanding of other species that may relate to their persona but of which they were previously unaware.

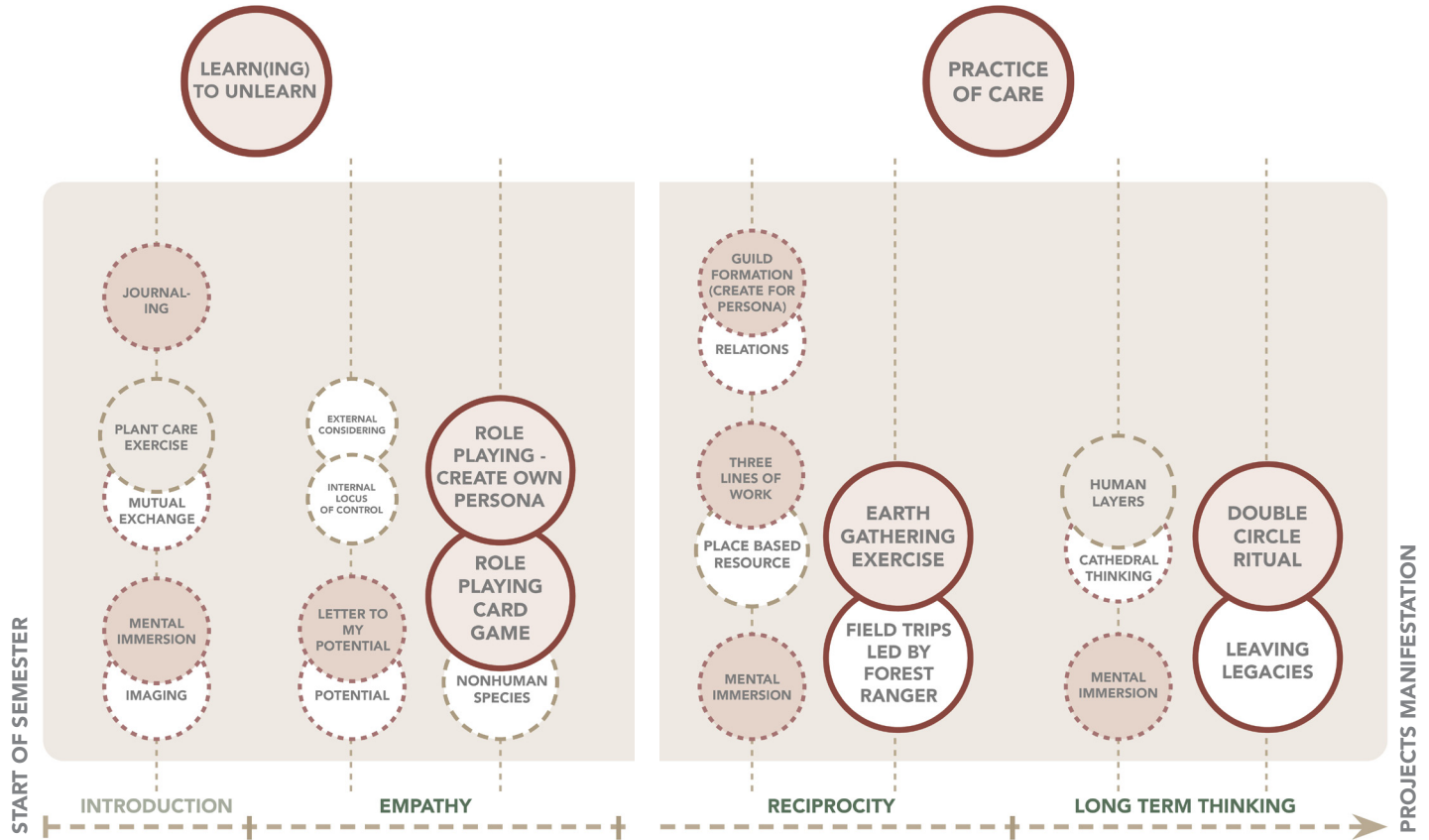


Guild formation drawing from student participant Lena and her NonHuman species, the Corn Crane

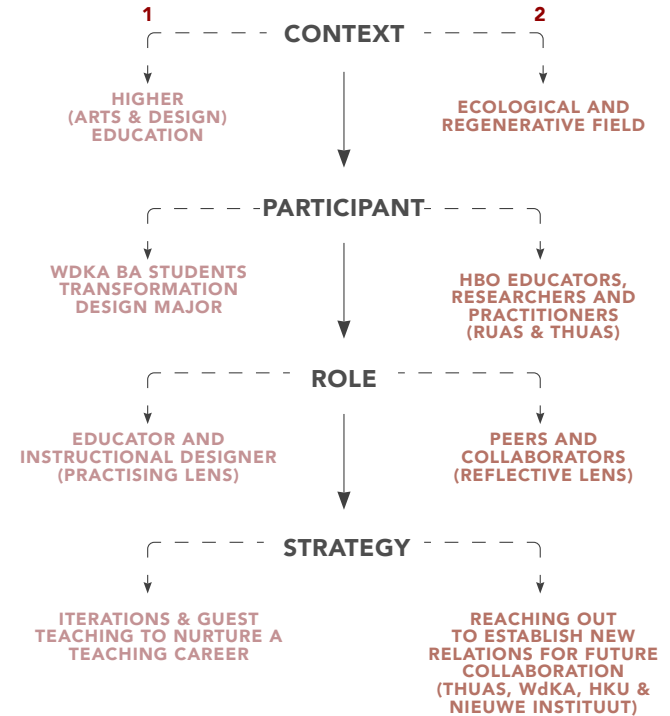


The notion of Learn(ing) to Unlearn can be personal and challenging to comprehend and practise. Understandably, some participants declined consent to share their creations.

MODULE MAP



DESIGN RESEARCH LEMMAS



reflection on DR lemmas:

This diagram illustrates the two trajectories of context I pursue in my research. One is Higher (Arts & Design) Education and the other is the Ecological and Regenerative professional field. I have intentionally planned and designed roles and strategies to lay an initial foundation for my New Practice: as a Regenerative Design Educator and as a Regenerative Practitioner or Consultant. Pairing these two tracks allows me to reflect on and share my iterations and learnings with student participants (trajectory 1) and my peers and collaborators (trajectory 2). In return, my peers share their experiences and advice with me. As Regenerative education is still in its infancy in the professional sector, reaching out to like-minded professionals has broadened my network and provided possibilities for future collaborations.

CONCLUSION

Crafting a conclusive statement proves challenging when continuous iterations are necessary to ensure a comprehensive understanding of my research, for both participants and myself. Furthermore, while acknowledging that my current knowledge serves as a foundation for future endeavors, I feel compelled to elevate my research to a more substantial level. Despite encountering pitfalls and experiencing triumphs over the past year, I am driven to redesign and refine my approach, particularly in preparation for future teaching opportunities within the context of Higher Arts and Design Education.

This journey of continuous refinement will enrich my understanding and enhance my ability to impart valuable Regenerative insights to generations born and bred in the era of climate emergencies. Embracing the lessons learned, I am prepared to adapt and improve my teaching methods, ensuring that they remain dynamic and relevant. My commitment to ongoing growth means that I can contribute meaningfully to the academic and creative development of future generations in this field. Ultimately, this process of improvement and reflection highlights the importance of evolving research and teaching practices to better serve the educational community as well as advancing the discipline of arts and design.

to a new beginning

