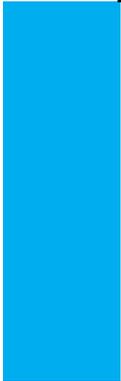


Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Tobine Rasmussen
Student number	5384753

Studio		
Name / Theme	Explore Lab	
Main mentor	Roel van de Pas	Design Mentor
Second mentor	Rufus van den Ban	Technology Mentor
Argumentation of choice of the studio	I have always been interested in how architecture can manipulate behaviours and emotions through the sensation of space, which led my theory thesis to addressing how homes could possibly learn from mediational spaces to create an environment where one could fully disconnect from the 'outside world' and be present in the moment. This further sparked a question to how design could enhance movements and behaviours which allowed for a more mindfulness way of living. These topics brought me to Explore Lab with a great drive and passion to explore how environmental features in nature which benefits our wellbeing can enhance mindfulness, and how these environmental features can be translated to architectural structures in a country with already a lack of true raw nature.	

Graduation project	
Title of the graduation project	The Rythmic Escape
Goal	
Location:	Rotterdam, NL
The posed problem,	Discovering that the environmental features and our sensorimotor response have a great impact on the well-being and behavioural patterns, one can start questioning certain design decisions made in the urban environment. Therefore, the paper and project will investigate the environmental impact landscape ecology has on the individual

	<p>and how landscape-inspired patterns and forms can positively adjust the individual's behaviour for more mindfulness living. The focus will be on the amalgamation of rhythms and rituals conducted between landscape ecology and humans, and how to translate and transform these towards the interiority and exteriority of a retreat for self-healing and self-awareness. The formation of landscape ecologies does in many cases show a lasting and intimate relationship with anthropology through its human impacted patterns and morphosis. It becomes the spiritual relationship between people and ecology through powerful beliefs and artistic and traditional customs. However, the harmonious human-nature relationships are decreasing, and with it disappears the cognitive healing power it holds. In The Netherlands, this might be due to the overly ordered urban expansion. With this said, there is an urgency to rebuild the relationship between humans and nature through re-learning the knowledge and philosophies landscape ecology produces, and reintegrate it in the daily human life.</p>
<p>research questions and</p>	<p>Which environmental forms and patterns within landscape ecology can manipulate rhythms and behaviour, and how can these be extracted to be reimplemented within the territory of architecture to promote wellbeing?</p>
<p>design assignment in which these result.</p>	<p>A retreat</p>
<p>For the design phase, I propose a retreat where people can come to reground themselves through the teachings of rituals and restructuring of rhythms for mindfulness living, which they can reimplement into their everyday life. The retreat will be located in Rotterdam, a man-made city with a lack of landscape environmental forms located, in the man-made country of The Netherlands where the term 'landscape' was founded. The reason for choosing The Netherlands and not the country of my own origin, Norway, is due to its lack of immediate nature. Dutch people have to travel a lot further to experience less organised and more diverse environmental landscape ecologies than a Norwegian living in Norway for example. I found that this country has more necessity for a retreat which can offer ecological stimuli and stress relief through the use of nature-inspired elements that advocate</p>	

inner healing. Rotterdam is a city which already is filled with many man-made features yet little historic value. Due to the city's varied and obscure architecture, this city could be an exciting playground for architectural exploration without ruining the historic context but adding to it. During the design phase, the focus will first be approached from the inside following perceptive and rhythmic practices found in the case studies. The exterior will later be formed by the inside, becoming an extension of the interior and the surrounding landscape. By designing the façade with the same principles as the interior, the behavioural change will start when walking up to the building. With its location close to business, leisure, and residential, this area is easy to access, yet, with a location in a quieter spot which is an important factor for its programme.

Process

Method description

Primary sources of literature will be used to gain a comprehensive understanding of the environmental features within nature and how humans interact with them. The main research will recognise patterns and forms that are re-occurring and rhythmic in the landscape ecology, specifically wood and stone. Many forms and patterns found in the ecology and cosmos have been used as inspiration sources for architecture tracing back to ancient times. However, this body will focus on the interest of their rhythmic behaviours that may alter perception and affordances.

For the case studies, this paper will investigate three groups of people that worship nature. The underlying interest is to how these people pick certain locations and prepare them in ways that will fulfil the worshipping, and in return attain nature-healing. The environmental forms and patterns specifically looked for when inaugurating the space for rituals, and actions of territorialisation (subtraction and addition of elements) in preparation for the act to happen, will be the outcome of interest in these case studies. Intention, attention, and repetition are the three main investigation focuses when investigating the case studies which will allow for the understanding of why certain forms and features are used, where the emphasis is, and patterns that are created. The elements found during the investigation will identify features that draw the perceptive eye and stimulate the sensorimotor cognition. Correspondingly, the act of territorialisation demonstrates how humans subtract and add elements that will allow an outdoor room to be formed. The act itself is rooted in the memory of the body and mind, leading the human to territorialise the landscape ecology in certain ways that allow the basic human's instinct of rituals to take place. As a result, this outdoor room will catalyst certain behaviours and emotions that psychologically and neurologically changes the rhythms of the individual and enhances inner healing. After identifying these factors, the elements found will be catalogued to later become tools in the design phase. The expected result from this research is to find forms and patterns in nature that unconsciously affect humans' cognition and wellbeing and can be used as design tools to create architectural rooms that will facilitate certain behaviours, emotions and actions. The catalogue of forms and their specific abilities will later be used as a methodological instruction book during the design phase.

Literature and general practical preference

- Bogue, R. (2003). *Deleuze on music, paintings and the arts*. London : Routledge.
- Brown, K. W., Creswell, D., & Ryan, R. M. (2015). *Handbook of Mindfulness: Theory, Research, and Practice*. New York: Guilford Publications.
- Burns, J. (2020). *The Kinfolk Garden: How to Live with Nature*. New York: Artisian Books.
- Cartwright, M. (2021, March 15). *World History Encyclopedia*. Retrieved from Sacred Sites & Rituals in the Ancient Celtic Religion: <https://www.worldhistory.org/article/1710/sacred-sites--rituals-in-the-ancient-celtic-religi/>
- Day, C. (2004). *Places of the Soul: Architecture and Environmental Design as a Healing Art*. Oxford: Elsevier.
- Djebbara, Z. (2022). *Architecture, Homeostasis and affordances*. Aarhus: Zakaria Djebbara.
- Djebbara, Z. (2022). *Neuroscience and architecture: Modulating behavior through sensorimotor*. N/A: Creative Commons.
- Djebbara, Z., Gramann, K., Petrini, L., & Fitch, L. B. (2019). *Sensorimotor brain dynamics reflect architectural affordances*. N/A: Proceedings of the National Academy of Sciences.
- Fralick, N. B. (2002). Mapping the Wiccan Ritual Landscape: Circles of Transformation. In *Folklore Forum Volum 33* (pp. 45-65). University of California Press.
- Gramann, Z. D. (2022). *Architectural Affordances: Linking Action, Perception, and Cognition*. N/A: Oxford University Press.
- Gregory, J. (Director). (2019). *The Art of Effortless Living* [Motion Picture].
- Grosz, E. (2008). *CHAOS, TERRITORY, ART Deleuze and the Framing of the Earth*. New York: Columbia University Press.
- Han, F. (2016, June 10). *Connecting Humans and Nature for an Ideal Future*. Retrieved from Landscape Architecture Foundation: <https://www.lafoundation.org/resources/2016/07/declaration-feng-han>
- Kleinherenbrink, A. (2015). Territory and Ritornello: Deleuze and Guattari on Thinking Living Beings. In *Deleuze Studies 9.2* (pp. 208-230). www.eupublishing.com/journal/dls: Edinburgh University Press.
- Lamb, G. (2020, July 30). *Reinventing Old Rituals For Modern Times to Reconnect with the Natural World*. Retrieved from Medium: <https://gavinlamb.medium.com/reinventing-old-rituals-for-modern-times-to-reconnect-with-the-natural-world-7fd63112920c>
- Mallgrave, H. F. (2018). *From Object to Experience*. London: Bloomsbury Visual Arts.
- McCabe, D., & Reisz, R. (Directors). (2017). *Decoding the Secret Patterns of Nature* [Motion Picture].
- Montgomery, P. (1997). *Partner Earth; A Spiritual Ecology*. Rochester: Destiny Books. Retrieved from Earth Rites.

- Montley, P. (2005). *In Nature's Honor: Myths and Rituals Celebrating the Earth*. Boston: Skinner House Books.
- Morton, T. (2007). *Ecology without nature*. New York: Harvard University Press.
- Nationalparks. (n.d.). *Nationalparks*. Retrieved from Seidas as Places of Worship for the Sámi People: <https://www.nationalparks.fi/akassaivoandseitapahta/seidasasplacesofworshipforthesamipeople>
- Pallasmaa, J. (2017). *Embodied and Existential Wisdom in Architecture: The Thinking Hand*. Helsinki: Sage.
- Rosenfeld, S., & Bautista, S. (2017). *Rituals of the Past: Prehispanic and colonial case studies in andean archaeology*. Boulder: University Press of Colorado.
- Roth, L. M. (2018). *Understanding Architecture: Its Elements, History, and Meaning*. N/A: Routledge.
- Schmidt, D. (Director). (2012). *Inner Worlds, Outer Worlds* [Motion Picture].
- Smit, S. (2022). *The Wisdom of the Witch*. Amsterdam: Lebowski.
- Stewart, S. (2002). *Poetry and the Fate of the Senses*. London: The University of Chicago Press.
- Vala, D. F. (2013). *The Third Vision: The Science of Personal Transformation*. New York: Balboa Press.
- Wang, S., de Oliveira, G. S., Djebbara, Z., & Gramann, K. (2022). *The Embodiment of Architectural Experience: A Methodological Perspective on Neuro-Architecture*. N/A: Frontiers in Human Neuroscience.
- Wijk, M. v. (Director). (2014). *Origins* [Motion Picture].

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

In my graduation project, I see the possibilities for architecture and nature to be a healing agent in the treatment of one's wellbeing and, overall, to enhance positive mental and physical behaviours. Rituals and ceremonies are basic human instincts that can be traced back over ten thousand years ago. They create comfort and continuity enabling human daily lives to be lived more mindfully (Montley, 2005). In comparison with mindfulness, rituals are also argued to strengthen humans' wellbeing which has been supported by neuroscientific and psychological research (Lamb, 2020). I wanted to tackle the psychological realm of architecture through a larger focus on form, detail, nature, and the individual through architecture as a spatial sensation rather than a solely technical built structure designated for different functions. This led me to Explore Lab which allowed me to go deep within my field of passion and explore architecture through learning from unconventional human-nature relationships.

Explore Lab offers the ability to set self-chosen boundaries which can lead to research situated in the personal. However, it also stimulates the development to a collective understandings which may add to the potentials of future architecture and built environments in the topic of wellbeing.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

By learning from the landscape ecology and to identify environmental features which holds psychological values, future architecture and how we perceive it can radically change the overall social behaviour and mental wellbeing. This may lead to more presence, focus, and intuitive ways of life which affect the larger society if used in more architecture. People's mental health are important, not only when it is broken but also to maintain and uplift it in the everyday life. We spend most of our days within or around architecture which stimulates, or the contrary, our minds and affects our focus, movement, and behaviour. This topic, therefore, is extremely important as we construct and build to shape the standard of wellbeing of the future.