
PUBLICATION: REFLECTION

REVITALISING RURAL HERITAGE



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REFLECTION

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DISCLAIMER

At the time of publication, the design process is still ongoing, meaning that the complete graduation booklet is not yet finalized. This document serves as an appendix in the larger graduation booklet and consequently does not offer in-depth information about the thematic research and design research. For further details, the graduation plan can be consulted.



INTRODUCTION

Content

This reflection is an explanation to account for the preliminary results of the research and design process in the graduation phase. The first part is a personal reflection on the process. It aims to reflect and look back to see whether the research approach worked and to get an understanding of the 'how and why' of my project. Further, the reflection upon the feedback of the tutors is discussed together with the translation of this feedback into the graduation project.

In the second part of the reflection I will zoom in on the content and results of the research and design by describing 5 different aspects within the broader context of the Architectural Engineering Studio.

PART A: RESEARCH APPROACH

Approach of research

The research began with a broad interest in rural landscapes, cultural heritage and sustainable alternatives for polluting industries. I aimed to find a project encompassing these topics but was unsure where to start. Eventually, I focused on the country estate and larger rural landscape of Nederrijk, Nijmegen.

Initially, I was thinking about researching a context beyond my 'comfort zone', by focussing on a location that was new for me. However, my tutors advised me to investigate familiar locations for a more thorough understanding. I'm glad I chose a context close to my hometown as it allowed frequent visits, connections with locals, including those from the Regionaal Archief Nijmegen, and a deep understanding of the landscape that fascinated me since childhood.

By addressing a broader problem statement during the research for P1 and projecting it on the Nederrijk context, I found it to be a suitable case study with many existing problems.

How and Why

My research approach outlines a methodology projected onto a case study, which serves as my design location. The transition from research to design seamlessly blended.

The research approach describes a methodology that is projected on a case study, it being my design location. Therefore, the transition from research to design blended into each other. However, organizing the different stages of the process reveals a clear point at which a different case study can be chosen to project the research on. This means that the methodology can be projected on different locations, each leading to a different project.



Eigenaar wil Landgoed Nederrijk in Berg en Dal nieuw leven inblazen.

Wethouder Nelson Verheul: "We willen nieuwe bebouwing toestaan, in ruil voor revitalisering van het landgoed."

– De Gelderlander (2021)

The why of the research was very important. I aimed to dedicate my graduation to combining my design interests with a realistic problem statement in a context that fascinates me. Therefore, my research method included a broad analysis of agricultural problems and solutions. It took me quite a while to understand the outlines of the topic and I immersed myself in gathering information. Diving into the literature beneath newspaper headlines and research paper was particularly enjoyable. I think my research tutor assisted me in landing from the broader information collection phase into the condensing phase.

This part of the process can be compared with the shape of an hourglass. I gathered a wealth of information and eventually narrowed it down to the essentials for my project. Once there was a clear defined base, I elaborated to address several different design principles and starting points, all based on the research basis.

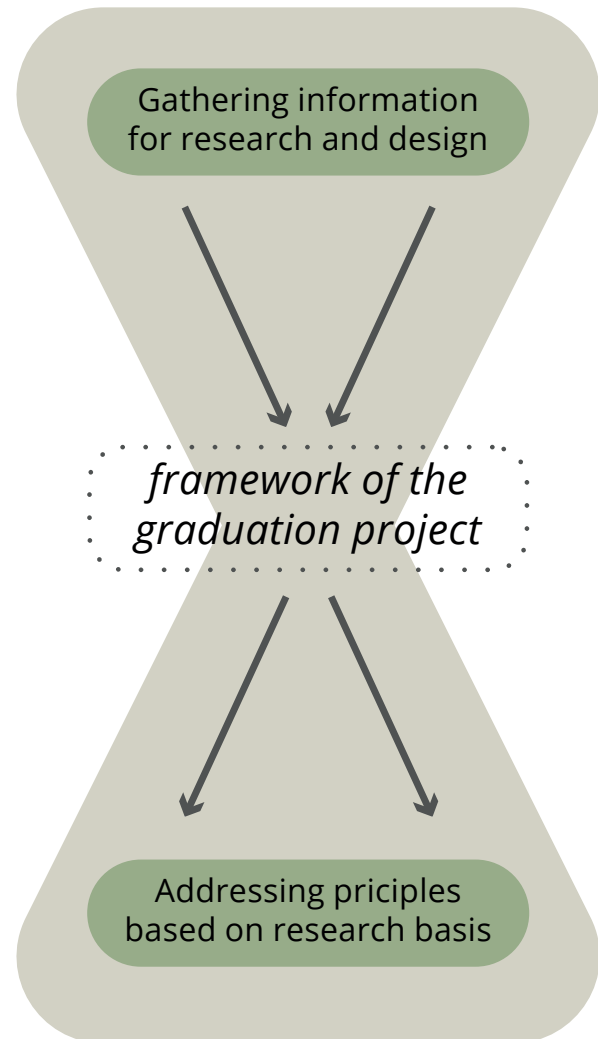
Initially, my focus was solely on creating a new estate house and implementing sustainable agricultural practices. However, insights from the thematic paper steered me towards a broader focus on nature-inclusive practices. It became evident that the estate house itself might not be the most critical aspect of the design.

Feedback and implementation

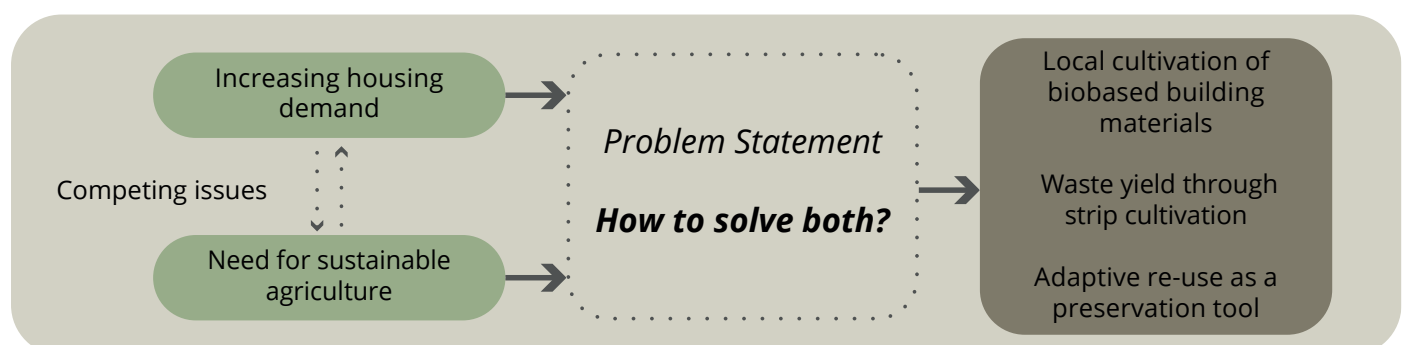
Discussions with my tutors between P2 and P3 clarified why I structured my project as I did. It taught me to formulate a design objective from a broad context and narrow it down to the essence.

I also grew more confident about standing behind my design choices. During the project, I noticed a clear difference between the research and design phases. Where in the research the answers are mostly objective and 'yes' or 'no', the design process was way more subjective. Instead of just 'yes' or 'no' there was also 'maybe' or 'perhaps' or

'could be' or 'definitely' or 'certainly not' or 'might consider' and so on and so forth. Because of the wide timespan of the graduation compared to previous design projects I finally got the chance to really think about the choices that I made rather than having to decide because of time pressure. This did put a different kind of stress on me that I had not yet experienced that much. The fact that there are a thousand possibilities to choose from, learned me that if you substantiate one choice and cross out the others with arguments, diagrams and principles, you can confidently convince both yourself and others of the design you made.



Author (2024).



Author (2024).

PART B: CONTENT REFLECTION

Relationship between research and design

My fascination for rural landscapes and country estates were the starting points of the project. Because of that they are also the main starting points of defining what I started to research. With my interests as a basis, an initiative raised to look into the possibilities to create an academic based project that combines my fascinations in a multifaceted approach.

Thereafter the research took shape, the outcomes were very determinative for the starting points of the design. I came up with a design grammar, a set of playing rules really, that in a way limited my options but also created a context wherein I could explore the possibilities.

Relationship between Architecture and the Built Environment and Architectural Engineering

During both my bachelor's and master's studies, there has been minimal emphasis on landscapes, particularly rural projects outside urban contexts. I understand the priority of addressing large-scale housing needs over refined biobased projects in woodland areas. However, in order to make sure that the cultural heritage and rural heritage sites are protected for the future, it is necessary to address viable perspectives to prevent degradation. Architectural Engineering, in my view, provides a playground to explore topics indirectly related to architecture and then integrate them into engineering.

In my project this meant that in the end the research findings have a large impact on the way that the design is carried out. The theoretical framework implied a nature inclusive way of nature preservation and a waste flow of biobased material resources. This framework was then translated and accentuated in the materialisation of the architecture. The origin of the materials is readable and tells the story on eyelevel. When zooming in, the material details reflect the theoretical framework. It helped me to build up the argument to initiate a project in which buildings are built with local resources and biobased practices.

The opportunity to delve into the technical elaboration across all scales and consequences of building methods that arise from thematic research is characteristic of Architecture and the Built Environment. For my graduation project, this translated into greater attention to detailing, which

proved both challenging and enjoyable. Every line had to be carefully considered, as conventional construction methods didn't always apply. This led to numerous stimulating discussions with my building technology tutor, often resulting in discovering simple yet logical solutions, counter to my initial high-tech approach.

Assessing the value of the work progress

Reflecting on the process, it's evident that numerous smaller research efforts contributed to the larger objective of developing a methodology for revitalizing rural heritage. These smaller studies are interconnected, all tied to the overarching theoretical theme of nature-inclusive, biobased building as a foundation. Considerable attention was given to bridging theory with practical application, with a theoretical framework serving as the cornerstone.

Furthermore, the methodology's adaptable nature allows it to be projected onto other case studies, adding to its versatility and potential impact beyond the current project.

Assessing the academic, societal, and ethical values

The redevelopment of the Nederrijk country estate can be seen as a reaction on the existing problems in the region. This is confirmed by the discontinued more conventional plans that were proposed. Also my meeting with the land agent of the Nederrijk brought me insides in the fact that there are several other land agents that are looking for sustainable solutions for the conservation of estates. By focusing the design on a number of target audiences that are a minority and creating a communal place with a sense of belonging I'm responding to ethical aspects of the region rather than building a private forest in the forest. The project gives an alternative view on how nature, production and culture can work together in a viable concept.

The redevelopment of the Nederrijk country estate can be viewed as a response to existing issues in the region. This is evidenced by the abandonment of more conventional plans previously proposed. Additionally, my meeting with the land agent of Nederrijk provided insights into the pursuit of sustainable solutions for estate conservation by several other land agents.

By directing the design towards specific target audiences, who constitute a minority, and fostering a communal space that creates a sense of belonging, I am addressing the ethical dimensions of the region rather than merely constructing a

private villa within the woods. The project offers an alternative perspective on how nature, production, and culture can coexist within a viable concept.

Assessing the transferability

This project holds significant relevance in the broader context. Socially, it addresses the critical issue of rural depopulation, contributing to efforts aimed at revitalizing communities and preserving cultural heritage. Professionally, it encourages architects and engineers to innovate by exploring the connection between construction, agriculture and nature through the farming and processing of locally sourced biobased building materials, setting a benchmark for sustainable rural development practices. Scientifically, the project uses an interdisciplinary approach, contributing to the understanding of complex issues that are present in contemporary Dutch society. Thereby emphasizing the necessity for sustainable land use to oppose climate change and biodiversity loss.

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