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Dutch dwelling heritage towards modernizing future development

Ronald Vink

GLOBAL INTRODUCTION

Designing with heritage housing requires a precise method of working. These dwellings are namely not merely homes. They embody and sustain multiple narratives. As Osello et al. [Osello et al., 2018], quite strikingly, wrote:

Complex systems, such as historical buildings, are the result of historical events, different architectural influences, changes in ownership, and transformations over time.

These are values that must be maintained and protected at all costs.

However, these dwellings often do not align with contemporary needs and the preferences of potential future residents. And how we, as architects, opproach the task of future monuments is of a personal matter. Do we freeze the monument in time, do we opt for a suitable extension or development, or pursue a modern intervention to acknowledge that te monument has evolved in modern times?

One important thing should be the main focus. That is to keep alive these historical relics respects the past and the value acquired over centuries.





the dutch architectural, historical value within heritage house designs























The worldwide accepted anonymity of modern villa architecture























The integration of glass, modern architecture to enhance monuments

MY INTEREST

In the past couple of years, I have been trying to define where my interest lies within the field of architecture. Initially my fascination for dwelling design started with newly build villa architecture. But beside that I noticed that in recent years, the heritage part of architecture started to be quite intriguing to me. The character of historical buildings and the stories attached to them drew my eye more and more. How can I, as a future architect, preserve the quality of these buildings while ensuring they continue to meet the modern requirements and expectations?

When renovating a monument, or for that matter an existing building, regulations typically dictate that addition should be made from a modern architectural perspective. While sometimes this can blend in nicely, I wonder if this is always the desired approach. Are there more **possibilities** to enhance a monument without immediately resorting to modern design?

I wonder if the essence of traditional Dutch architecture can be expressed in contemporary ways, without turning to anonymous, international glass architecture...

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FRAMING THE PROBLEM

This research plan is based on the development of the Midden-Delfland, an area expected to be significantly impacted by the climate change and for which ZUS had proposed a clear and structural plan, as depicted in figure 1. This proposal suggests a restructuring of the entire area, in which they take a rather radical approach. However, this radical change does not, at all, consider the existing value of the current housing stock. This current stock plays part in 2 different kinds of values, the first being the high value of the heritage and secondly the sustainablity within reusing existing buildings. These are the exact elements in which the issue for this research plan arises.

Firstly the area holds substantial historical significance, with not only the regional structures but also the historical building being a part of the Dutch history. As for Fairclough. [Janssen et al., 2017] states that "...there is a growing recognition that the historic environment is an integral part of our cities and landscapes, rather than a world set apart." Within the plan of ZUS, the heritage should

be incorporated, but heritage buildings could consist of different kind of issues. "The longevity of buildings can create a situation where design criteria from the past may not align with the present" [Thomsen & van der Flier, 2011].

The influence of heritage is an important element, which seems to be neglected in the current plan of ZUS, but should be taken into account as a base value for the area.

Secondly, the plan of ZUS does not take a sustainable approach to the reuse of existing housing. As Eric Bladwin observes in his article on ArchDaily [Baldwin, 2024]: "The reuse of building material involves saving a high percentage of embodied energy. Finding new uses for old buildings significantly reduces the energy consumption associated with demolishing a structure and building a new one to replace it." This perspective holds a good potential, yet it remains unaddressed in the general approach proposed by ZUS. This gap highlights a subject that future architects will need to

take into account.

The issue is further strengthened when viewed through the lens of critical regionalism, and architectural concept developed by Kenneth Frampton in the early 1980s. [Frampton, 1983] The current proposal of the redesign appears to rely on newly build structures that disregard the regional context and historical continuity. Critical regionalism emphasizes the importance of balancing modern design with local architecture. In this approach, contextual sensitivity, traditions, the use of local materials, and human experience are values that should be central to any development plan.

This is precisely where the ZUS proposal seems to be lacking. While Midden-Delfland is being restructured, where does the character and regional value remain?



ARCHITECTURE IN THE PROBLEM

The preservation, maintenance. and development of heritage are the basis for this research. It is not an unfamiliar statement to claim that heritage plays a significant role in architectural history. In Midden-Delfland, but also far beyond that. The Netherlands namely counts around 63.000 monuments, all part of a value inherently tied to architecture. This is expanded in the current time with all the present design and future dwellings build. It is a source of knowledge and history we wish to pass on to future generations.

And the responsibility for this source? Well, that is not an easy task. According to ZUS's radical plans for the transformation of

Midden-Delfland, heritage appears to be absent. The responsibility mainly falls upon architects. Professionals who are able to react to how these buildings meet new requirements, how future modes of living can be integrated with these structures and how effects of climate change can be addressed in this context.

But can they actually? A significant challenge arises with this question: architects often lack te expertise needed to effectively address these issues. As Keitsch [Keitsch, 2020] and Otero [Otero, 2021] observe, "The lack of specific knowledge within project teams may cause organizational challenges to arise. The specialized nature of heritage conservation means that

the required expertise is not always readily available, causing **suboptimal decision-making**." If architects themselves lack the necessary knowledge, how can they be expected to appropriately respect monumental dwellings?

There is a strong desire to preserve heritage, with strict regulations from local municipalities and homeowners doing everything in their power to protect this. But how should this be done, and is there even a single solution to address this issue? How will [future] architects ensure that heritage remains an integral and fitting part of modern design and society?

OVERALL RESEARCH SCHEME



QUESTIONING THE PROBLEM

What, then, is the actual problem? Aren't monuments already being adapted to align with contemporary architecture? Obviously, there is no single approach to this, but isn't it in line with the municipality's requirements? For a fact, this is not untrue. The question, however, is whether this is truly the desired approach to heritage conservation. Or is it the only known way to deal with it? The additions, extensions, or modifications commonly applied today are often sleek, modern, minimalist volumes. An anonymous, non-local design approach. The rich history that is valuable to these monumental dwellings is being supplemented with an international design language, one that disregards Dutch characteristics and

material use. Those elements are connected to the **vernacularity of architecture**: "A style of regional or local building that utilizes conventional supplies and resources from the region in which the building is situated [2050 materials, 2023]."

But what approach is truly suitable for this task of preservation? How can the distinctly Dutch character be reintroduced into future developments?









AIM OF THIS RESEARCH

Heritage preservation is essential, and this research aims to explore how it can be achieved in the most fitting and complementary way. The focus is on how the development of heritage buildings can best integrate with their surrounding landscape and culture. This is divided into three key objectives:

- To clearly define what vernacular architecture means in the Netherlands. While extensive research has been conducted on foreign vernacular architecture, there is a lack of information regarding the Dutch context.
- 2. To analyze how heritage family dwellings are currently being worked with, in order to develop a vision on where and how vernacular architecture can be used.
- 3. To explore how future residential living environments may evolve, considering that the demand for these environments is changing, and heritage must adapt to these shifts as well.

These sub-objectives aim to establish a vision and design direction, while implementing this knowledge into the architectural design process.





DEFINING THE QUESTION

To meet the aim of this research, the main research question has been carefully defined:

Single-family homes with two or more floors, surrounded by larger open spaces in the form of a garden or water.

In what way can Dutch dwelling heritage utilize vernacularity to assist contemporary homecoming?

Vernacularity typically uses locally sourced materials suited to the environment. The creation of home environments in many different forms possible.





DIVIDING THE QUESTION

To answer the main question, subquestions have been written down. These seperated questions give a guide through the final research, and helps to understand de different aspects that needs to be analyzed. As stated in the aim of research, the entirity will be divided into different themes, being as follows:

1. Vernacular architecture:

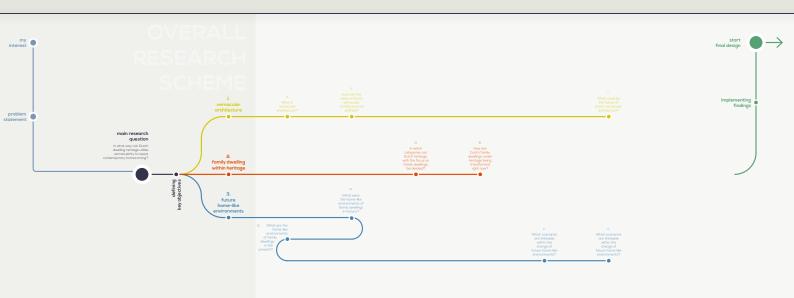
- a. What is vernacular architecture?
- b. How can the value of Dutch vernacular architecture be defined?
- c. What could be the future of Dutch vernacular architecture?

2. Family dwelling within heritage:

- a. In which categories can Dutch heritage, with the focus on family dwellings, be divided?
- b. How are Dutch family dwellings under heritage being transformed right now?

3. Future home-like environments:

- a. What were the home-like environments of family dwellings in history?
- b. What are the home-like environments of family dwellings in the present?
- c. Which scenarios are thinkable within the change of future home-like environments?



3

THEORETICAL FRAMEWORK

This research plan, and eventually the research itself, will be organized through the three main themes, vernacularity, heritage and home-like environments. It is essential to clearly understand what each theme precisely tries to bring to the table. What has already been written on these topics, and what is its overarching significance? These questions are addressed for each theme to establish a clear framework for the focus of the forthcoming research.

VERNACULARITY refers to building styles and methods that are closely connected to local traditions, cultures, materials from surrounding environments, and the climate of a specific region. This architecture is generally practiced by local population. Rather than being designed by formally trained architects.

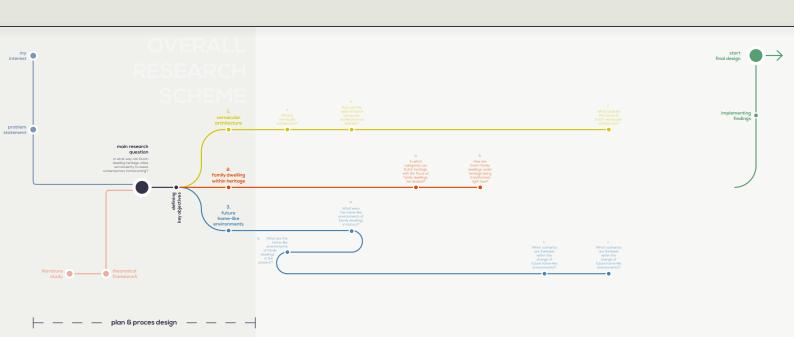
As architects, we may be quick to adapt a birds-eye view when approaching a design, which risks losing the authentic value of a project in the outcome. An overly objective stance is not only a problem in architecture but

can also have broader societal implications. The period before the 1960s serves as a clear example of this. According to the discussion in "Ethnographic Paradigm of the 60s", this was a time when identity, tradition, and local pride gradually disappeared from both society and architecture. As a result, an objective approach to design began to dominate architecture. The focus of this discussion is primarily on recognizing this limitation: The removal of identity led to a constrained understanding of culture. The local tradition must de revived. This movement became evident after the 1960s, when a renewed appreciation for vernacularity emerged.

As future architects, we must understand the values embedded in the environments of a projects to ensure that cultural and social aspects are reflected in building and living spaces. In a modern architectural world where everything is becoming increasingly anonymous, we have the responsibility to preserve and convey culture. Bernard Rudofsky's book "Architecture without Architects" aligns with

this perspective. He argues that the value found in ancient building practices using local materials should not be lost due to western, academic approaches to architecture. This type of architecture often drowns out an ancient tradition that holds significant value regarding the history of a specific area. [Rudofsky, 1964]

HERITAGE in this research ties into this important value, as it is an element of the built environment where tradition, material usage, construction methods, and knowledge are preserved. Sian Jones addresses this in her article "Wrestling with the social value of Heritage: Problems, Dilemmas and opportunities". The social value of heritage extends far beyond the traditional approach of material value and historical significance. When heritage is viewed pragmatically, economic, and political interests often play a major role. However, recognizing its social value is essential for preserving heritage for future generations, to ensure that this knowledge is not lost. A key point raised by Sian Jones is that



THEORETICAL FRAMEWORK

local communities must be more involved in the preservation of heritage objects. This strengthens the monument's value within its surrounding environment and contributes to cultural identity, with vernacularity seamlessly connected. [Jones, 2016]

Can monument then not be transformed for the future, in order to preserve this identity? J.T. Koopmans observes in his article "Preserving the past, Building the Future" that it is about finding the balance between both. Carefully preserving architectural elements while seeking relevance for contemporary users. Koopmans observes that transformations of monuments are often seen as a compromise, which is not the correct approach. It offers opportunities to innovate by merging functional requirements with aesthetic value. [Koopman, 2024] This Is a challenge for future architects, to make the existing housing stock future-proof.

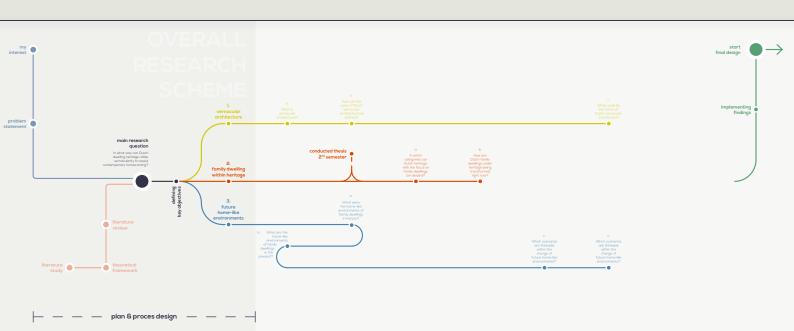
Not only monument transform over time, but **HOME-LIKE ENVIRONMENTS** also undergo significant changes, which often form the basis for changes in the design of monuments. In my own MSc 2 thesis, "1900-1960 De villa & de Maatschappij", [Vink,2024], the relationship between the development of society, the evolution of living environments, and the architecture is explored. The way people wanted to live, as encouraged by societal changes, directly impacted the development of the physical environment.

The research to be conducted in the coming months will build upon this thesis. For a house is not yet a "home" ... This phenomenon is explored by Rybczynski in "home: A short history of an idea." How, throughout history, has genuinely comfortable living environment been created? And perhaps even more importantly, what developments have these environments undergone to become what we are used to today? [Rybczynski, 1986] Rybczynski's research not only addresses the physical environment but also the emotional connection to that. How does a space feel? How is comfort experienced, and is there a sense of privacy? Aldo van Eyck's vision aligns closely with this. His sense

of "homecoming" was not only about the built environment but rather about the emotional and psychological experience of a place, and how this can be enhanced through thoughtful architecture.

Aldo van Eyck views the home as a place of connection with the environment, the community, and the past, and het opposed the modernist architecture that was dominant in his time. This vision is closely linked to the concept of heritage explored in this research. It is evident that a great deal is already known about the subjects that will be researched, as reflected in the information currently available, which far exceeds what has been written thus far is this theoretical framework. Therefore, the question must continually be posed: How do I ensure that my research remains relevant?

This will eventually be clear in the final research report's literature review, which will provide insight into how my research contributes to the existing body of knowledge. Currently, this is not yet doable, for not all the literature has been reviewed for existing knowledge.



AIMED METHODOLOGY

With the theoretical framework now clearly established and the scope of the research defined, it is essential to clarify the methodology for conducting this research. What resources and steps are necessary to product the outcomes required for implementation in the final design?

The approach chosen in this plan is to address each sub-question, identifying the key components necessary for reaching a fitting conclusion. Each sub-question is organized as follows, numbered along with paged 13:

Vernacular architecture:

- a. Definition: A clear, concise definition of vernacular architecture, identifying the essential aspects to be considered, a categorization of characteristics and current usage statistics. This section will provide a foundational definition that the rest of the research can reference.
- b. Dutch perspective: While vernacular architecture

has been widely studied internationally, the Dutch perspective remains underexplore. To make informed statements on incorporating vernacularity into final designs, it is critical to identify relevant elements within the dutch conext. The aim of this sub-question is to create a toolbox of Dutch vernacular characteristics to inform the research and design process.

c. Design direction: This sction will explore possible directions in which vernacularity might be integrated into future architectural practices. The exact product of this analysis is still unclear, as it will depend on the findings from the previous questions.

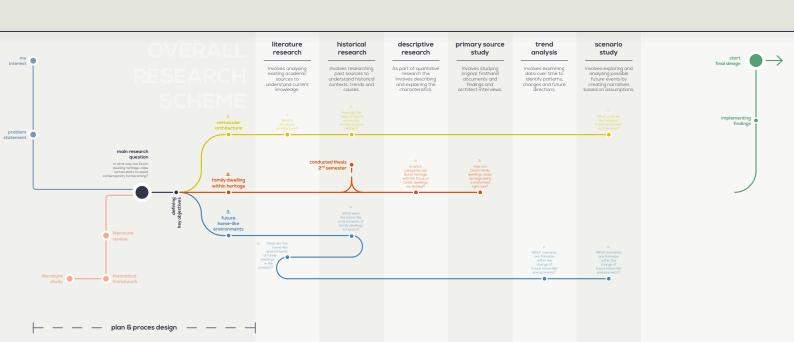
Family dwelling within heritage:

 a. Inventory of heritage: To gain a clear understanding of the current heritage housing stock, this section

- will generate an inventory that categorizes monuments and identifies key elements for the upcoming design process. This sub-question will likely produce a pragmatic outcome, such as a list or matrix for organizing the heritage assets.
- b. Current usage of heritage for future purposes: Understanding how heritage properties are currently adapted for future uses is vital to contemporary design practices. This sub-question aims to identify main transformation strategies by engaging with heritage architects, documenting their perspectives, and comparing case studies. The intended outcome is a detailed, comparative report or matrix that enables direct comparison of different design approaches.

Future home-like environments:

a. Foundation of residential environments: To grasp the functionality of different



AIMED METHODOLOGY

living environments, this section will focus on foundational elements, historical evolution, and persistent features. All findings will be presented in a clear overview.

- b. Current residential trends:
 building on the preceding
 findings, this sub-question
 will analyze contemporary
 residential environments
 and the ways in which
 people currently adapt to
 them. This, too, will be
 organized in a structured
 overview.
- c. Conceptualizing future living spaces: The final design phase will center on creating innovative, modern living environments. This sub-question will explore potential scenarios and configurations for such environments based on the previously analyzed elements. The precise form of this outcome will be defined over the course of this research.

The" what" of this research is now clear, and to systematically analyse and collect all this information, the study is divided into six distinct methodologies. Each sub-question will be assigned to one of these methods, which are further defined in the following section based on definitions given by different sources. The distribution of the sub-question is presented in the scheme at the bottom of this page.

Literature research

"Literary Studies is the study of written works of the imagination, of which poetry, drama and narrative fiction constitute today the most familiar types or genres. Most students and teachers of literature, however, see it as a more complex matter."

[Literary Studies | University of Kentucky College of Arts & Sciences, n.d.]

Historical research

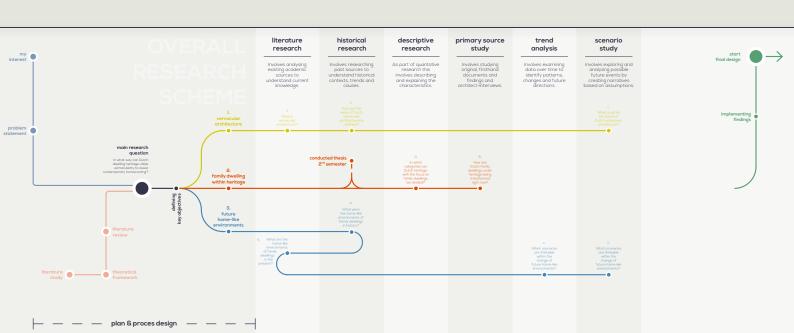
"Historical research represents a systematic enquiry into the past and an attempt to separate true from fictionalized accounts of historical events, based upon the examination of a wide range of relevant source material. This is an important task because history is the source of many of our ideas, beliefs and customs. A better understanding of the past places us in a more advantageous position to appreciate change in the present and to try and learn from past mistakes."

[Mcdowell, 2013]

Descriptive research

A descriptive study is one in which information is collected without changing the environment (i.e. nothing is manipulated). Focuses on 'what' rather than 'Why' It is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variable or education in a situation. Present trends, beliefs, public mind, their viewpoint and attitudes, their effects or development of new trends are described. It is done without influencing the subjects.

[Studies, 2022]



AIMED METHODOLOGY

Primary source study

A primary source provides direct or firsthand evidence about an event, object, person, or work of art. Primary sources include historical and legal documents, eyewitness accounts, results of experiments, statistical data, pieces of creative writing, audio and video recordings, speeches, and art objects.

[LibGuides: Primary Source Research and Discovery: What Are Primary Sources?, n.d.]

Trend analysis

"Trend analysis involves the use of any of a variety of techniques based on historical data. Trend analysis involves several processes. One process is spotting an emerging trend, that is, identifying a change in the world around us. Second is Trend extrapolation, which is the most straightforward and objective component of trend analysis. Extrapolation essentially consists of taking historical data, fitting a curve to the data, and extending the curve into the future. Trend

plan & proces design

extrapolation assumes that things will keep changing in the future the way they have been changing in the past. One simply extends the line or the curve forward to predict where things will be at a certain future time."

["Methods and Approaches of Futures Studies," n.d.]

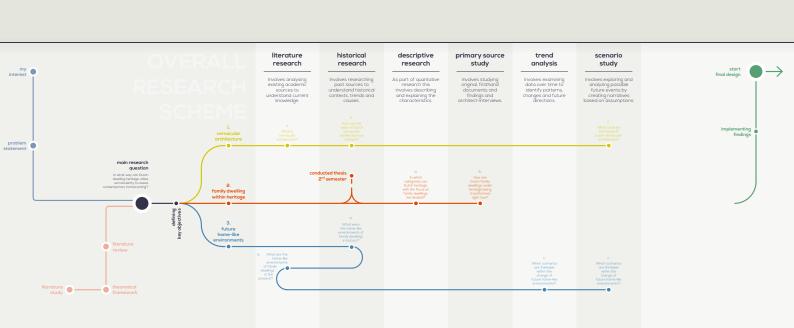
Scenario study

"Scenario planning is the use of internally consistent narrative descriptions of possible states of affairs or development in the future. Usually, alternative scenarios are developed in order to allow people to conceptualize alternative futures and to clarify possible consequences of present developments and decisions.

A scenario is simply a series of events that we imagine happening in the future. Our everyday thinking is filled with little ventures into the mysterious world of tomorrow, or next week, or next year. And these ventures are scenarios, though rarely as well developed as the elaborate scenarios prepared

by professional researchers working for government agencies, the military, and commercial enterprises."

["Methods and Approaches of Futures Studies," n.d.]



4

COMPLETION & REFLECTION

Conducting the research using the previously outlined methods provides a clear structure and valuable insights into the research process, However, the next question that needs to be asked is: How does this information ultimately converge into a final conclusion?

To **CONCLUDE** the research, all information will be compiled into a report, though the format of this report has not yet been determined. This will become clearer as the process unfolds; nonetheless, I aim to give the report a creative and interesting perspective and form.

Once the information has been consolidated, a general conclusion will be drawn from the research. This conclusion serves two purposes:

01

To provide input fort the continuation of this process, as the research should establish a foundation for design work that will contribute to my graduation project. Therefore, the conclusion

must have a practical dimension, offering clear entry point for further development.

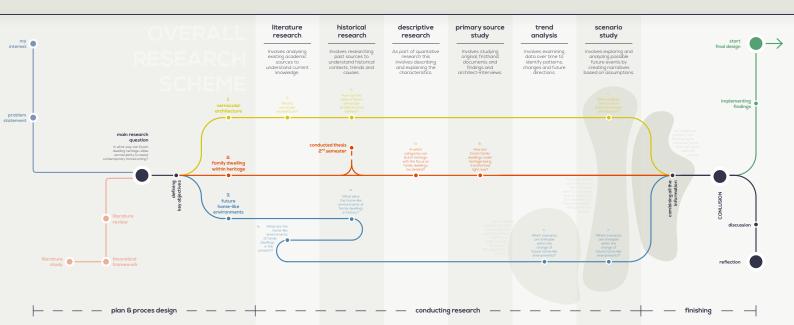
02

To expand my knowledge in the field of conducting research. For this purpose, the conclusion does not necessarily need to be positieve of definitive. What is essential is the ability to review and analyze the completed research for areas of improvement, which will ultimately lead to a reflective assessment of the process.

This **REFLECTION** is crucial not only at the end of the research, but also earlier on. I have structured the research plan with a critical eye on whether the approach, volume and sequence of steps are feasible for the upcoming quarter.

The research appears to consist of two distinct parts: a practical component and a more openended, hypothetical component. The practical part currently seems manageable, with a clear direction

that allow me to begin immediately. This phase will conclude after conducting the primary source study. The subsequent phase has been included because I believe it adds substantial value to any potential conclusions. However, I am uncertain how this part will ultimately take shape. For now, this component is not the primary focus, as it is not entirely integrated with the first part; it may prove unfeasible withing the set timeframe. To maintain ambition, I plan to retain this part for now, while keeping in mind that it may ultimately not be included in the final conclusion. Nevertheless, the research will still offer meaningful contributions to my graduation project, even if the last part would fall out of the process.



SCHEMATIC OVERVIEW

he scheme presented in the previous chapters of this research plan has been progressively built upon to clarify how the research process as a whole is interconnected. The final question I ask in shaping this research plan is: "How do all the different components of the research relate to one another?"

To make this clear, connections have been established within the main structure, indicating potential interdependencies, supplementary aspects, or resources among the various elements.

This approach helps distinguish the research's two primary phases. The first, more pragmatic phase primarily seeks connections within itself, while the second phase, starting with the trend analysis, represents a more self-contained section. This division reinforces the sense that, even if the second

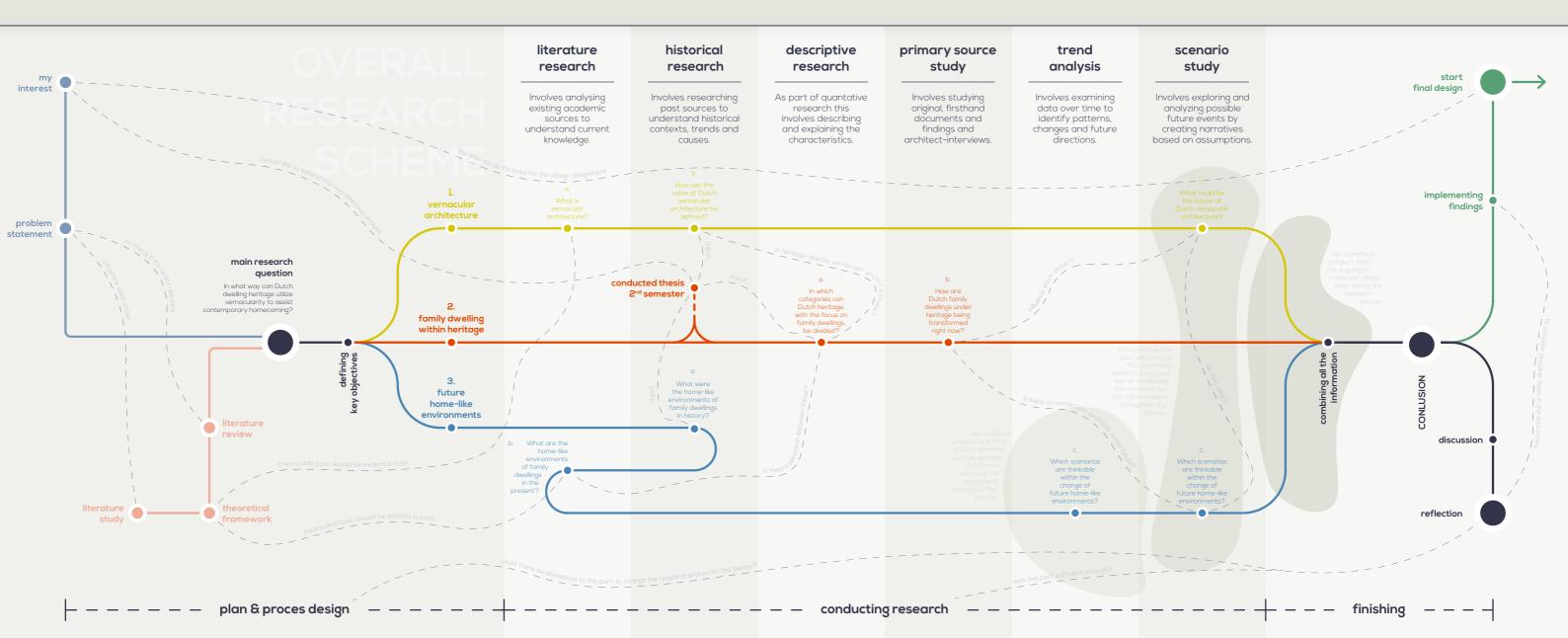
part might be less feasible to fully implement, the study still constitutes a cohesive, relevant whole.

It is also good to see overlapping connections among the main structure, plan & process design, conducting research and finishing. The study thus integrates these parts into a cohesive whole rather than treating them as isolated parts of the research.

This research forms a foundation for aligning my personal interest with the goals of my graduation studio.

A study that contributes to my academic development to be a **future architect**.

Ronald Vink



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