

PILGRIMAGE TO TRANQUILLITY:

An Architectural Journey Toward a Centre for Calmness
in Rotterdam South

*How can architecture provide calmness
and mitigate environmental stressors in
urban settings, specifically in targeted for
development neighbourhoods in Rotterdam
South?*



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ABSTRACT

This research explores the urgent need for calm and restorative spaces within contemporary urban environments, focusing specifically on Rotterdam South. In today's fast-paced, hyper-connected world, cities often overwhelm the senses, contributing to chronic stress and an increasing threat to mental health. The lack of tranquil, reflective environments intensifies these conditions, sparking a growing demand for spaces of escape and restoration.

The study investigates how architecture can respond to this challenge by designing spaces that promote tranquillity and support mental well-being. Drawing on the metaphor of "pilgrimage," the design approach emphasizes a journey through a sequence of diverse spaces, each contributing incrementally to a state of calmness. This concept frames the spatial experience as a progressive retreat from stress toward serenity.

Central to the research is an examination of environmental stressors and relaxants within urban contexts. Rotterdam South, characterized by its social diversity and urban complexity, provides a critical case study to understand the tension between the energetic pace of city life and the human need for peace and introspection.

The ultimate aim is to restore a balance between vibrancy and tranquillity. This is pursued through the proposal of a 'Centre for Calmness', a spatial anchor point for mental rejuvenation, and a set of architectural guidelines or patterns to inform a future network of calming spaces across Rotterdam South.

OVERVIEW OF THE RESEARCH

Methodology

To properly analyse the intricacy of the new typology that the thesis attempts to introduce, a specific schematic technique must be implemented. The main question is divided into sub-questions, research aims, goals, and objectives emerge as guiding directions for the research, allowing it to focus on answering the main question. Several methodologies will be used to conduct the inquiry, including quantitative and qualitative features. However, it is important to note that each method has limits. Nonetheless, by combining the various methods more knowledge is gathered, resulting in a more sober perspective. Outputs are the predicted findings of the research into the sub-questions (Figure 1).

Conceptual framework

The conceptual framework of this thesis would consist of three main domains – public space, social space and personal space. As the illustration below shows, when the physical space is sustaining highly dynamic daily life and when the social space is consistently producing stressors such as mechanical noises, inducing feelings of crowding and imposing social injustice, the personal space or the individual mind space is under pressure. However, through design, we can tweak the physical and social spaces to reduce the pressure put on the personal space (Illustration 1).

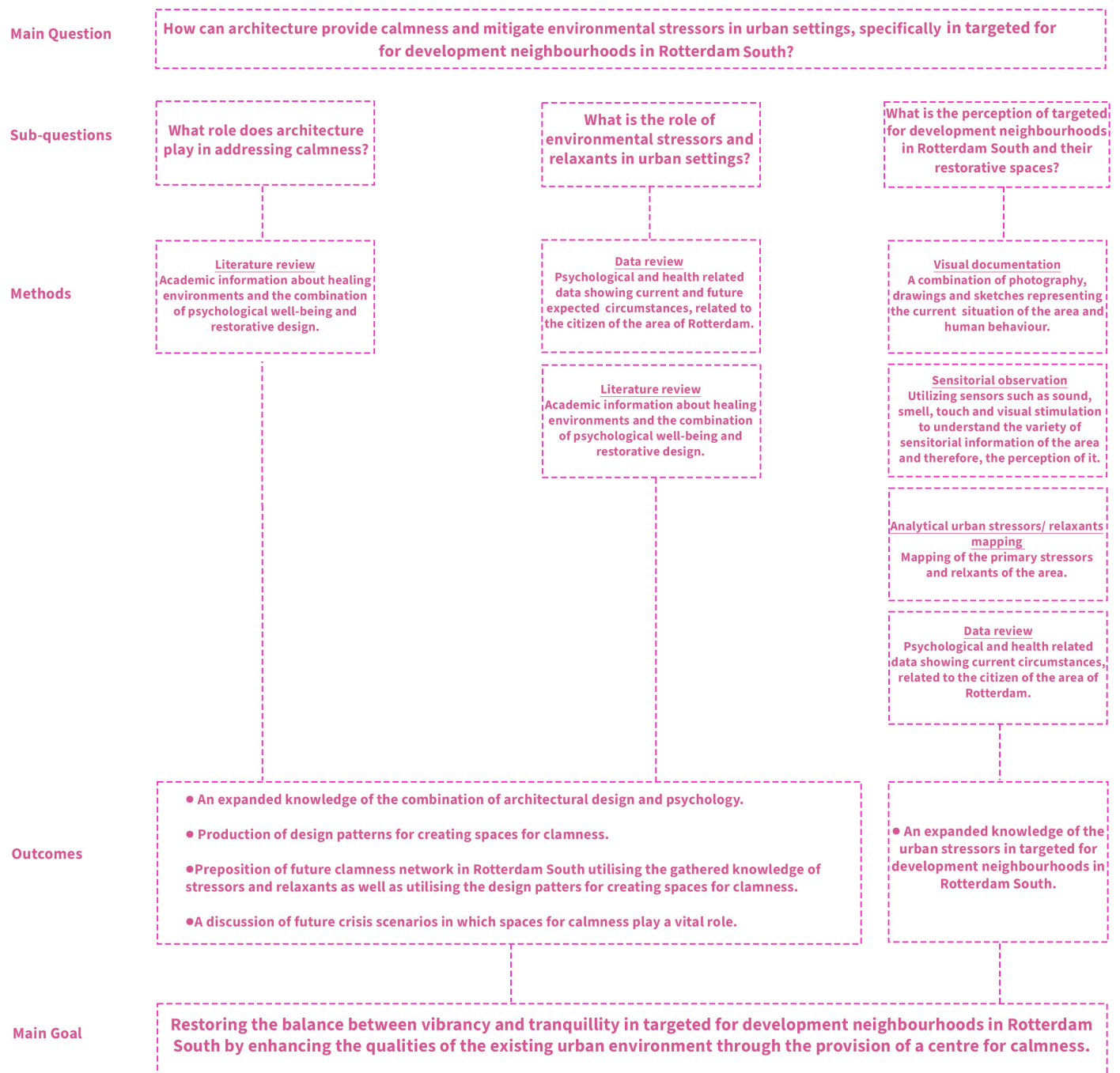


Figure 1. Initial schematic methodology approach (created by the author).

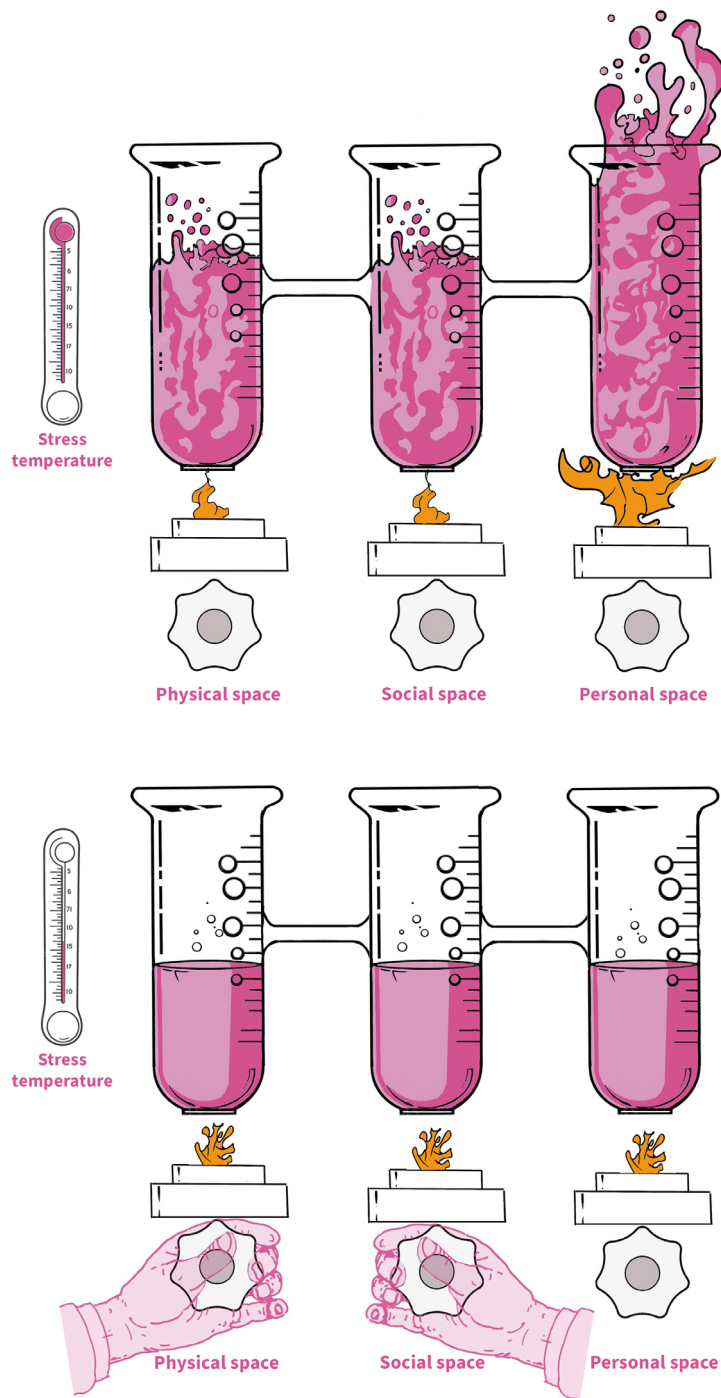


Illustration 1. Conceptual framework (created by the author).

1. WHAT IS THE RELATION BETWEEN YOUR GRADUATION PROJECT TOPIC, YOUR MASTER TRACK (A, U, BT, LA, MBE), AND YOUR MASTER PROGRAMME (MSc AUBS)?

My graduation topic aligns closely with the broader themes of architecture in Rotterdam South and resilient cities by addressing the critical need for prevention of mental health issues by proposing design for calmness. Moreover the location of the chosen site and well as the site issues addressed in the design approach are closely related with the core values of the Veldacademie graduation studio including context-relation and people-centered design.

- Graduation Topic: To re-establish the harmony between vibrancy and tranquillity in Rotterdam South, my proposal focusses on creating a calmness centre to repair the lost balance as well as suggesting guidelines for calmness network based on literature research and already utilised 'patterns' in the design of the calmness centre. The theme of putting human well-being and calmness becomes central for the project.
- Study Topic: By examining how architecture can promote calmness and lessen stress, this project supports my studio's themes of urban resilience and human-centric design.
- Master Track (A, U, BT, LA, MBE): This project, which is a component of the Architecture track (A), addresses more general societal challenges like environmental stress and mental health by utilising architectural design. There is a clear integration of architectural concepts in the design of the architectural calming centre and the proposed guidelines (or 'patterns') for a creating of network of calmness pavilions.
- Master Program (MSc AUBS): This project aligns with the MSc Architecture, Urbanism, and Building Sciences program's goal of investigating novel approaches to urban problems by fusing human centred-design with context-related design to enhance quality of life.

2. HOW DID YOUR RESEARCH INFLUENCE YOUR DESIGN/RECOMMENDATIONS AND HOW DID THE DESIGN/RECOMMENDATIONS INFLUENCE YOUR RESEARCH?

The literature overview provided variety of insights into types of buildings aiming to address the issue of calmness and tranquillity. The field work done in the research phase prove valuable to identify context-specific issues that would required integration of the literature knowledge into design solutions.

The design itself informs the research by testing the design concept of 'pilgrimage' and how could spaces organised in specific order could provide sense of calmness and tranquillity in a context which originally, based on fieldwork research done, evokes emotions related to distress and discomfort. During the design stage extra enquires were made exploring further the typology of the bathhouse as well as investigation on the topic of calmness through visual references in order to create a sensation of tranquillity (Figure 2).

3. HOW DO YOU ASSESS THE VALUE OF YOUR WAY OF WORKING (YOUR APPROACH, YOUR USED METHODS, USED METHODOLOGY)? WHAT HAVE YOU LEARNED FROM IT?

I do believe the research phase provided many valuable insights and I am confident that the fieldwork done and original analysis relating to site locations made are crucial for well-integrated architectural innervations. However, it should be noted that due to word and time limitations, the topic of calmness is not fully investigated. The novel idea of creating a 'calmness centre' is under-investigated topic in the architectural field as such types of buildings are more commonly associated with different typologies (e.g. religious buildings, bathhouses, cemeteries etc.). Nevertheless, the different methods utilised such as fieldwork analysis, sensorial observation, literature overview, similar design typology analysis, and extraction of common patterns have greatly contributed to the understanding of calmness. Because of the wide scope of methods utilised for the project, more holistic and grounded view on the subject is obtained. In terms of design integration, that knowledge shapes the conceptual approach of calmness and makes a good use of the reviewed 'guidelines' or 'recommendations' extracted from existing examples.

However, it is important to note that I have started the project with the idea of creating a calmness centre as well as a network of calmness. The idea of the network was to truly create that desired balance between vibrancy and tranquillity on larger scale covering Rotterdam South, as the centre itself would focus only on small area. However, in the process it became clear that this task would have required more time and would not be able to fit the required schedule for graduation. Therefore, the design would only concentrate on the centre for calmness and propose patterns and suitable locations

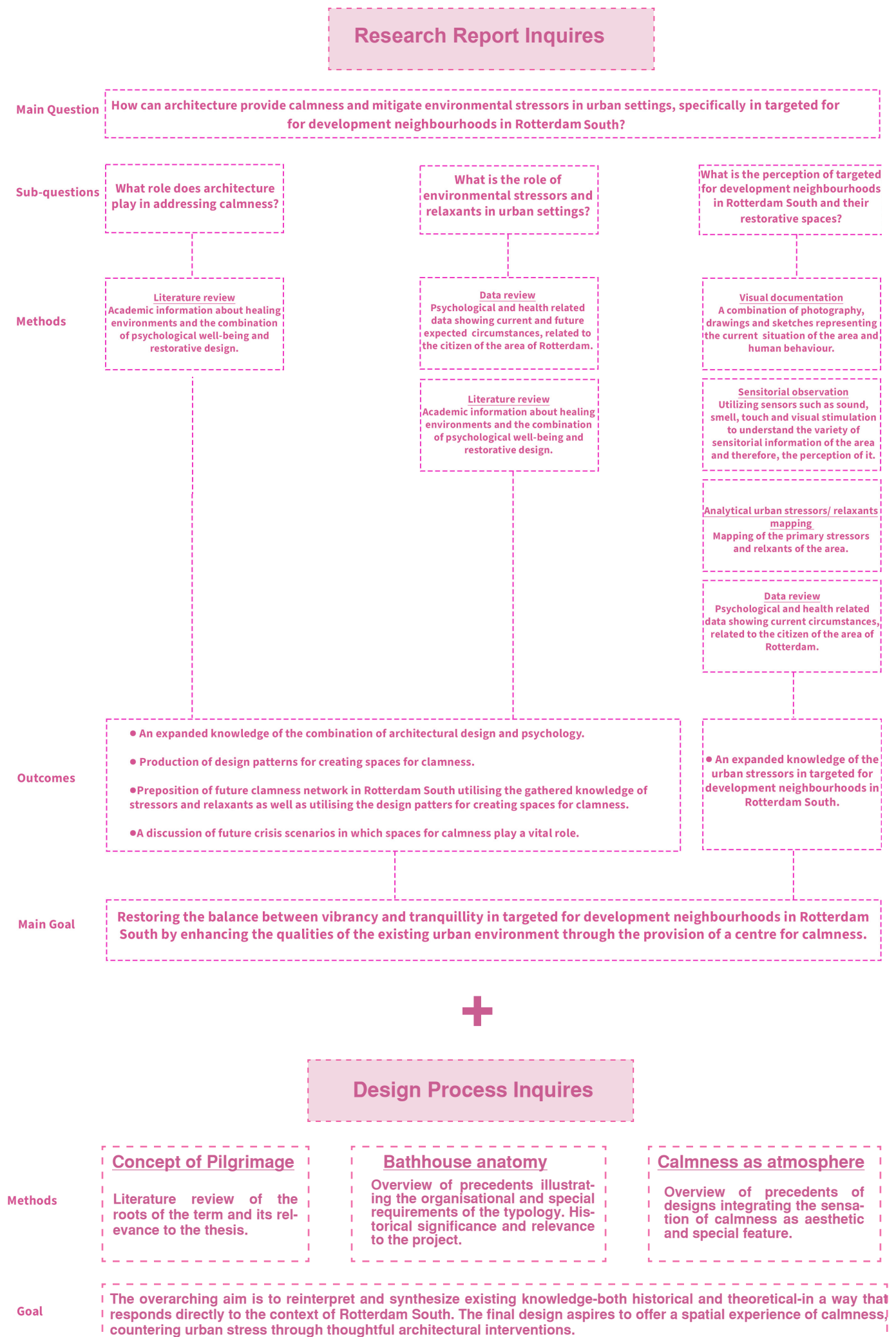


Figure 2. Integrated schematic methodology approach (created by the author).

for future creation of that calmness network. This reflection on the list of products which I have originally planned has proven that design work is often not linear process but rather continues loop of refinement.

4. HOW DO YOU ASSESS THE ACADEMIC AND SOCIETAL VALUE, SCOPE AND IMPLICATION OF YOUR GRADUATION PROJECT, INCLUDING ETHICAL ASPECTS?

I do believe that the creation of new type of building itself has a notable academic value. Moreover, the research points out that mental health is going to become even more frequently discussed topic in future. Therefore, the chose to design this type of a building in challenged context such as Rotterdam South is a reasonable decision. However, while this research provides a strong foundation for understanding the role of architecture in promoting calmness and mental well-being in urban environments, further studies and practical applications are necessary to fully assess the effectiveness of proposed solutions. The integration of more diverse methods, such as quantitative data and cross-cultural studies, as well as real-world testing, would enhance the robustness of future investigations and contribute to more comprehensive design strategies for tranquillity.

5. HOW DO YOU ASSESS THE VALUE OF THE TRANSFERABILITY OF YOUR PROJECT RESULTS?

To assess the result of the research 3 lenses could be used:

- **Social Relevance:** Rotterdam South's residents' mental health and quality of life are impacted by major urban stressors, and mental health is one of the four largest demands on the Dutch healthcare system. To solve this problem, my proposal uses architectural design to create a centre intended to lessen these stressors. As a result of the design and initially done research on the topic of calmness, pattern language would be proposed as well as locations in Rotterdam South where calmness pavilions could be created in future. That way, urban dwellers' well-being and mental health are improved by this project's promotion of rest and serenity.
- **Professional Relevance:** By demonstrating how design can actively solve societal concerns, the project has relevance to the field of architecture. It draws attention to the function of architecture in establishing healing spaces, a topic that is gaining popularity among experts.
- **Scientific Relevance:** This work advances current studies in architectural design, urban planning, and environmental psychology. It provides empirical insights and design techniques that can guide future scholarly research and urban policies by examining the interaction between environmental stressors, relaxants, and restorative places. The initiative also advances the conversation on the role that architecture can play in improving mental health, which is becoming a more important consideration in both architecture and urban planning.