

REFLECTION GRADUATION YEAR 2024/2025

1. Relation Between the Graduation Project, Master Track and Programme

The theme of my graduation project focuses on designing for elderly people with dementia. Many existing care facilities and their surrounding environments are not designed in ways that support the autonomy or quality of life of their residents. With this project, I want to create an environment and buildings that do just this.

Another key aspect of my project is its location: the Tarwewijk in Rotterdam. This is a highly multicultural neighborhood, which makes it essential to consider cultural diversity in the design. In some cultures placing parents in a traditional care facility can be considered taboo, with families preferring to provide care themselves. Therefore, the design must accommodate different cultural views on care and ageing within the same neighborhood.

This subject aligns closely with the studio *'Designing for Health and Care in an Inclusive Environment'*, as it focuses on the specific care needs of a vulnerable group (elderly with dementia) and explores how design can contribute positively to their well-being. At the same time, it strongly connects with the broader master track in Architecture by investigating how architectural strategies and spatial interventions can enhance the quality of life and autonomy of its users. Furthermore, this project fits within the overarching goals of the MSc Architecture, Urbanism and Building Sciences programme by addressing societal challenges (such as ageing, dementia, and cultural diversity) through spatial design. It contributes to the understanding of how architecture and its surrounding landscape can play an active role in improving human health and well-being.

2. Influence of Research on Design and Vice Versa

The research formed the foundation of my design process. I conducted literature research on three scales: environmental, building, and room level. For each scale, I analyzed the same six themes to understand how they differ across the scales: (1) orientation & accessibility, (2) privacy & social spaces, (3) outdoor environment, (4) autonomy, (5) familiarity, and (6) sensory engagement. Exploring these three

scales and six themes led to concrete design guidelines that I could then apply to my design.

During the design phase, however, research continues to be an ongoing process. All the insight gathered from my research were very valuable: from the form of the buildings, their placement within the neighborhood, to how the rooms were designed, were all informed by my research. However, new questions arose during the design phase that were not specifically addressed in the research. One example in my case was how elderly couples, where one partner requires care due to mild dementia, could continue living together for as long as possible. This issue was not explicitly covered in my research, but I explored it during the design phase and found a solution that worked within the context of my project.

This continuous exchange between research and design allowed me to refine both the theoretical framework and the practical application of the project, ensuring that each informed and strengthened the other.

3. Assessment of the Approach, Methods, and Methodology

The combination of fieldwork, literature review, interviews and case studies proved to be highly effective. In addition to fieldwork in care institutions, I also spoke with residents of the Tarwewijk to better understand how people in this multicultural neighborhood prefer to care for their parents. These conversations revealed cultural differences in attitudes toward institutional care and emphasized the importance of offering alternatives that align with diverse family structures and values. This helped shape my project and create different types of dwellings.

As I mentioned before, I structured my literature study into three spatial scales and six themes. Analyzing these themes across different scales proved to be very effective. It allowed me to gain a clear understanding of what should be implemented at each level to create an inclusive living environment for older adults with dementia.

The fieldwork week, during which I stayed in three different dementia care facilities, also provided me with valuable insights. Conver-

stations with care staff, residents, and family members gave me a human and realistic understanding of what works in practice. Structuring the literature in combination with these experiences ensured that my design principles were both well-founded and applicable across multiple levels.

4. Assessment of the Academic and Societal Value of the Project

This graduation project explores how architecture can address the challenges of ageing and dementia in a multicultural context. By focusing on the Tarwewijk, it shows how cultural perceptions shape care preferences and proposes inclusive solutions such as intergenerational housing. Academically, the project contributes to research on how design can enhance autonomy and quality of life for this vulnerable group. It is grounded in literature, fieldwork, and interviews. Professionally, it aligns with current trends in healthcare architecture, offering a model for community oriented dementia care in urban environments.

5. Effectiveness of the approach

Overall, my approach proved effective and the research significantly supported my decision-making during the design phase. However, the large number of design guidelines resulting from the analysis of different scales and themes made it impossible to apply everything. Initially, I struggled with leaving out parts of my research, but eventually I focused on selecting the most relevant principles. Many of the guidelines were quite general and not all directly suited to the specific context of the Tarwewijk. Therefore, I carefully filtered and adapted those that best matched the urban and cultural environment of Rotterdam South.

6. Understanding the “how and why”

Through this project, I gained a deeper understanding of how and why the built environment should be designed to help people with dementia retain autonomy and quality of life. One key insight was the importance of maintaining connections with the local community. Initially, I considered separating the care environment from the neighborhood, but I later realized that people with dementia benefit greatly from being able to move independent-

ly and safely through their surroundings. This freedom fosters autonomy and enables spontaneous encounters with neighbors, which strengthens their sense of belonging. As a result, the integration of social zones, both indoors and outdoors, became a central element in my design.

7. Reflection on Feedback and its integration into the project

An important piece of feedback I received focused on future adaptability. What if a cure for dementia is found? What will happen with all these buildings then? In that case, specialized care environment might no longer be needed. In response, I made flexibility a central design principle. I adapted the floor plans so that apartments could be resized or repurposed in the future.

Flexibility was implemented not only in the layouts and structural system, but also in the technical installations. I carefully considered the positioning of air supply and exhaust points to prevent the need for changes in future conversions. Additionally, underfloor heating zones were designed to be easily coupled or separated to accommodate layout changes.

Thanks to this feedback, flexibility became a key part of the project. Without it, my design would have been far less adaptable. And for a target group like this, long-term flexibility is essential, especially in the current fast changing care landscape.

8. Learning from my own work

One key lesson was that I initially tried to develop every building in too much detail, which proved unrealistic within the available time. I have learned that focus is essential: one well-developed design can be more powerful than several that are only partially resolved. I also realized how important it is to continuously refer back to the research throughout the design process, something my mentors rightly reminded me of. This helped me stay grounded and ensured that my design choices remained aligned with the project's core values and findings.

9. Looking ahead

As the design process nears its completion, the focus shifts to finalizing all products and elements for P4. Between P4 and P5, I will concentrate on visualizing the buildings atmosphere and creating a physical model.

By critically reflecting on my process, design, decisions, and the feedback I received, I have developed a clearer understanding of how architecture can meaningfully contribute to inclusive dementia care, and I feel equipped to apply this knowledge in both my graduation project and future professional practice.

10. Transferability of project results

The design principles I developed are applicable beyond the Tarwewijk. The three spatial scales and six core themes can serve as an analytical model for other dementia care projects aiming for inclusivity. Additionally, the concept of combining multiple housing types offers a flexible framework that can be adapted to other neighborhoods or cities.

11. Self developed reflection questions

1. When is a design considered 'inclusive enough', and how did I address this in my project?

A design can be considered 'inclusive enough' when it actively removes barriers and enables meaningful use for a group of intended users, especially those who are often excluded. In my project, I assessed inclusivity by examining how well the design supports people with dementia from different cultural background and with varying care preferences. I explored how care is perceived in diverse communities and translated those insight into flexible housing types, shared spaces, and spatial strategies that support autonomy and informal care. Inclusivity was not just a goal, but a design tool throughout the process.

2. To what extent can my project encourage informal care or community involvement?

This project fosters informal care and community involvement by integrating shared spaces and outdoor areas that are easily accessible to both residents and neighbors. By not isolating the care facilities but embedding it within the existing fabric of the Tarwewijk, the project encourages spontaneous interactions and supports neighbors in taking an active role in care. Mixed housing typologies and intergenerational elements also promote a sense of ownership and mutual support.