



AGEING ELDERS

Finding the right home to age

REFLECTION

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This chapter is a reflection of the work I did at the graduation studio for Advanced Housing Design. This studio is part of TU Delft's MSc Architecture, Urbanism & Building Sciences program's Architecture Master track.

The following guiding questions will be used to provide additional information on the approaches used in the research and design phases, as well as the essential connection that exists between these two aspects:

1. What is the relation between your graduation project topic, your master track (A, U, BT, LA, MBE), and your master programme (MSc AUBS)?
2. How did your research influence your design/recommendations and how did the design/recommendations influence your research?
3. How do you assess the value of your way of working (your approach, your used methods, used methodology)?
4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?
5. How do you assess the value of the transferability of your project results?

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

The graduation studio Advanced Housing Design, part of the Master of Architecture, Urbanism & Building Sciences, focuses on the theme of urban densification as a strategy to address the ongoing housing crisis. In many places, such as Amsterdam, where housing demand greatly exceeds supply, this urgent issue has been a focal point of the built environment. I decided to focus my efforts on the housing issues that older people confront, a growing population that is frequently disregarded when talking about urban living, within this larger theme.

As seniors age, their homes, which were once suitable for family life, begin to present a range of challenges. Many people discover that their homes are too big for their current needs, with unused rooms and hard-to-maintain rooms. Over time, accessibility within the house declines and features like stairs turn into hurdles. Their living circumstances and their capacity to live a comfortable, independent life

are therefore at clash. Seniors are frequently left without the official care or resources they need as a result of societal and governmental changes that have increased the burden on relatives and local communities.

The elderly themselves as well as the larger housing market are greatly affected by this mismatch. These larger homes are basically removed from the housing supply when elderly people continue to live in family homes that are no longer suitable for their needs because there are no suitable alternatives available. This makes it harder for younger families and first-time homebuyers to find adequate property, which adds to the housing shortage they face. This insight motivated me to concentrate my research and design work on developing housing specifically for elderly people who are overlooked by the current housing laws and urban planning approaches. My goal was to create concepts that address the larger social issue of equal housing distribution in addition to providing seniors comfortable living spaces. It is possible to free up larger homes for younger families by allowing elders to downsize to supportive, accessible,

and well-designed housing, which helps to create a more sustainable and balanced neighbourhood.

2. How did your research influence your design/recommendations and how did the design/recommendations influence your research?

My research's first sub-question was: [insert first sub-question]. I learned more about the origins of senior housing and its historical development thanks to this investigation. It also clarified how society has viewed the elderly over time and how this has affected dwelling design. I discovered contemporary architectural ideas put forth by architects of that time by investigating these historical and cultural changes.

Using personas, I 'tested' these historical ideas with current seniors to make sure they were still relevant in the modern world. I was able to determine which old design ideas are still relevant and which are no longer useful thanks to this method. As a result, I developed a set of practical guidelines to inform my design process, highlighting what works and what doesn't in modern housing for seniors.

The second sub-question was: [insert second sub-question]. This part of the research led to a list of design principles that needed to be integrated into my project. These principles spanned multiple scales:

- **The environment:** How the immediate surroundings and broader urban context can support senior living.
- **The building block:** How the architectural layout can encourage accessibility and community.
- **The individual dwelling:** Ensuring the home itself meets the physical, functional, and social needs of seniors.

These ideas were further divided into three categories: social (e.g., encouraging community contact), functional (e.g., adaptable spaces), and physical (e.g., accessible features). I created an initial list of design aspects by answering to these sub-questions and then addressing the main research topic. This list helped me focus certain elements while also guiding my overall design. I focused, for example, on designing spaces that promote interactions between people in such common areas, while providing privacy where

social interaction is voluntary rather than forced.

New questions that had not been covered in my original research surfaced throughout the design phase. What are the ideal house sizes, for instance, to accommodate people who use wheelchairs or mobility scooters—something that was not given much thought in previous design methodologies? How to design floor plans that are as senior-friendly as can be while accommodating residents' present and future requirements as they age was another important issue. These additional challenges forced me to continue my study and deepen my understanding of senior design. In addition to refining my project, this iterative process led to a deeper understanding of what it means to create housing for this group. In the end, my work integrates historical perspectives, current requirements, and useful suggestions to provide an organized structure for creating senior-friendly housing that is both practical and creative.

3. How do you assess the value of your way of working (your approach, your used methods, used methodology)?

To answer the main research question, I found it essential to first understand the history of senior housing. I was particularly interested in uncovering why certain governmental decisions were made regarding housing for the elderly. This research allowed me to create a timeline that mapped out key innovations and architectural ideas over the years. By studying several projects from each decade in greater depth, I was able to extract valuable insights and develop guidelines that served as inputs for my design process.

To identify the needs and desires of seniors, I relied primarily on literature research. Over the years, this topic has been extensively studied, as it remains a current and pressing issue. The literature revealed that senior housing typically involves two scales of focus: the scale of the environment and the scale of the dwelling. However, in my opinion, an important intermediate scale is often overlooked: the scale of the building block.

For most people, stepping out of their home immediately places them in the public domain. However, for those living in large building blocks, there is often an intermediary space—a semi-private domain—between the home and the outside world. By incorporating this additional scale into my research, I was able to create a more comprehensive framework for addressing the main question. This intermediate space can serve as a transitional area that fosters community interaction, while still offering privacy and security, making it especially important for senior housing.

Reflection on the Design Process

During the design process, I realized that I had spent too much time focusing on floor plans. Designing the layouts and resolving technical challenges, such as the placement of vertical shafts, took up a significant portion of my time. As a result, other crucial aspects of the design, such as spatial relationships at different scales, began to take a backseat. For instance, when I finally solved one issue in the floor plan, I often discovered that it created problems at a larger scale—such as in the design of the atrium or

when addressing the challenges of stacking apartments efficiently. In some cases, I had to rethink entire systems, such as developing a “Tetris” approach to prevent inefficiencies in stacking units. In hindsight, I think that if I had tackled the project by working on all scales at once, my design process would have been more integrated. I could have considered the relationships between the environment, the building block, and the dwelling from the beginning with a more integrated design process, which would have created a solution that was more complete.

Additional Reflections

- **Importance of Historical Context:** I learned a lot about how architectural concepts and society views on seniors have influenced design by researching the development of senior housing across history. I was able to appreciate what has worked in the past and what may be translated for current needs due to this historical perspective.

- **Balancing Technical and Conceptual Design:** Even though solving technical difficulties like floor plans and utility shafts is

essential, the experience made it clear how important it is to find a balance between fixing technical problems and doing greater conceptual design work. A more integrated approach would have allowed for better alignment across scales.

- **Enhancing the Intermediate Scale:** It was crucial to my study and design process to use the building block as a third scale in order to create areas that serve as transitional zones. Because they provide chances for social interaction and a feeling of community without pressuring participation, these spaces are especially essential to seniors.

This experience has reinforced the importance of adopting a multi-scale, integrated approach in architectural design. It has additionally shown to me that in order to provide useful senior housing, focus must be given to all levels of interaction, ranging from the individual home to the semi-private building block to the larger urban environment.

4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects and transferability?

I think that there are many ways to deal with the problem of senior housing, and my proposal is just one of them. This concept is a creative step forward in redefining alternatives to housing for seniors by focusing on collective design. The design principles I identified during my research provide a framework that other architects might apply to deal with a range of current social problems.

Balancing the needs of different types of users was a major part of the design process. When one demographic group uses a building, it frequently has unintended negative effects on the structure as a whole. As a result, my suggestion emphasizes inclusion by making sure that senior-friendly design features are smoothly integrated while also taking other residents' needs into mind.

This project emphasizes the importance of encouraging diversity in the built environment through encouraging an inclusive, multigenerational approach.

The design's collective areas encourage interaction, lowering senior loneliness and increasing friendship and shared experiences.

This project serves as an example of how architecture can integrate social responsibility and functionality in tackling societal issues holistically. It adds to the larger discussion on how to build for an older population in a way that benefits the community as a whole, even though it just represents one possible strategy.

