

AR3AD110: Dwelling Graduation Studio – Designing for care in an inclusive environment

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P5 Reflection

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

This research and project look into the effects of architectural and urban design on the mental and physical well-being of a vulnerable target group, the elderly. It is connected to the “Health and Care” studio focusing on designing healthier living environments with caring facilities for elderly people. The project engages on the scales of urban, architectural, and interior design to reach its goals. All these levels, followed by structural details, as part of the AUBS master program, come together in a complex design to tackle the problem of health and care among elderly living environments.

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

The research and design processes maintained a dynamic relationship throughout the project. Investigation at Liv Inn deepened the understanding by highlighting the significance of fostering communal living environments. The fieldwork there emphasized the benefits of shared amenities and the necessity for housing units that are flexible enough to adapt to evolving care needs. This insight confirmed that the design should not only address physical constraints but also nurture a sense of community and mutual support.

A subsequent field trip to Vitalitas provided essential input for the medical recovery facilities aspect of the project. The observations made during this visit helped define spaces that support healing and medical care, ensuring that these specialized areas were integrated effectively into the overall design.

Early fieldwork in Tarwewijk revealed several critical issues—such as inefficient layouts that disrupted movement, steep stairs that impeded accessibility, and underused public areas that lacked vibrancy. These challenges provided a concrete foundation for preliminary design proposals and even influenced the decision regarding the project's location.

All of these insights were eventually consolidated into a set of comprehensive guidelines that directed the design development. Early sketches and massing models played an equally important role by challenging initial assumptions and prompting new research questions.

In essence, the continuous dialogue between research and design ensured that every stage of the project was grounded in real-world insights and focused on the users' needs. This iterative, user-centered approach not only addressed immediate spatial challenges but also allowed the

design to evolve organically, resulting in an outcome that is both innovative and deeply responsive to the context in which it operates.

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

The project uses the following methodology:

- Ethnographic research (Liv Inn)
- Spatial mapping (Tarwewijk)
- Interviews and personas
- Literature and Case studies

The methodology created a base and guidelines to be implemented at three scales: urban (neighborhood level), architectural (building level), and interior (apartment level).

At the urban scale, strategies were developed for neighborhood-level planning, focusing on community connectivity, public spaces, and broader contextual considerations. On the architectural scale, the guidelines informed the overall design and structure of buildings, ensuring that the physical form and spatial organization meet both functional and aesthetic requirements. Finally, at the interior scale, these principles were translated into detailed apartment-level strategies that optimize livability and user experience.

The combination of the theoretical research and the practical research (fieldwork) concluded in essential design strategies, that are context-sensitive and deal with differences in income, nationalities, and background. This layer added extra challenges and guidelines and required solutions that combined the approach used in the case studies analyzed and the needs of a culturally diverse area.

The feedback from the teachers was focused on strengthening the concepts on all scales throughout the project and on ensuring awareness of the different cultures in the area. The implementation of the feedback influenced the entire design but was particularly important for the mass design which created a strong base for the whole project. Further, the feedback was translated into using a homogenous language throughout the project and creating an atmosphere that influences physical and mental well-being.

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

This research contributes to the field of architectural gerontology by exploring design strategies that promote active aging while addressing mobility limitations. It emphasizes creating environments that enable older adults to remain independent, active and engaged in their communities. By integrating principles from architecture, urban design, and gerontology, the study offers new perspectives on how built environments can be adapted to support aging populations.

In addition to focusing on the needs of older adults, the research also addresses the growing demand for spaces that accommodate multi-generational and multi-cultural communities. In neighborhoods characterized by aging housing stock and low-income profiles, the study's design strategies promote inclusivity and social cohesion. It recognizes that modern urban environments must cater to a diverse range of users, ensuring that communal spaces foster interaction, cultural exchange, and mutual support across different age groups and backgrounds.

5. How do you assess the value of the transferability of your project results?

The project provides a set of practical recommendations aimed at enhancing the overall quality of life for all users, with a primary focus on residential environments and the common and public spaces that support them. These recommendations are grounded in extensive research and field observations, ensuring that the proposed interventions are both evidence-based and directly responsive to the needs of everyday users.

A key strength of the project lies in the versatility of its guidelines. While initially made for residential projects—addressing issues like spatial efficiency, accessibility, and community connectivity—the principles established can be adapted to a wide range of projects, from residential to public space and urban projects. Thus, the guidelines can be transferred to other projects and adapted to the type of projects, following the line of mental and physical well-being and encouraging active aging.

Reflection questions:

1. How can architectural design support a flexible design that future-proves the buildings and adapts to the changing needs of the new generations?

Architectural design can support flexible, future-proof buildings by focusing on modular and adaptable layouts. Modular design features spaces that are easily configurable or expanded using prefabricated components and movable walls, so the buildings evolve according to the changing needs. By prioritizing open floor plans and universal structural grids, interior spaces can transition between different functions over time, such as communal spaces, residential, and commercial. Such adaptability is strengthened by using durable and sustainable materials that extend the building's lifespan and reduce the costs of renovations, as well as reducing the environmental impact.

These strategies ensure layout changes as well as functional adaptability for the needs of future generations.

2. How can the architectural design for multigenerational spaces promote active aging without segregating the groups?

Architectural design spaces can promote active aging by fostering intergenerational, inclusive interactions while accommodating diverse social and physical needs. Rather than segregating different age groups, design should encourage shared spaces focusing on mobility, comfort, and social interaction for everyone. This should include walkable layouts

with gradients of interaction, seating areas to encourage conversations, and accessible amenities. Including flexible and open communal areas, such as gardens, kitchens, and game rooms, without strict division walls encourages social mixing and offers different generations spaces to connect. Visual connections allow for passive interaction and create a sense of belonging, while accentuating the gradients of interactions.