

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

| Personal information | |
|----------------------|------------------|
| Name | Muriël de Ridder |
| Student number | 4874420 |

| Studio | | |
|---------------------------------------|---|---------------------|
| Name / Theme | Dwelling graduation studio: Designing for care in an inclusive environment | |
| Main mentor | Leo Oorschot | Research |
| Second mentor | Birgit Jürgenhake | Architecture |
| Third mentor | Lex van Deudekom | Building technology |
| Argumentation of choice of the studio | I am interested in the design of dwellings for specific user groups. I enjoy working on this 'human' scale of architecture. Therefore I chose this studio, as I wanted to explore the needs of a specific user group and design for them; specifically people with a diagnosis of dementia. | |

| Graduation project | |
|---------------------------------|--|
| Title of the graduation project | Dementia-Friendly design for Aging Couples: An Architectural Perspective |
| Goal | |
| Location: | Delft |
| The posed problem, | Because there is a growing elderly population in the Netherlands, there is also an increasing amount of people that need care. In particular, the risk of dementia significantly increases with age. About 68 percent of people with dementia lives at home and gets care from their family or close social network (Cijfers rond Dementie, 2023). There is a total of about 350.000 of these informal caregivers that take care of someone with dementia. Half of these informal caregivers live together with the person with dementia, mostly being their partner. When they no longer can manage the care for their partner with dementia, it becomes a significant reason for considering admission to a nursing home or an assisted living facility. However, in the current healthcare system, there are few options for the 'healthy' partner to move with |

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| | <p>them. As the elderly population continues to expand, it is crucial to explore innovative living alternatives to ease the strain on informal caregivers and provide appropriate housing options that suit the needs of both partners.</p> |
| <p>research questions and</p> | <p>The main research question for this thesis will be:</p> <p>What living environmental features can support elderly couples who wish to live together, while one of them experiences dementia, to maintain their shared living arrangements?</p> <p>To answer this question, I will answer the following sub-questions:</p> <ol style="list-style-type: none"> 1. What are the different stages of dementia and what are their needs in their living environment? 2. What are the living environmental needs of a person living with a partner with dementia? 3. What kind of living environments do already exist for elderly couples where one experiences dementia? |
| <p>design assignment in which these result.</p> | |
| <p>By focusing on the specific scenario of elderly couples where one has dementia, the research seeks to identify and propose design solutions that cater the collective requirements of both individuals. This involves recognizing the needs of the person with dementia while also acknowledging the partner's role as an informal caregiver and cohabitant. This research aims to concentrate more on the living environmental scale, to present a toolbox of design guidelines for designers. These design guidelines will be translated into a design for a shared living environment for people with dementia and their partner, to support couples to maintain their shared living arrangements and to take pressure off the informal caregiver. A shared living environment does not necessarily have to mean that partners live in the same home, they could also live separately and still engage in shared activities outside of their living spaces.</p> | |
| <p>Process</p> | |
| <p>Method description</p> | |
| <p>To answer the research questions, different types of research will be conducted. This segment will elaborate how to implement and execute these distinct research techniques.</p> <p>Literature study</p> <p>An important criterion for the literature study is that it needed to revolve around dementia, caregivers, and living environmental features. The foundation of the research will consist of a literature review of books and articles as well as an analysis of existing research, concerning the topic of dementia design and couples living together with dementia. The literature review will provide answers to all three of the sub-questions. To find relevant literature, there will be searched using key-</p> | |

words such as 'dementia', 'informal caretaker', 'living together', 'couplehood', and 'architecture'. Additionally, an examination was conducted on the articles cited within the research that was found.

Fieldwork/observations

During the fieldwork week I visited two care facilities for people with dementia. I also spend the night there to get a complete view of what happens there. Here I made observations of people's daily lives and routines. I made pictures of the elements I want to highlight in my research. For the observations, I will specifically look if I can recognize the living environmental attributes that have been established in the studies literature.

Interviews

To answer the research questions, interviews will be conducted with healthcare providers during the fieldwork week and partners/family members of individuals with dementia residing there. The responses will likely overlap at times, providing complementary information together with the literature.

Caregivers of people with dementia

I want to learn from the experience of caregivers what the needs are of people with dementia, specifically in their living environment. This will help answer the first research question. I would like to know from them how they think the living environment influences people with dementia, and what they think are good aspects of the care facility that they work at and what can be improved.

Partners of someone with dementia

With the interviews of a partner of someone with dementia, I want to get to know what activities couples still do together, where they need specialized care and how dementia has impacted the life of both partners. This question will help to answer the second sub-question. Examples of questions are: What is it like to live with someone with dementia? What impact did this have on your life? What do you like to do together?

family members

I want to have a conversation with family members of individuals with dementia, whether the person with dementia still lives in an independent home or care institution. Asking questions like; What was the selection process for considering future housing options? Why did you choose this location? They will bring an outsiders perspective to the situation of a couple.

Case studies

Case studies do not permit generalization per se but may provide insights that can be recontextualized to other situations. By testing them on the design guidelines that have been conducted while answering the first and second sub-question, a review can be made about the projects. The selection of these case studies is based on several criteria: the facility must cater to individuals with dementia and include apartments designed for couples.

Establishing design guidelines

Combining the information from the fieldwork, literature and case studies, a number of design guidelines will be established and categorized in general themes. The guidelines will be ranked by importance on a scale from one to three stars, based on how many times they were mentioned in interviews and literature. The conclusion will combine all the guidelines, looking where they overlap between those of the healthy partner and the partner with dementia.

Literature and general practical references

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Reflection

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

In relation to the Dwelling Graduation Studio: Designing for Health and Care in an inclusive environment, this research is aiming to identify and propose design solutions that cater the collective requirements of both the partner with dementia, and the 'healthy' partner as an informal caregiver. These guidelines can improve the well-being of being of both partners. The Architectural and living environmental scale is also in relation with the master track Architecture.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

More than half of the caregivers for people with dementia in the Netherlands experience moderate to heavy levels of burden, and one in eight even admits to being severely overwhelmed (Dementiamonitor mantelzorg, 2022). New living solutions could make it possible for couples where one faces dementia to maintain their shared living arrangements and relieve the burden on the informal caregiver.

In terms of the scientific framework; although there is separate research on the unique living environmental needs of individuals with dementia, and the themes for maintaining a fulfilling life for both partners in the context of dementia, there is a research gap where these two are combined and overlapping themes are explored. There is also a lack of the perspective of the partner as an informal caregiver and the living environmental needs that are important for them. This research aims to add to this perspective and combine the collective needs of both partners.