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<b>Studio</b>	
Name / Theme	The architecture of the Interior – The Healthy Environment
Teachers / tutors	Mechthild Stuhlmacher, Laura Alvarez
Argumentation of choice of the studio	<p>This studio was suiting for me as a graduation project because I have a sincere interest in health care architecture. This arises mostly because of my former studies: I finished a Bsc degree in Medicine from the Radboud university in Nijmegen.</p> <p>The aging population of the Netherlands is a second reason why this seems socially very relevant in our time. Contemporary solutions should be considered in a time where the heritage of post-war health care architecture is questioned more rigorously.</p> <p>The last reason I pose is the affinity I feel for the crafting work method practiced at the Interiors chair. The importance of creating and discovering the tectonics that is present in handcrafted models seems very reasonable to me as a student in architectural design.</p>

<b>Graduation project</b>	
Title of the graduation project	Crooswijk Charterhouse - The collective and private combined.
<b>Goal</b>	
Location:	The project location is situated in Rotterdam, northwest of the city center in the city part of Kralingen-Crooswijk. Exactly at the intersection of the two Neighbourhoods Rubroek en Oud-Crooswijk, there is a rundown senior-flat and nursing home of the 70s. This structure will be replaced and will serve as site for my graduation project.
The posed problem,	The existing complex offers limited outdoor space to the patients and seniors living there. The environment is very institutional and clinical. These characteristics from the 70s architectural paradigm should be highly questioned.

	<p>The existing building is designed from the inside outside. Which leads to a terribly bad functioning urban plan and fragmented public space.</p> <p>On the level of the target-group the separation of patient with dementia and spouse is questioned.</p> <p>When hospitalization is imminent, patient and spouse are separated harshly. There is currently no room to live together for couples that have lived their whole life in the same house and environment.</p> <p>The institution has only place for sick people, the healthy are not welcome.</p>
research questions and	<p>Hence, in the design the following questions are answered:</p> <ol style="list-style-type: none"> <li>1. What are the possibilities of a longer stay of the spouse in a dementia care-home to create a positive effect on partner and patient? Could they live together, with a typology of housing that could be a particular twist to existing typologies?</li> <li>2. What can be the organizing role of gardens in the complex?</li> <li>3. How could the garden configuration and design fulfill the need for a thorough differentiation in private, collective and public?</li> </ol>
design assignment in which these result.	<p>In the graduation project the assignment will be based around the idea of collective living. The target-group is people with dementia, with the addition of spouse housing and facilities. The tension that arises from the different needs and ideas that spouse and dementia patient have about private, collective and public life have will lead to a basic scheme that will be further developed to a consistent whole.</p>

## Process

### Method description

A workshop exploring the architectural and urban qualities of the 'hofje' typologies will be the starting point to explore on a systematic levels the contribution of courtyards in the design. In collaboration with Willemijn Floets.

On a more practical and design level, a garden workshop is organized by the chair that focuses on the idea of garden as a soothing and qualitative element in the hospital or clinical surrounding. This will be done in a role-play game, where we as Msc 3 students, are the garden architects of the Msc 4 students.

After this introductory parts, a more theoretical and social research will be followed. Under tutoring of Irene Cieraad a literature and social study will be done. In the theoretical part of this research the positive effects of nature and garden on dementia patients and seniors are explored. What are the positive effects on the target-group, and what are known negative effects?

The second step is a social research on the target-group. In my research the focus will be on the dramatic separation that often takes place when partners are separated from each other when the home situation seems to be impossible to sustained. Are there alternatives to envision?

This research will be then used as as informing my graduation project on both program and design level. An iterative process will take place, from top-down 1:500 till bottom up, 1:20.

## Literature and general practical preference

### Literature

Bossen, A.

2010 The importance of getting back to nature for people with dementia. *Journal of Gerontological Nursing*, 36(2), 17-22.

Beattie, L., O'Connor, D., Phinney, A., Smith, A., Small, J., Purves, B. & Perry, J. 2007 Personhood in dementia care Developing a research agenda for broadening the vision. *Dementia*, 6(1), 121-142.

Chalfont, G. E., & Rodiek, S. 2005 Building edge: An ecological approach to research and design of environments for people with dementia. *Alzheimer's Care Today*, 6(4), 341-348.

De Bruin, S., Oosting, S., van der Zijpp, A., Enders-Slegers, M. J., & Schols, J. 2010 The concept of green care farms for older people with dementia An integrative framework. *Dementia*, 9(1), 79-128.

Eyck, A. v., Bakema, J. B., Boon, G., Hardy, J., Hertzberger, H., & Schrofer, J. 1959

Drempel en ontmoeting - de gestalte van het tussen. *Forum*, 14.

Gonzalez, M. T., & Kirkevold, M. 2014 Benefits of sensory garden and horticultural activities in dementia care: a

modified scoping review. *Journal of clinical nursing*, 23(19-20), 2698-2715.

Hartig, T., & Marcus, C. C. 2006 Essay: Healing gardens—places for nature in health care. *The Lancet*, 368, S36-S37.

Stigsdotter, U., & Grahn, P. 2002 What makes a garden a healing garden. *Journal of therapeutic Horticulture*, 13(2), 60-69.

Sugiyama, T., & Thompson, C. W. 2007 Outdoor environments, activity and the well-being of older people: conceptualising environmental support. *Environment and Planning A*, 39(8), 1943.

#### Documentaries:

Van Ditschuyzen, Ireen: 2013 Dementie en dan. IDTV Docs

#### Internetbronnen:

[http://www.alzheimer-nederland.nl/media/840711/factsheet\\_dementie\\_algemeen\\_publicatieversie\\_03-02-2015.pdf](http://www.alzheimer-nederland.nl/media/840711/factsheet_dementie_algemeen_publicatieversie_03-02-2015.pdf) (15-05-2015)

<http://www.alzheimer-nederland.nl/hulp-en-advies/alzheimer-cafes.aspx> (15-05-2015)

<http://hogeweyk.dementiavillage.com/plattegrond/> (18-05-2015)

<http://www.werkenindeouderengeneeskunde.nl/2013/09/dementie-en-dan/> (15-05-2015)

#### Social Research:

Different visits to Alzheimer cafés in Den Haag, Rijswijk and Rotterdam and informal conversations with patients and their spouses. These will learn me more about dementia and the preferences of the target-group.

Interviews with care-givers, social workers and professionals dealing on a daily basis with dementia patients.

## **Reflection**

### **Relevance**

Dementia is a severe syndrome that is mostly seen in older people. Old age is besides smoking, depression, little movement, diabetes and obesity the main risk factor. The two most prevalent causes for the syndrome are Alzheimer's disease and vascular dementia.

Although most people with dementia live at home as long as possible, they become increasingly helpless and in need of care, hospitalization often follows. The increased need of care is the consequence of cognitive and functional difficulties. People with dementia normally live 8 years before they die of the disease's complications. Cure is not be found yet.

The Netherlands is getting older, hence more people with dementia are diagnosed. In the next 40 years, the amount of people with dementia will rise from 260.000 till 690.000 in 2055. It will increasingly become a reality of our society that we need to face.

This graduation studio deals with the contemporary problems of this vulnerable group of people in our society,

## **Time planning**

February / March / April

Research on the Hofjes typology with Willemijn Floets  
Garden workshop: role playing game in collaboration with Msc4  
Site research together with Marloes Pieper  
Preliminary design ideas urban plan  
Research on the Hogeweyck dementia village to define program.

Presentation of progress in P1

May / June

Incorporating critique of P1 presentation  
Defining leading concepts for the dementia center

Iterative process on:  
Urban plan 1:500  
Floor plans 1:200  
Group dwelling dementia 1:50  
Facade model 1:20  
Building several models on scales  
1:500, 1:200, 1:50 en 1:20  
Prepare rationale and narrative for P2 presentation.

Presentation of Preliminary design in P2

(In this week also a retake of the Arch design exam takes place on the 24<sup>th</sup> of June: 3 ECTS)

August / September / October

Incorporating critique of P2 presentation

Reworking on the floor plans and sections 1:200

First sketches of facades 1:200

Reference research, searching for atmospheres and expression

Definite materialization concept

Iterative process on:

Details 1:20 and 1:5

Consultations with building construction tutor and further development of technical plan.

Presentation of progress in P3

November / December

Incorporating critique of P3 presentation

Working on the final plans, sections and facades 1:100

Final decision of materialization parts 1:50/1:20/1:5

Construction floor plans

Presentation of progress and final design lay out and materialization in P4

January

Incorporate critique of P4

Preparation for the public presentation.

Finalize drawings and models.

Prepare rationale and narrative for final presentation.

P5 Public presentation

Graduate

Receive diploma