

# 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](mailto: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	Roos Salih
Student number	

Studio		
Name / Theme	The Advanced Housing Design Graduation Studio (AR3AD100)	
Main mentor	Olv Klijn Anne Kockelkorn	Architectural design Research and methods
Second mentor	Ferry Adema Frank Schnater	Building Engineering
Argumentation of choice of the studio	The role of an architect, in my opinion, is to serve as a bridge between the needs and requirements of the users and building space. The Advanced Home Design Graduation Studio's goal is to research how housing design might help residents reduce their ecological footprint while also ensuring social inclusion. This studio's investigation of the societal problem at hand is critical, as is a greater knowledge of habitation as a social practice and the city as an ecosystem. As a result, my interest in the Advanced Housing Studio was piqued by the potential to learn and explore in order to contribute to the solution of urgent social issues.	

Graduation project	
Title of the graduation project	An intergenerational building that takes aspects of ageing and caring into account

Goal	
Location:	Rotterdam
The posed problem,	[Problem Statement]
research questions and	[Research Question]
design assignment in which these result.	[Design Assignment]

Globally, societies are seeing a long-term rise in the older adult population; by 2050 one in every four persons will be 60 years old or older. For the first time in human history, there will be more senior people than children in the population (WHO, 2018). In the Netherlands the grey pressure was 34% in 2021. According to population predictions, this will rise to over 50% in the next thirty years (CBS, 2021). The numbers

of solo dwellers; solo-dwelling elderly; and people living in cities, especially cities with populations under five million, will also increase (WHO, 2018). However, most city neighbourhoods do not suit contemporary lifespan demands, since they were largely constructed for youthful, typically abled individuals (BHSc, 2021). The increasing segregation of generations into same-age institutions such as preschools and retirement homes decreases opportunities for young children and elderly persons to interact with, understand, and learn from one another (Cortellesi & Kernan, 2016). Particularly significant is social isolation. Social isolation is strongly tied to loneliness, which is described as 'a quantitative manner of weakened social network' (BHSc, 2021). The effect of social isolation is explored in the 2019 BC Centre for Disease Control study, which mentions that housing is a 'key component' in the battle against this problem.

With age-segregation, social isolation, and loneliness being identified as major social issues, how can architects adapt and improve cities to combat these challenges? How can environments be created that are more 'age-inclusive'? And is there a design proposal that would be more sensitive to the changing population's demands? Meaningful intergenerational relationships are fundamental social structures that benefit people of all ages (BHSc, 2021). Therefore, I propose a study for intergenerational housing that serves as a potential solution in the context of these changing demographics.

My aim is to explore an innovative and adaptable residential design that might be one of the solutions to Dutch social issues and demographic changes. To create a residential neighbourhood where one may live throughout many life stages while being valued as an individual, I have created research and design questions to take the first steps toward developing a 'caring place'.

The main research question is:

"How can one create an intergenerational building that takes aspects of ageing and caring into account?" This research question is divided into three sub-questions to gain a deeper understanding:

What are the intergenerational care and support cycles and how can they be spatially articulated?

What are each target group's residential, spatial and programmatic needs?

How can one create opportunities for intergenerational encounters through the programming and design of collective spaces?

## **Process**

### **Method description**

The focus of this research is on incorporating ageing requirements and intergenerational views and techniques into architecture. To support the use of multiple research methods, I have divided my study into three themes. The three themes correlate with the three sub-questions. Several research approaches based on quantitative primary and secondary data will be used.

Intergenerational care across various cultures: What are the intergenerational care and support cycles and how can they be spatially articulated?

To answer this question, a sociological literature study is a useful first method for thematic analysis, since it situates the main ideas about this theme. A Case study review will serve to translate the literature study into spatial design techniques.

Spatial and programmatic needs in all-age-inclusive housing: What are each target group's residential, spatial and programmatic needs?

This question will be explored by a literature study on all-inclusive spatial requirements and design strategies. This will be supported by a praxeological method of narrative biographic interviews. This will be used to develop the graphic novel. Two residential projects will be used as case studies: a residential complex for urban families and a residential complex for elderly people.

Spaces for an intergenerational encounters: How can one create opportunities for intergenerational encounters through the programming and design of collective spaces?

A sociological and architectural literature review on intergenerational interactions and on community-wide settings, activities, and spaces that attract all age groups will provide a foundation for analysing two case studies on this theme. These case studies are of two projects: an intergenerational complex and a cohousing complex focused on elderly people.

Using the data and insights gathered, design guidelines will then be carried out. The literature reviews, project analyses, interviews, and graphic novel will offer a comprehensive understanding of the topic. I will combine these results with the design graduation studio's thematic group research and plan analysis to create a project brief and a reference framework for use in designing.

## Literature and general practical preference

### Books

Anttiroiko, A., & Jong, D. M. (2020). *The Inclusive City: The Theory and Practice of Creating Shared Urban Prosperity* (1st ed. 2020 ed.). Palgrave Pivot.

Center for Inclusive Design and Environmental Access, Steinfeld, E., & White, J. (2010). *Inclusive Housing: A Pattern Book: Design for Diversity and Equality* (Illustrated ed.). W. W. Norton & Company.

Gromark, S., & Andersson, B. (2020). *Architecture for Residential Care and Ageing Communities: Spaces for Dwelling and Healthcare* (1st ed.) [E-book]. Routledge.

Handler, S. (2019). *Age-Friendly Cities and Communities: A Global Perspective (Ageing in a Global Context)* (First ed.). Policy Press.

Lawlor, D., & Thomas, M. A. (2008). *Residential Design for Aging In Place* (1st ed.). Wiley.

Newman, S. (1989). *Intergenerational Programs*. Taylor & Francis.

Simpson, D. (2015). *Young-Old: Urban Utopias of an Aging Society*. Lars Muller.

### Reports

BHSc. (2021, May). *Intergenerational housing as a model for improving older-adult health* (No. 63 no. 4). BC Medical Journal.

Glezer, H. (2019). *Cycles of care Support and care between generations*. Institute for Family Advocacy & Leadership Development.

World Health Organization. (2018). The Global Network for Age-Friendly Cities and Communities: Looking Back over the Last Decade, Looking Forward to the Next.

#### Scientific articles

Biggs, S., & Carr, A. (2015). Age- and Child-Friendly Cities and the Promise of Intergenerational Space. *Journal of Social Work Practice*, 29(1), 99–112. <https://doi.org/10.1080/02650533.2014.993942>

Cortellesi, G., & Kernan, M. (2016). Together Old and Young: How Informal Contact between Young Children and Older People Can Lead to Intergenerational Solidarity. *Studia Paedagogica*, 21(2), 101–116. <https://doi.org/10.5817/sp2016-2-7>

Mercken, C. (2003). Neighbourhood-Reminiscence. *Journal of Intergenerational Relationships*, 1(1), 81–94. [https://doi.org/10.1300/j194v01n01\\_08](https://doi.org/10.1300/j194v01n01_08)

Ronald, R., & Lennartz, C. (2018). Housing careers, intergenerational support and family relations. *Housing Studies*, 33(2), 147–159. <https://doi.org/10.1080/02673037.2017.1416070>

#### Website

Centraal Bureau voor de Statistiek. (2021, July 2). Ouderen. Retrieved 2 November 2021, from <https://www.cbs.nl/nl-nl/>

## 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)?

The goal of the Advanced Home Design Graduation Studio is to look into how housing design might contribute to a more socially inclusive and sustainable environment. Intergenerational interactions are important social structures that benefit and include all, which is why my research is relevant to the studio. Care, on the other hand, isn't just a matter between human beings; it also includes care between humans and their environment. This relates to our studio's second focus, which is ecology.

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

While recent sociological studies have concentrated on intergenerational connections, fewer architectural studies have addressed this issue. Most related architectural studies have centred on elderly care or ageing in place. Because there are gaps in the literature on how design might contribute to intergenerational care possibilities, I have identified recurring primary themes and propose a study for intergenerational housing that serves as a potential solution in the context to Dutch social issues and demographic changes.