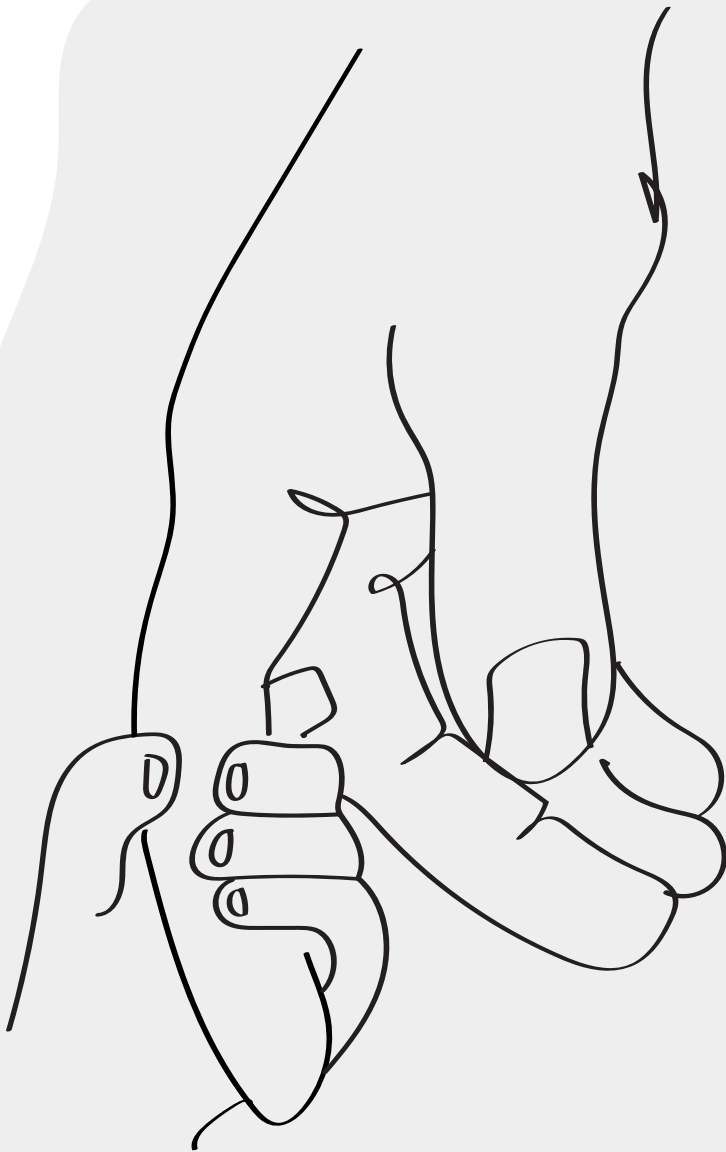


A CARING PLACE

Research Plan

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INTRODUCTION

Background and Context

When I left my family's home, I knew I would always be grateful for the care and support that my community provided to one another. I will carry the shared experience with me forever. My mother, my little sister, and I first moved into the neighbourhood in 2000. It had a diverse socioeconomic profile, as well as a multicultural and multigenerational population. My mother worked full-time while raising two young daughters as a single parent. Families lived on either side of us, but a lone elderly lady lived behind.

This neighbour, who had no grandchildren, was frequently alone at home and enjoyed spending time in her garden. My sister and I played outside often as kids, and as we grew older, we became closer to the elderly lady. She eventually learned about our family situation and offered her assistance babysitting. She taught us how to walk, how to hold a pen, how to write, and how to read, and she told us about the Second World War from her own personal experience. When

my sister and I went to bed in the evening, our mother chatted with the woman over a glass of port. A wonderful bond was formed. As my sister and I grew older, we helped with the elderly lady's groceries, watched ice skating on TV with her, and invited her to all our social gatherings. We also started calling her 'Oma', which is Dutch for 'grandmother'. This intergenerational relationship allowed us all to grow with each other. We shared knowledge, care, and support in the same way a typical family would.

Unfortunately, the woman's home was built for active young families, and there were no alterations that could be made to accommodate her rising age. After two major falls down the stairs, she was moved into a care facility, far away from the community where she had spent much of her life. She felt isolated from any form of social activity. It left us all heartbroken.

Sadly, this experience is part of a larger trend....



Figure 1. Persona's (made by author)

INTRODUCTION

Problem Statement

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). The Netherlands had 3.5 million people over the age of 65 as of January 1, 2020. This equates to 19.8% of the total population. In 2021 the grey pressure was 34%, which means there were three persons of working age (20 to 65 years) for every person over 65. According to population predictions, this will rise to over 50% in the next thirty years before dropping somewhat to a plateau. The numbers of solo dwellers; solo-dwelling elderly; and people living in cities, especially cities with populations under five million, will also increase (CBS, 2021). A century of human development has led to these patterns (WHO, 2018).

However, most city neighbourhoods do not suit contemporary lifespan demands, since they were largely constructed for youthful, typically abled individuals. Furthermore, most older people do not wish to live in age-segregated communities (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' and is characterised as 'a felt loss of a social network' (BHSc, 2021). Loneliness is linked to a reduction in daily function, which

has a negative impact on subjective health and raises the risk of illnesses like depression and of mortality. 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, architects must consider how to adapt and improve cities to combat these challenges. How can environments be created that are more 'age-inclusive'? Is there a design proposal that would be more sensitive to the changing population's demands? As noted earlier, meaningful intergenerational relationships are fundamental social structures that benefit people of all ages. Supporting this is the focus I hope for in my graduation project. Therefore, I propose a study of opportunities for a socially inclusive and caring neighbourhood in the context of these changing demographics, particularly considering people's desire to continue living in their own homes as they age. My aim is to explore an innovative and adaptable residential architectural design that might be a solution. I believe this may lead to a hybrid typology as a solution to Dutch social issues and demographic changes.

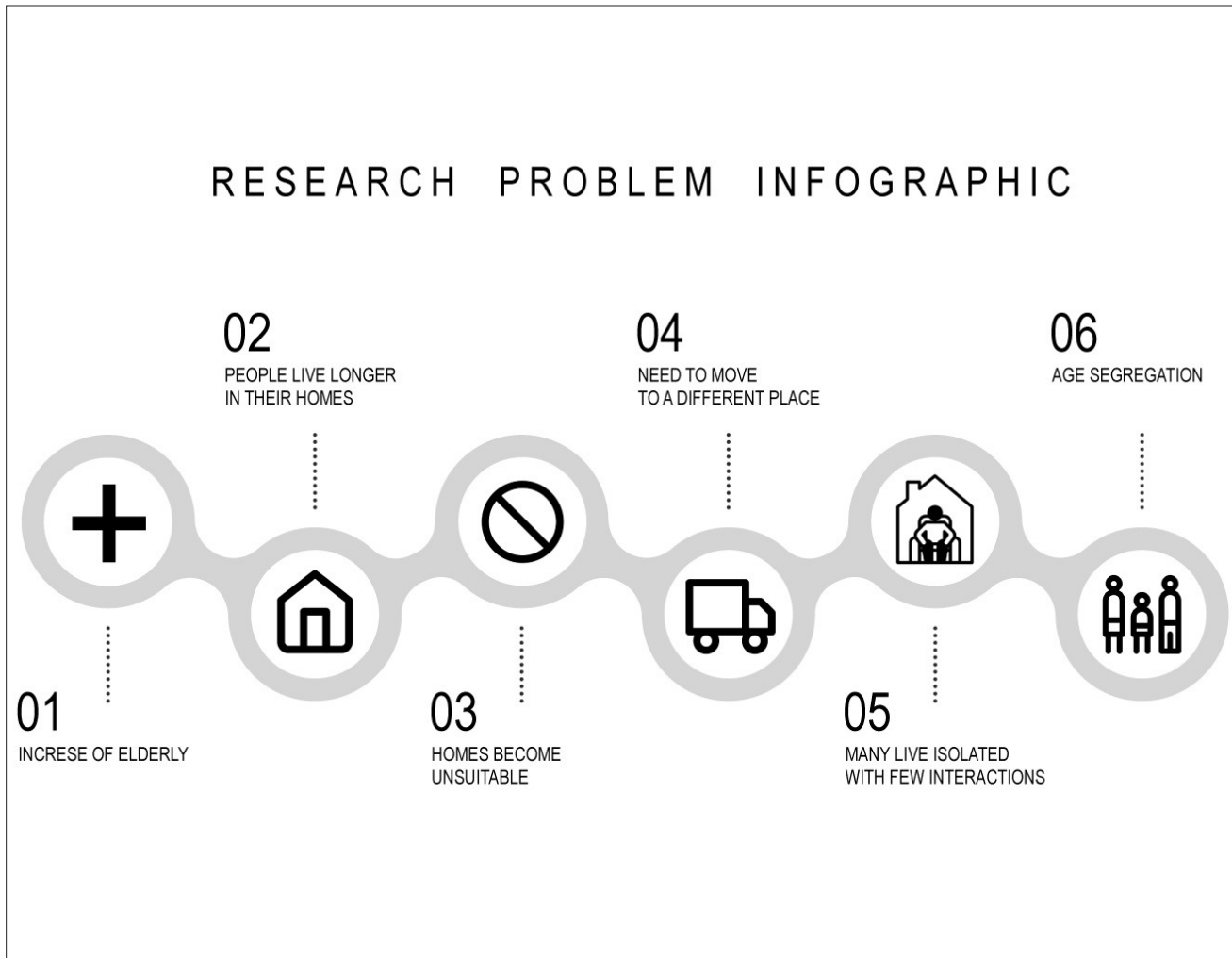


Figure 2. Problem diagram (made by author)

Research Questions

To create a residential neighbourhood where one may live throughout many life stages while being valued as an individual, I have divided the target stages into childhood, adulthood, and elderly adulthood. I have also 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?

How can one create opportunities for intergenerational encounters through collective spaces?

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

RESEARCH FRAMEWORK

Theoretical 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 have divided the literature review into subsections that address various parts of my research topic.

Care and relationships between generations

While data on childcare needs is readily accessible, less is known about various forms of caring within families or family-like relationships. Social scientist Newman (1989) compiled with different authors a sociological and anthropological study on intergenerational programs. It presents a chronology of events from 1963 to 1988 that have contributed to the growth of intergenerational relationships. According to Newman (1989, p.12), the term 'intergenerational' is becoming more common in descriptions of community care programs that tackle a broad variety of modern social issues. The term 'intergenerational' relates to the way people of various generations interact to nurture and support one another. The elderly individuals in a family system should, in theory, pass on their collective knowledge, perspective, and understanding to the younger generations. The elder generation likewise receives care. The Newman (1989) research is important to my studie because it underpins my main theme of care and intergenerational relations.

Keywords: intergenerational; social; care; family

Grow old along with me!

The best is yet to be,

The last o f life, for which the first was made

Our times are in his hand.

Robert Browning

Quote Robert Browning. Newman (1989, p.3)

Spaces for an intergenerational public

Social policy professors Biggs and Carr (2015) speak about 'generationally intelligent' spaces, which are characterised as communal places where different generations can meet, communicate, and negotiate common usage (Biggs & Carr, 2015, p. 106) Biggs and Carr propose reemphasising spaces that enable intergenerational 'play' in an intergenerational urban environment. This 'play' is defined as what takes place in spaces that can accommodate many generations' timetables and interests at the same time. The topic of intergenerational environments is relevant to my study's second sub-question.

Keywords: age-friendly; child-friendly; active ageing; intergenerational; social cohesion; urban design

"Caring, communication, collaboration, learning, positive role modeling, and positive relationship building, all of these benefits are inherent in the intergenerational exchange, and all extend to the community at large, affecting values and behaviors and helping to shape a society that is respectful of the developmental and social needs of all its generations."

Quote Newman (1989, p.19)

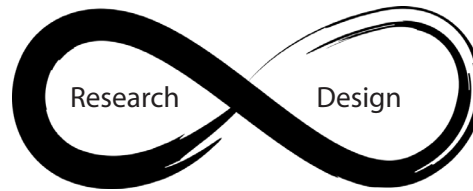
Spatial and programmatic needs in all-age-inclusive housing

Gromark, S., & Andersson, B. (2020) addresses critical architectural design issues in the fields of residential innovation, ageing communities, and health. This study provides data on architectural developments, care developments, and environmental design patterns. It is thus particularly relevant to my research; however, the study falls short on all-ages spatial requirements. Handler (2019) provides more details on how to create age-inclusive places using data on the techniques and needs of all-age-inclusive spaces.

I hope to use these studies and many more to answer the main-question and therefore to close the research gap between intergenerational care relationships and all-age-inclusive spatial designs. In this way, I will discover how to create an intergenerational building that takes aspects of ageing and caring into account.

Keywords: age-friendly; design for access; ageing

RESEARCH FRAMEWORK



Research - Design Diagram (made by author)

Research methods

The focus of this research is on incorporating ageing requirements and intergenerational views and techniques into architecture. A healthy lifestyle starts with environments that support everyone at every stage of their lives. As noted above, and to support the use of multiple research methods, I have divided my study into three themes. As architect and urban designer Jan Gehl says, "First life, then spaces, then buildings. It never works the other way around." The three themes correlate with the three sub-questions. Several research approaches based on quantitative primary and secondary data will be used.

1. Life: What are the intergenerational care and support cycles?

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. Interviews with people from the different life stages will then be conducted, examined, and compared with literature study. This will serve as the foundation for the social spatial analysis that will be used to develop the graphic novel.

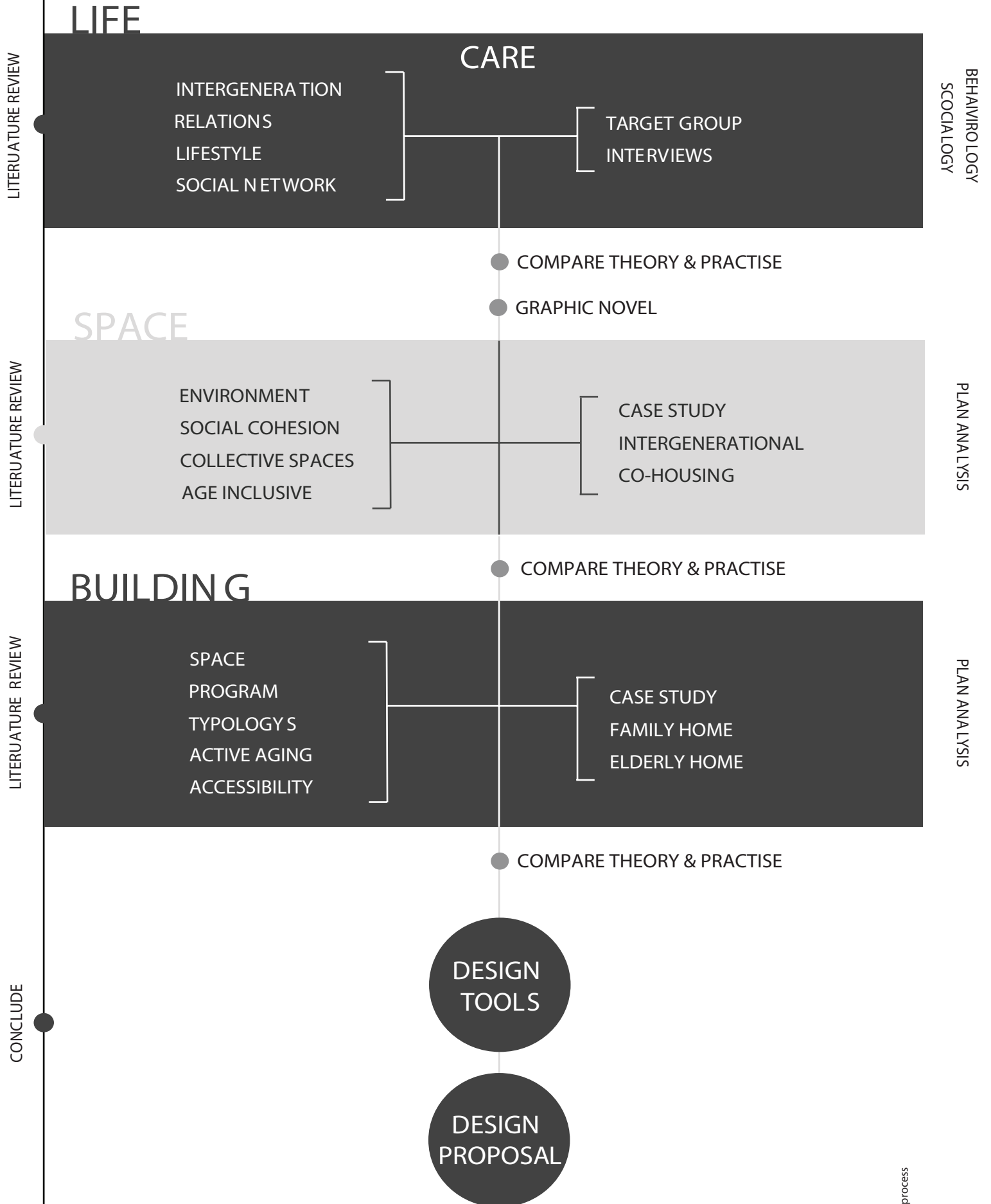
2. Space: How can one create opportunities for intergenerational encounters through collective spaces?

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.

3. Building: What are the target group's residential spatial and programmatic needs?

In this last part of the research, I will dive into the literature on all-inclusive spatial requirements and design strategies. Two residential projects will be used as case studies: a residential complex for urban families and a residential complex for 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 urban masterplan, previous thematic group research and plan analysis to create a project brief and a reference framework for use in designing.



CASE STUDIES

1.

Intergenerational housing

STA | zwei+plus

Location: Wien, Austria

Architects: Trans_city TC

Completed: 2018

Units: 128 apartments



© Hertha Hurnaus, Leonhard Hizensauer

2.

Co-housing

Vindmøllebakken Housing

Location: Stavanger, Norway

Architects: Housing / Helen & Hard

Completed: 2019

Units: 40 co-living units, 4 townhouses, and 10 apartments



© Sindre Ellingsen



Site plan



First floor

CASE STUDIES

3.

Family housing

BIGyard / Zanderroth Architekten

Location: Berlin Germany

Architects: Zanderroth Architekten

Completed: 2010

Units: 23 townhouses, 10 garden houses, 12 penthouses



© Simon Menges

4.

Elderly housing

The Architect

Location: Utrecht, The Netherlands

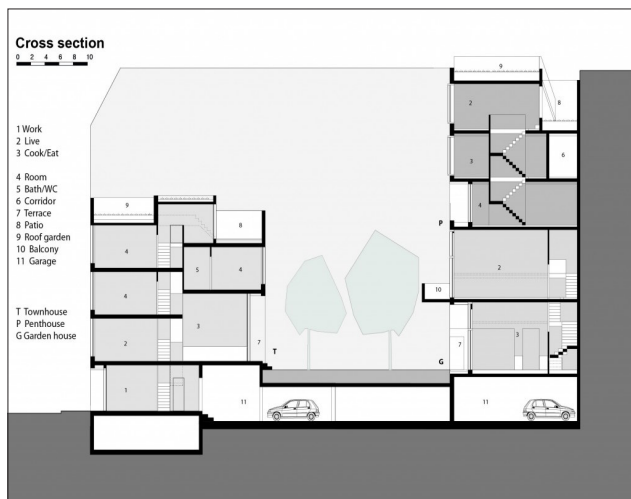
Architects: LEVS architecten

Completed: 2013

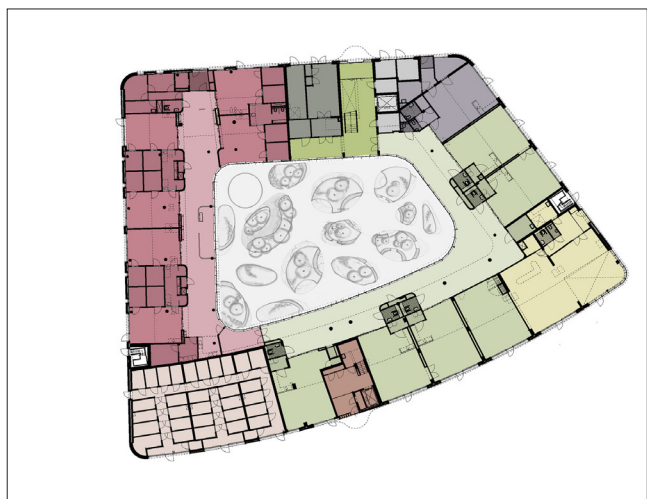
Units: 30 apartments



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Cross section



Groundfloor

PRELIMINARY CONCLUSION

Relevance and relation to design

The Advanced Home Design Graduation Studio aims to investigate how housing design can decrease inhabitants' ecological impact and ensure social inclusion. The location of the studio is Rotterdam's central business area, which is situated on the northern side of the train track between the city's main station and the Blijdorp Rotterdam zoo. The goal of the urban masterplan is to establish a socially inclusive, sustainable, and human-scaled living environment based on the long-term non-speculation concept. My research relates to this because it reacts to the demographic changes and social issues that Rotterdam is facing and combines two of the masterplan's three target groups: elderly people and families. According to the BHSc, Centre for Disease Control, study (2021), existing intergenerational programs improve the self-reported health, physical

function, and cognition of the target groups. Furthermore, these programs benefit society as a whole by creating a sense of belonging. The BHSc study indicates that intergenerational housing opportunities could be used to address modern housing and social issues. The end purpose of this study is to provide guidelines and architectural tools for designing an intergenerational building complex that supports community care and ageing in place. The guidelines will be organised around a set of reflective theories and analyses. Research theory and practise will be compared. With combined methods of sociological and architectural research and practice, I hope to contribute to new knowledge on intergenerational care by design.

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