Bringing people together through housing and combatting loneliness

Understanding the role of housing in stimulating social support and combatting loneliness among elderly and young adults.

GEERTJE DE LANGE
Front page image: own photo.

Note: if not stated otherwise, the pictures in the report were taken by the author.
Preface

Full of fascination I have worked on the topic loneliness for the last 10 months. A topic that has puzzled me during my time as a student. Having started my studies in Human Geography and Planning at the University of Utrecht, the Netherlands, I became involved in a network of international students. They inspired me to study for one year at the Karl-Franzens University of Graz, in Austria. Later on, I moved to Stockholm to study for a master degree in Sustainable Urban Planning and Design. While I enjoyed my time in each country, I also experienced what it is like to be far away from home, be disconnected from others, feel isolated and alone. Especially within the student housing in Graz, I found myself wondering who my neighbors were, what other residents in the building were doing and why I never saw anyone in the hallway. It was the moment that the housing office opened the common room, that for the first time ‘life’ was brought into the building. I got to know the students that lived next to me, under me and above me. The intervention of opening up the common room for all residents had such a great impact on social interaction between residents, that it fascinated me and I wanted to learn more about it. That is why I decided to write my master thesis within the research project ‘Geographies of age, loneliness and affordable housing’, an international endeavor between ETH Zürich, TU Wien and KTH.

For my master thesis I went back to all three countries I have lived in, during a fieldwork for five weeks. Within this period I have been welcomed into respondents’ homes, seen their everyday living environment and learned about their daily routines. The research interviews turned into extensive conversations in which respondents gladly shared their everyday experiences, which are prominent parts of their lives. I have met many people that were relieved to be able to share their experience with loneliness. Slowly the taboo loneliness is turning into a subject people are not afraid to share their experiences on.

I want to thank all the respondent for their kindness and willingness to share their experiences with loneliness. I want to thank Peter Daniëls, Ralf Aydt and Elisabeth Stich for welcoming me and providing me with relevant information. In addition, I want to thank Judith Lehner for supporting my search for research cases in Vienna and inviting me for her class at TU Wien. Furthermore, I want to thank the Axel och Margaret Ax:son Johnsons Stiftelse, for supporting my fieldwork financially. Finally, I want to thank my supervisor Stefan Lundberg for his patience and support.

Geertje de Lange
October, 2019
Abstract

The high prevalence of loneliness, especially among elderly and young adults, calls for measures to connect people and strengthen social support networks. Housing models that bring people together and reduce loneliness are seen as a solution. The theory implies a causal relation in which the building design can stimulate social interaction, contribute to social support, and combat loneliness. This research aims to get an insight in the way different housing models for elderly and young adults can stimulate social support and combat loneliness, by looking at social contact design principles. The research consists of six qualitative case studies spread over Sweden, the Netherlands and Austria. Among the case studies there are two nursery homes, two student accommodations and two co-housing initiatives. The data is collected within a period of five weeks, using the go-along method, in-depth interviews and diaries.

The research confirms the causal relation between building design, social interactions and social support. However, it was found that loneliness must be considered separate from this. While housing models cannot combat loneliness, they can stimulate social interactions between residents that help to build a social support network. In addition, the housing situation cannot cause loneliness, but it can reinforce an already existing feeling of loneliness among residents by hindering possibilities for residents to interact and build social support networks. Based on the research findings, two policy recommendations are made. First of all, future housing models should aim to integrate students and elderly within the wider society. Second, future housing models should offer a building design and organizational structure that stimulate social interaction and social support between residents.

For människor samman genom boende och motverka ensamhet

Sammanfattning


Table of contents

<table>
<thead>
<tr>
<th>Chapter 1 – Introduction</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Research purpose and research questions</td>
<td>6</td>
</tr>
<tr>
<td>1.2. Societal relevance</td>
<td>7</td>
</tr>
<tr>
<td>1.3. Scientific relevance</td>
<td>7</td>
</tr>
<tr>
<td>1.4. Reading guide</td>
<td>8</td>
</tr>
<tr>
<td>Chapter 2 - Literature Review</td>
<td>9</td>
</tr>
<tr>
<td>2.1. What is loneliness and who is lonely?</td>
<td>9</td>
</tr>
<tr>
<td>2.2. Loneliness and the rise of single-person households</td>
<td>10</td>
</tr>
<tr>
<td>2.3. Combatting loneliness</td>
<td>12</td>
</tr>
<tr>
<td>2.4. Bringing people together through housing</td>
<td>15</td>
</tr>
<tr>
<td>2.5. Synthesis and conceptual model</td>
<td>17</td>
</tr>
<tr>
<td>Chapter 3 – Methodology</td>
<td>20</td>
</tr>
<tr>
<td>3.1. Case studies</td>
<td>20</td>
</tr>
<tr>
<td>3.2. Operationalization</td>
<td>22</td>
</tr>
<tr>
<td>3.3. Methods</td>
<td>24</td>
</tr>
<tr>
<td>3.4. Research limitations</td>
<td>29</td>
</tr>
<tr>
<td>3.5. Ethical considerations</td>
<td>29</td>
</tr>
<tr>
<td>3.6. Data analysis</td>
<td>29</td>
</tr>
<tr>
<td>Chapter 4 – Results</td>
<td>31</td>
</tr>
<tr>
<td>4.1. Elderly service residence</td>
<td>33</td>
</tr>
<tr>
<td>Nieuw Vredenbergh - Breda, the Netherlands</td>
<td>33</td>
</tr>
<tr>
<td>4.2. Elderly residential care center</td>
<td>41</td>
</tr>
<tr>
<td>Humanitas - Deventer, the Netherlands</td>
<td>41</td>
</tr>
<tr>
<td>4.3. Student accommodation</td>
<td>51</td>
</tr>
<tr>
<td>Guesthouse Gasgasse - Vienna, Austria</td>
<td>51</td>
</tr>
<tr>
<td>4.4. Student quarter</td>
<td>60</td>
</tr>
<tr>
<td>Lappkärrsberget – Stockholm, Sweden</td>
<td>60</td>
</tr>
<tr>
<td>4.5. Co-housing</td>
<td>72</td>
</tr>
<tr>
<td>Die Mauerseglerie – Vienna, Austria</td>
<td>72</td>
</tr>
<tr>
<td>4.6. Co-housing</td>
<td>84</td>
</tr>
<tr>
<td>Frauenwohnprojekt Ro*sa kalYpso – Vienna, Austria</td>
<td>84</td>
</tr>
<tr>
<td>Chapter 5 - Analysis</td>
<td>93</td>
</tr>
<tr>
<td>5.1. Factors that stimulate and hinder social interaction</td>
<td>93</td>
</tr>
<tr>
<td>5.2. Superficial encounters versus intimate friendships</td>
<td>98</td>
</tr>
</tbody>
</table>
Chapter 1 – Introduction

In January 2018, the UK government made political history by introducing the world’s first minister of loneliness, that should tackle the problem of increasing loneliness (HM Government, 2018). The lack of social interaction and social support has been recognized as a public health concern, especially effecting elderly and young adults (Yang & Victor, 2011). Loneliness causes conditions such as depression, stress, dementia, heart attacks, strokes and cancers (Yang & Victor, 2011; Hawkley & Cacioppo, 2003). Within the UK, the increasing number of people that experience loneliness is referred to as ‘the loneliness epidemic’ or ‘the loneliness time bomb’ (Snell, 2015). However, not only in the UK, but also across Europe, the US and Japan, loneliness is an increasing problem. Together with obesity, loneliness is seen as a ‘disease of civilization’ associated with the way we live in today’s cities (Bound Alberti, 2018).

More and more people are living alone, especially elderly (Nederlandse Omroep Stichting [NOS], 2018). The rise of single person-households, an ageing society and governmental policies that limit residential stays in nursery homes, result in a situation in which elderly live independently longer. However, often with the risk of declining social interaction and social isolation (Cannuscio, Block & Kawachi, 2003). While research has focused on loneliness among elderly, not so much attention has been paid to loneliness among young adults. However, both elderly and young adults are groups that are often socially and geographically segregated from the wider community (Hagestad & Uhlenberg, 2005). While elderly often live in protective living spaces such as residential care centers, young adults are often assigned to special accommodations such as student housings. However these types of housing environments almost enforce isolation, by offering limited spaces for meaningful interactions and community gatherings (Cannuscio, Block & Kawachi, 2003). In contrast, some housing models can facilitate social interactions and foster connections between residents and the wider community, such as co-housing solutions and intergenerational living (Williams, 2005).

In October 2018, the UK government published ‘A strategy for tackling loneliness’ that aims to build a more socially connected society by strengthening social support networks (HM Government, 2018). The strategy places urban planning and design central within the issue of loneliness by focusing on improving access to community spaces, creating transport networks that support social connections and placing community at the heart of the design of housing developments (HM Government, 2018). One of the aims of the strategy is to put attention in understanding how housing can bring people together and how innovative housing models, such as co-housing, can reduce loneliness (HM Government, 2018). So far there has been limited research concerning the way housing models can stimulate social interactions, enhance social support and combat loneliness. The aim of this research is therefore to explore how different housing models for elderly and young adults can stimulate social interactions, contribute to social support and combat loneliness.

1.1. Research purpose and research questions

This research aims to get an insight in the role of housing in combatting loneliness, by looking at six housing models for elderly and young adults and the way they contribute to social support among residents. The main question of the research is:

To what extent can different housing solutions stimulate social support among elderly and young adults, and combat loneliness?
In order to answer the research question, four sub-questions are asked:

1. **How can design of different housing models for elderly and young adults stimulate social interactions between residents or hinder them?**
2. **To what extent do social interactions take place, where do they take place and what kinds of interactions are there?**
3. **To what extent do elderly and young adults feel emotionally and instrumentally supported within their home?**
4. **To what extent do elderly and young adults experience loneliness within their home?**

### 1.2. Societal relevance

In a time in which more and more people are living alone, elderly get older, social interactions happen via social media and societal changes such as online shopping and working from home reduce social interactions, people become more and more disconnected from the wider society (HM Government, 2018). The lack of social contact and social support has severe effects on peoples’ mental and physical wellbeing. While successful ageing is threatened among elderly, young adults risk to drop out of school, withdraw themselves from society and risk chronical loneliness (NOS, 2019). It is therefore important to find ways in which a more socially connected society can be built and social support networks can be strengthened (HM Government, 2018).

Previous studies have shown that some housing models can facilitate social interactions and foster connections between residents and the wider community (Williams, 2005). In addition there is increasing attention to intragenerational living as way to bring people together and combat loneliness among elderly (Sánchez, García, Díaz & Duagües, 2011). However, there is a need to get a better understanding in the way housing can enhance social support and combat loneliness. Therefore six different housing models will be studied within this research. Studying different types of housing models allows for comparison between them and can bring relevant insights in factors that are key within stimulating social support and combatting loneliness. Based on the research finding, recommendations for future housing models for elderly and young adults can be made.

### 1.3. Scientific relevance

Research concerning loneliness has so far mainly focused on loneliness among elderly within the context of an ageing society. However Victor and Yang (2011) identified young adults as another peak group that faces loneliness as well. Loneliness among young adults and the effect it has on their wellbeing, has gotten increasing attention within the news (NOS, 2019). It is therefore important that research concerning loneliness takes young adults into account as well.

So far the topic loneliness has hardly been approached from the discipline of urban planning and design. However urban planning and design is increasingly brought into connection with loneliness. While psychological research focusses on person-centered characteristics that influence loneliness, socialist argue that cultural determinants, such as urbanization contribute to loneliness. Living circumstances and neighborhood design are increasingly brought into connection with loneliness (Corcoran & Marshall, n.d.). In addition, the HM Government (2018), emphasizes the role of urban planning and design in combatting loneliness, placing urban planning and design central within the issue of loneliness. There is a growing need to approach the topic loneliness from the discipline of urban planning and design.
Urban planning and design is a discipline in which overarching research with other disciplines is common. However, overarching research between the disciplines of psychology and urban planning and design has hardly been performed so far. Yet, within the issue of loneliness, these disciplines show a potential to combine knowledge and research methods. This research can form a bridge between these disciplines and put attention on the relation between psychology and urban planning and design.

1.4. Reading guide
The research starts with a literature review that explores relevant literature concerning loneliness, originating from several disciplines. Key concepts that are discussed within the literature, are summarized and presented in the conceptual model. The conceptual model forms the framework of the research. The literature review is followed by the methodology that forms a link between the theory and research practice. Within the method chapter, the selection of the cases is discussed and the theoretical concepts are operationalized. In addition, the methods are explained, the research limitations are discussed and ethical considerations are made. The methodology is followed by the results chapter that forms the largest part of the research. The data gained from the data collection is presented in detail per case study. This is followed by the analysis in which the findings of the cases studies are interpreted and analyzed on the bases of the conceptual model. Within this chapter, an answer on the research questions is formulated. The final chapter consists of the conclusion and discussion in which the main research findings are presented. The findings are discussed from the societal and scientific context. Policy commendations and recommendations for future research are made. Finally, a reflection on the whole research process is made. Attached to the research report, once can find the literature list and appendixes.
Chapter 2 - Literature Review

This chapter focusses on exploring relevant literature concerning the topic of loneliness, linked to urban planning and design. Various theories and studies related to the subject of this study, are explained and connected to each other, in order to create an overview of the existing knowledge and identify knowledge gaps. The literature comes from a range of disciplines including psychology, sociology, demography, health and medicine, ageing, sustainable development and urban planning and design.

The literature review starts with an introduction into the topic of loneliness and explains loneliness from a psychological perspective. This is followed by a discussion concerning a trend of increasing loneliness, linked to the rise of single-person households within Europe. Then, ways to combat loneliness from a psychological and sociological perspective are addressed and are linked to the role of urban planning and design in combatting loneliness. It is discussed how planning and designing for social interaction can tackle the problem of loneliness. A focus is put on social-contact design and the way innovative housing solutions can bring people together. The literature chapter ends with a synthesis of the literature, resulting in a conceptual model that forms the framework of the study.

2.1. What is loneliness and who is lonely?

2.1.1. An introduction into loneliness

The word loneliness was mentioned first in the early 1800's, and referred to ‘oneness’ or ‘solitude’, a state of being physically remoted from others (Bound Alberti, 2018). It referred to a physical experience, rather than a psychological or emotional one (Bound Alberti, 2018). The word was used within a context of something enjoyable, like escaping the busy life and taking time for spiritual reflection (Bound Alberti, 2018). Nowadays, the meaning of loneliness has changed into a subjective and undesirable experience of being socially isolated from others (Peplau & Perlman, 1982, pp. 15-16). In this experience, people can feel lonely without being physical remoted from others. According to Peplau and Perlman (1982, p.17) ‘[…] the subjective experiences of loneliness is seldom accompanied by positive thoughts and feelings’. The experience of being lonely has been associated with health problems such as depression, low mental and physical health, stress and dementia (Yang & Victor, 2011). According to Hawkley and Cacioppo (2003), loneliness can even cause conditions leading to heart attacks, strokes and cancers. Loneliness together with the lack of social integration has been recognized as one of the most serious public health challenges in the Western world. Together with obesity, loneliness can be seen as a ‘disease of civilization’ associated with the way we live (Bound Alberti, 2018).

Weiss (1973) has categorized loneliness into emotional and social loneliness. While emotional loneliness refers to the lack of a close relationship such as a friend or partner that offers a feeling of security and intimacy, social loneliness refers to a disconnectedness to a social network and a larger community that can provide a sense of belonging (Chipuer & Pretty, 2000). Emotional and social loneliness refer to the perceived quality and quantity of a person’s social relationships. According to Peplau and Perlman (1982, p.15), loneliness occurs when there is a discrepancy between a person’s desired and achieved network of social relationships. Such a discrepancy could be caused by major disruptive events that change a person’s social relationships (Peplau & Perlman, 1982, p. 33). Groups
at risk could include people who have moved recently, students changing schools, couples getting a divorce or people that experience the loss of a partner (Peplau & Perlman, 1982, p. 33).

2.1.2. Loneliness among elderly and young adults
Loneliness is often associated with old age. According to Dykstra, Van Tilburg and Gierveld (2005), old age can bring risk factors that influence loneliness, like the loss of age peers, reduction in social activity, declining health and unwanted dependency. Dykstra, Van Tilburg and Gierveld (2005), discovered a trend in loneliness over time. As elderly get older, they will become lonelier. Especially those aged over 75 experience an increase in loneliness (Dykstra, Van Tilburg and Gierveld 2005). However, the older you get, does not mean the lonelier you will be. A study concerning age and loneliness across 25 European nations identified young adults as another peak group that faces loneliness, besides elderly (Yang & Victor, 2011). Chipuer and Pretty (2000) argue that young adults are a vulnerable group for loneliness, since they often move away from their family, home-centered social circles and activities, to develop close relationships to others. According to Brennan (1982), as quoted by Chipuer and Pretty (2000), ‘One of the most difficult developmental tasks facing adolescents is acquiring resources to fulfil their needs for intimacy and consensual validation’. Especially, those young adults that face difficulties establishing wanted relationships, are most vulnerable to loneliness. In addition, a study concerning loneliness among university students in Germany, showed that loneliness seems to be common among students (Diehl, Lucassen, Ishchanova, Hilger-Kolb, 2018). A reason for this, is the transition from school to university, that brings changes in environment (moving to a new city), relationships, routines, assumptions and roles (Diehl, Lucassen, Ishchanova, Hilger-Kolb, 2018). Although for some, this can bring new opportunities, changing environment and not knowing anyone, can increase a feeling of loneliness.

The elderly and young adults are thus perceived as groups that are most vulnerable to loneliness. However, it is argued that the nature of loneliness differs between the two groups (Victor & Yang, 2012). For elderly the quality of social relations influences their feeling of loneliness, while for young adults the quantity of social relations determines loneliness (Victor & Yang, 2012). Elderly therefore would be more vulnerable for experiencing emotional loneliness and young adults for experiencing social loneliness. However, other studies suggest that during young adulthood intimate relations become more important than being part of a larger social network (Qualter et al., 2015).

Although psychological research has focused on person-centered characteristics that can influence loneliness, like age, income, marital status and low self-esteem, socialist have argued that cultural determinants, such as urbanization and an increasing mobility contribute to a high prevalence of loneliness in the modern Western world (Peplau & Perlman, 1982). In addition, social isolation has been associated with certain living circumstances and neighborhood design, placing urban planning and design central within the issue of loneliness (Corcoran & Marshall, n.d.).

2.2. Loneliness and the rise of single-person households
2.2.1. Loneliness and living alone
Loneliness seems to be a problem in the Western world in particular and has been recognized as a direct and inevitable consequence of urbanization (Bound Alberti, 2018). According to Godfrey and Julien (2005), urbanization has brought hidden problems associated with loneliness and isolated age within the Western industrial countries. In particular the trend of rising single-person households has raised questions concerning a possible increase in loneliness within Western cities (Snell, 2017).
According to Laing (2016), quoted in Bound Alberti (2018), the urban revolution, characterized by an increase in single dwellings, has exacerbated loneliness. It is the illusion of living collectively, that has aggravated loneliness. Even though people share a physical space, they do not share an emotional space and can feel socially isolated (Bound Alberti, 2018). It is the feeling of being disconnected from a larger community or the lack of intimate friendships that causes loneliness (Peplau & Perlman, 1982). A link between loneliness and living alone, has been identified within several studies (Snell, 2017, 2015; Routasalo, Savikko, Tilvis, Strandberg, & Pitkälä, 2006). Loneliness studies, using multiple-regression analysis, have identified living alone as most significant explanatory variable for loneliness, with attendant variables such as the loss of a partner (Snell, 2015). In addition, Routasalo, Savikko, Tilvis, Sandberg and Pitkälä (2006), have identified living alone as a powerful predictor of loneliness among elderly in Finland.

2.2.2. The rise of single-person households
Since the 1960’s, there has been a dramatic rise in single-person households across Europe, North-America and Japan (Snell, 2017). While many pre-industrial settlements knew an average of 5 percent single-person households, the current proportion of single-person households has gone up to 60 percent or more in some European cities (Snell, 2017). The highest incidences of recent living alone can be found in Stockholm where 60 percent of the households exist of single-person households (Snell, 2017). In Amsterdam the share of single-person households is around 50 percent (Planbureau voor de Leefomgeving [PBL], 2016) and in Vienna the share of single-person households has increased from 24 to 45 percent since the 1950’s (Lebhart, 2016). While the rise of single-person household can be explained by an ageing population, Snell (2017) argues that weaker family connectivity due to migration, falling marriage and birth rates and rising living standards affecting housing options, have contributed to a rise of single-person households in the Western world. In addition, changing lifestyles such as the rise of Living Apart Together (LAT) where partners do not share a residence, can explain a rise in single-person households (Lebhart, 2016).

The rise of single-person households has especially effected the elderly, where the highest proportion of single-person households can be found. Cannuscio, Block and Kawachi (2003) argue how ‘living alone increases vulnerability to a variety of threats to successful aging, including social isolation, financial insecurity, lack of stimulating interactions, and loss of mobility and transportation’. The heat wave in Chicago, July 1995, illustrates the vulnerability of elderly that are living alone, are socially isolated and disconnected from a wider community (Cannuscio, Block & Kawachi, 2003). The heat wave resulted in 700 deaths, especially among isolated elderly who were living alone (Cannuscio, Block and Kawachi (2003).

2.2.3. Elderly and young adults living alone
Within the Netherlands, there is an enormous increase in the number of single-person households among those aged 75 years or older. The amount of single-person households among those aged 65-75 is expected to grow until 2055 (Van Duin, Stoeldraijer, Van Roon & Harmsen, 2016). One of the reasons for the growth is that elderly continue to live independently for a longer time. The introduction of a new government policy in the Netherlands has encouraged elderly to live independently and restricted residential stays in nursery homes or other health care institutions. Only elderly with serious health problems can stay in nursery homes (Van Duin, Stoeldraijer, Van Roon & Harmsen, 2016). Other reasons for the rise of single-person households among elderly, are the loss of a partner or divorce (NOS, 2018). Also in Sweden a large proportion of single-person households can be found among
elderly. The fraction of elderly within the society has increased and many live as widowers or widows, or live in singlehood because of a divorce ( Andersson, 2018; Lebhart, 2016). In Austria, the biggest share of single-person households is among those aged 60 years or older. However, the share has been similar since many years and the rise of single-person households is caused by an increase in living alone among those aged 45-59 years old (Gartner & Matzenberger, 2017).

Young adults are another group where single-person households are common. Within the Netherlands, one can find relatively a lot of single-person households among people in their twenties. However, since the introduction of a new student loan system in 2017, those in their early twenties are discouraged leaving their parental homes and move out one year later than before, due to high study and living costs (Centraal Bureau voor de Statistiek [CBS], 2019). In Sweden, young adults form a large proportion of single-person households. Here, the rise of single-person households can be partly explained by the fact that young adults from an age between 19 and 21 are expected to leave their parental home and support themselves. Due to social policies this is an realistic option ( Andersson, 2018). Interesting to note, is that in Austria it is less common among young adults to live in single-person households. Young adults moving out from their parents’ home, often end up in shared apartments due to rising costs of housing ( Lebhart, 2016).

Single-person households are thus most common among elderly and in some cases among young adults as well. Although living alone has been identified as a factor causing loneliness, living alone does not necessarily mean being lonely. According to Tomaka, Thompson and Palacios (2006), the objective physical separation of a person, for example by living alone, is referred to as ‘social isolation’ and differs from ‘loneliness’. Loneliness refers to the subjective feeling of being separated from others. According to Tomaka, Thompson and Palacios (2006) ‘Although isolation and loneliness may be related, there is no necessary relationship between the two’. Thus, loneliness can also occur among people that do not live alone and are surrounded by others. Easterbrook and Jones (2004) for example, discuss how elderly enjoy living by themselves, have control over their own lifestyles and make their own decisions. According to them, the assumption that older people who live alone are lonely and isolated, overlooks those elderly that actively decide to live alone (Easterbrook & Jones, 2004).

2.3. Combatting loneliness

2.3.1. Social relations, social support and social capital

Social relations are vital for loneliness and wellbeing. As mentioned earlier, loneliness occurs when people experience a discrepancy between their desired and achieved network of social relations (Peplau & Perlman, 1982, p.15). Weiss’ (1973) distinction between emotional and social loneliness gives an indication of the different nature of these relations, i.e. the attachment to an individual or to a wider social network. While loneliness refers to a lack of social relations, the term ‘social support’ is often used as the opposite. Social support refers to the availability of interpersonal resources (Peplau & Perlman, 1982, p. 18) and the perception of being part of a social network (Tomaka, Thompson & Palacios, 2006). Helgeson (2002), identified three classes of social support: emotional support, instrumental support and informational support. According to Helgeson (2002):

| Emotional support refers to having people available to listen, to care, to sympathize, to provide reassurance, and to make one feel valued, loved and cared for. Instrumental support, sometimes referred to as tangible assistance, involves people providing concrete assistance, |
such as help with household chores, lending money, or running errands. Informational support involves the provision of information or guidance (p. 25).

Features of social support such as contact with friends, positive family relations and being part of a larger network, have been associated with general wellbeing (Nguyen, Chatters, Taylor & Mouzon, 2016). Social support can be divided into formal and informal social support. Formal support involves support from professionals such as a therapist, councilor or nurse. Informal support refers to support that is provided by family members, friends or neighbors (Kelman, Thomas & Tanaka, 1994). Although both forms of support are equally important, Lopata, quoted by Peplau and Perlman (1982, p. 37), states that especially informal social support is important for people that experience loneliness. A study among lonely widows in Madison, Wisconsin, showed that women turned to friends, siblings and neighbors for support rather than professionals, such as a social worker (Peplau & Perlman, 1982, p. 37).

Another term often used within the context of social support and wellbeing is ‘social capital’. Social capital refers to the social connections that exist within a community (Cannuscio, Block, & Kawachi, 2003). It can be distinguished from social support by its collective dimension. The availability of social capital has been recognized as an important factor for healthy ageing. Especially for those who have lost close friends or a partner, the availability of social capital within their community is important (Cannuscio, Block, & Kawachi, 2003). Yet, social support, social capital and social interactions are diminishing within our society. The digital revolution made it possible to shop, work, travel and interact with public services and businesses, without any face-to-face contact with others (HM Government, 2018). Within the work ‘Bowling Alone’, Robert Putman (1995), argues that trust, socializing between neighbors, participation within the community, voluntarism and charity are diminishing in the United States and social capital is declining. According to Theresa May (HM Government, 2018):

[...] the warmth of human contact risks receding from our lives. [...] There are people who miss the camaraderie of some company, the support of a friendly voice, or just someone who can make them smile or laugh to lift their spirits (p. 2).

As mentioned earlier, within the UK, the lack of social interaction and its effect on people’s health and wellbeing, has been recognized as a public health concern. The increasing number of people that feel socially isolated is referred to as ‘the loneliness epidemic’ or ‘loneliness timebomb’ (Snell, 2015). In January 2018, the UK government introduced the world’s first minister of loneliness, that should tackle the problem of loneliness (HM Government, 2018). Within their policy document ‘A strategy for tackling loneliness’, the ministry aims to build a more socially connected society by strengthening social support networks (HM Government, 2018).

2.3.2. Planning for social interaction
According to Corcoran & Marshall (n.d.) ‘loneliness is distressing because we are human species. We need companionship to participate in a full life, making cooperative activity a key factor in functioning well’. It is said that certain urban environments challenge people’s aptness to be prosocial (Corcoran & Marshall, n.d.). Under prosocial behavior, one can understand behavior such as helping others, sharing and co-operating with others and acting in a way that tends to benefit the society as a whole rather than the individual. Corcoran and Marshall (n.d.) argue that we are building lonely cities focused
on the individual rather than the community. Contemporary urban design of the public realm is becoming homogenized by retail and commercial quarters where one can find cafés, cinemas and bars. According to Corcoran and Marshall (n.d.). These are spaces that are visited rather than lived in; where one can go with people they already know, rather than interact with strangers. On the same time, Corcoran and Marshall (n.d.) argue that zonal planning, based on economic urban agendas, creates urban environments that challenge community coherence, such as traffic corridors, industrial parks, commercial, touristic and artistic quarters. Urban development programs are driven by economic and materialistic growth rather than community wellbeing and social sustainability (Corcoran & Marshall, n.d.). This creates an unpleasant public realm that reduces opportunities to meet people within one’s own neighborhood.

Corcoran and Marshall (n.d.) argue for putting social sustainability and well-being central within urban planning. While social sustainability on a traditional scale mostly focuses on hard factors such as poverty and human rights, soft factors such as well-being and happiness are increasingly becoming recognized as central aspects within social sustainability (Colantonio and Dixon, 2011). More and more emphasis is put on social interactions, social capital and community creation. According to Dempsey, Bramley, Power and Brown (2011), social interaction, social networks and participation in groups and networks, characterize a sustainable community. Sherman, quoted by Montgomery (1998), provided a list of qualities and characteristics that reflect successful urban places. One of the qualities in the list puts special attention to the topic of loneliness. According to Sherman (Montgomery, 1998), ‘There will be a good balance between the needs to prevent loneliness and to preserve anonymity and privacy’. The list also includes the importance of opportunities for informal and casual meetings to take place.

According to Corcoran and Marshall (n.d.) urban loneliness can be reduced by increasing community wellbeing, through providing urban infrastructure that supports social interaction, community coherence and connection. The same approach is taken by the UK’s ministry of loneliness, that sees social support, interaction and community creation as a way to combat loneliness (HM Government, 2018). Within their strategy of tackling loneliness, four key policy proposals are described in which the third proposal focuses on offering community infrastructure that empowers social connections. The strategy places urban planning and design central within the issues of combating loneliness (HM Government, 2018). Ways to combat loneliness by urban planning, according to the strategy, are improving access to community spaces (buildings and outdoor spaces), creating transport networks that support social connections and help people to stay connected with their community, and placing community at the heart of the design of housing developments and planning. (HM Government, 2018).

2.3.3. Designing for social interaction
Designing neighborhoods for social interaction is key in rebuilding social capital (Williams, 2005). Williams (2005), describes a number of design principles to create social interaction within a neighborhood. According to Williams (2005), social interactions take place where people have the opportunity to meet, live in proximity to others and have suitable spaces for interaction. Designing for proximity is therefore key in stimulating social interactions. Designing for proximity can generate passive contacts between residents that can increase social interactions. For example direct neighbors are more likely to be in touch with each other than residents that live further apart (Williams, 2005). In addition, residents in multi-storey buildings, living next to the stairs, tend to socialize more with residents in upper and lower floors, while residents in the middle of a corridor tend to socialize more
with their direct neighbors (Williams, 2005). However, other studies have shown that too much proximity can have a negative effect on socializing. At high densities the social environment could be perceived as invasive and the resident could withdraw from the community (Willimans, 2005). Therefore the provision of buffer zones between private and public spaces, referred to as semi-private spaces, could function as a threshold. According to Williams (2005), semi-private spaces such as gardens and verandas play an important role in social interactions, as they provide both a form of privacy and the option for social contact into proximate public spaces. Semi-private spaces also give the opportunity for residents to hear and see other residents that are using proximate public space. According to Williams (2005), this gives resident the opportunity to interact with others and creates a sense of community.

Another way to design for social interaction, is creating shared pathways to sites with activities, such as a community facility. According to Williams (2005), this increases the potential that residents take a similar path from their private unit towards a community facility and increases the potential for social interaction. The provision of common spaces is key in creating opportunities for social interaction (Williams, 2005). Common spaces can be both indoor and outdoor spaces. They should be designed for a certain use, but at the same time adjustable to other kinds of usages. They need to be of good-quality, located along shared pathways and visible for the residents (Williams, 2005). When the space is visible, residents can observe what happens within the space and decide whether or not to join the activity of others. The visibility of common spaces increases therefore the potential for social interaction.

Furthermore, the size of the community matters. According to Williams (2005), the bigger the community, the less social interactions. Within a big community, there is more anonymity and a greater diversity in values and norms between residents. Within a big community it is therefore less likely that residents participate in communal activities and use common spaces (Williams, 2005). In addition, it is important that communities are low/medium rise in promoting social interactions. Spontaneous and short term activities that happen outside the building, such as barbecues and sporting activities can be very important in creating social interactions on one- or two-floor buildings. However, it is said that residents living in upper floors of multi-storey buildings are less likely to take part in such activities, since it is too much of a hassle to go all the way down to join (Williams, 2005).

Williams (2005) also identified barriers that can hinder social interactions within a building. For example the management of communal facilities had an impact on usage and social interaction between residents. Poor maintenance of communal spaces, poor hygiene and broken equipment reduced interactions and usage. In addition, poor acoustics of areas used for social events such as dinners, reduced the use of the space among older residents (Williams, 2005). Furthermore, the use of communal spaces for private events excluded other residents from using the space.

2.4. Bringing people together through housing

Housing plays an important role within the issue of loneliness. Loneliness is associated with certain living circumstances, such as living alone and living in private rented or social housing (Corcoran & Marshall, n.d.). According to the Ministry of Loneliness (HM Government, 2018) there is a need to diversify the housing market and deliver a high-quality, fair, secure and affordable private rented sector. Special attention should be put in understanding how housing can bring people together and how innovative housing models, such as co-housing, can reduce loneliness (HM Government, 2018).
2.4.1. Residential segregation of elderly and young adults.

Hagestad and Uhlenberg (2005) argue that especially elderly and young adults are often geographically and socially separated by their residence. According to Chatterton (1999), students often live segregated from the wider community. They are assigned to special accommodation within the inner city where they live together with other students and spend their free time with other students (Chatterton, 1999).

Elderly often live in protective living spaces, such as nursery homes. According to a study in the US by Cannuscio, Block and Kawachi (2003), ‘Some types of housing environments almost enforce isolation, while other types facilitate interaction among elderly residents as well as foster connections between residents and the broader community’. Cannuscio, Block and Kawachi (2003), for example argue that the institutional model of nursing home care creates isolation of elderly. Nursing homes are often geographically segregated from community centers because of zoning laws and have a regulated and unpersonal character. They are designed for maximum efficiency and safety rather than the residents’ quality of life (Cannuscio, Block & Kawachi, 2003). In addition, according to Cannuscio, Block and Kawachi (2003) ‘Institutions offer few private areas for congregation, minimizing opportunities for meaningful interaction among residents as well as between residents and their visitors’. Within this model, residents are both geographically and socially isolated from their families and communities of origin (Cannuscio, Block & Kawachi, 2003).

2.4.2. Intrigenerational living

Bringing old and young together within housing is referred to as ‘intrigenerational living’. While research about intragenerational living often focuses on different generations within a family living together (de Jong Gierveld, Dykstra & Schenk, 2012), little literature has focused on studying intragenerational living among non-family related residents. Sánchez, García, Díaz and Duaignéus (2011) studied an intergenerational home sharing program in Spain where lonely elderly rent out a room to young students that lack housing. In Spain, 7 out of 10 people aged 65 years or older live alone. On the same time, 7 out of 10 university students stay at their parents because of financial reasons. (Sánchez, García, Díaz & Duaignéus, 2011). The home sharing program was initiated to bring two different needs together and create a mutual satisfaction. While students searched low cost accommodation, the elderly were searching for company (Sánchez, García, Díaz & Duaignéus, 2011). However, the program has shown to encompass much more than the exchange of accommodation for company. For the elderly, the program stimulated daily personal face-to-face conversations that complemented their telephone conversations that they had with family members. These social contacts have been associated with healthy ageing (Sánchez, García, Díaz & Duaignéus, 2011). The program also stimulated collaboration and help between the elderly and students in performing activities and tasks at home (Sánchez, García, Díaz & Duaignéus, 2011). In addition, the elderly indicated that they provided social support to the students. The students reported a better relationship with elderly and saw them in a more positive light. Sánchez, García, Díaz and Duaignéus (2011), therefore, stress the importance of intragenerational relationships and recognize how people from different generations can complement each other.

2.4.3. Co-housing

Co-housing initiatives can be seen as a direct response to the problem of loneliness and decreasing social support and social capital. According to Tummers (2015), in several European countries, cohousing is related to an ageing society, rising costs of care and increasing loneliness among elderly,
especially in larger cities. Co-housing can be distinguished from classical condominiums and co-ownership by a high degree of interaction and involvement of inhabitants (Tummers, 2015). In contrast to classical condominiums, co-housing initiatives are collectively built and self-managed housing clusters (Tummers, 2015). They aim to create a sense of community by offering both private homes and shared communal spaces (HM Government, 2018). According to Williams (2005), co-housing uses social-contact design principles that encourage social interactions and offers formal social structures, such as communal activities, decision making processes and organizational meetings, that encourage social interaction. Both the design and the organizational structure encourage a collaborative lifestyle and create interdependency between residents (Williams, 2005).

Collaboration and co-operation are central within co-housing. According to Corcoran and Marshall (n.d.), sharing, co-operating and other forms of prosocial behavior are being challenged within the current built environment, causing lack of companionship and loneliness in today’s cities. According to Nowak and Highfield (2011, p. 14), co-operation is much more than simply working together, but is about people deciding to aid each other. It goes against the grain of self-interest and is about the interest of an entire community (Nowak & Highfield, pp. 11-19). Within co-housing, co-operation can be found in the form of relinquishing private space in exchange for large common areas with shared equipment, taking turns to prepare meals and taking responsibility for care of the building (Sangregorio, 2000). Work that normally is carried out in isolation, is shared between young and old, women and men. According to Sangregorio (2000), living in proximity to people makes daily life easier, more secure and more fun.

2.5. Synthesis and conceptual model

2.5.1. Literature synthesis

The literature review shows that loneliness is a subjective experience that occurs when people experience a discrepancy between their desired and achieved network of social relations (Peplau & Perlman, 1982, p.15). According to Peplau and Perlman (1982, p. 33) a discrepancy between people’s desired and achieved network occurs when people experience disruptive events that change their social relations, such as moving to a new city for studies or experiencing the loss of a partner (Peplau & Perlman, 1982, p. 33). Especially elderly and young adults experience changes in their social relations and are identified as groups that are most vulnerable for loneliness (Yang & Victor, 2011).

While loneliness refers to a lack of social relations, the term ‘social support’ is often used as the opposite and refers to the availability of interpersonal resources (Peplau & Perlman, 1982, p. 18) and the perception of being part of a social network (Tomaka, Thompson & Palacios, 2006). Increasing social support and social interactions are therefore seen as key in combatting loneliness (HM Government, 2018). The focus of this study is therefore on social support and social interactions.

Loneliness has been associated with certain living circumstances. Especially the rise of single-person households, raised the question of a possible increase in loneliness. Several studies showed a link between loneliness and living alone (Snell, 2017, 2015; Routasalo, Savikko, Tilvis, Strandberg, & Pitkälä, 2006). The highest share of single-person households can be found among elderly and young adults. It is argued that elderly living alone are vulnerable for social isolation and disconnectedness from a wider community (Cannuscio, Block & Kawachi, 2003). In addition, elderly and young adults are groups that are often geographically and socially segregated by their residence (Hagestad & Uhlenberg, 2005). Keeping this in mind together with the thought that elderly and young adults are most vulnerable for loneliness, makes elderly and young adults interesting research groups for this study.
According to Corcoran and Marshall (n.d.) and HM Government (2018), urban planning and design can play an important role in combatting loneliness, by offering urban infrastructure that supports social support networks, social interaction, community coherence and connection. Especially designing neighborhoods and housing for social interaction is key in combatting loneliness (HM Government, 2018). According to the HM Government (2018), there is a need in gaining a deeper understanding in the way housing can bring people together, create social interactions, increase social support and combat loneliness. The main question of this research is therefore:

*To what extent can different housing solutions stimulate social support among elderly and young adults, and combat loneliness?*

### 2.5.2. Conceptual model

Based on the literature review, a conceptual model has been developed that gives a schematic representation of the links between relevant variables. (fig. 2.1.). The model shows a causal relation between housing, social interaction, social support and combating loneliness. The aspects of each variable are listed within the table below. The conceptual model forms the framework of this study and will be further explained within this section.

![Conceptual model diagram](image)

<table>
<thead>
<tr>
<th>Housing</th>
<th>Hindrance</th>
<th>Social interaction</th>
<th>Social support</th>
<th>Combat Loneliness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared facilities</td>
<td>Quality of common spaces</td>
<td>Greeting</td>
<td>Instrumental Emotional</td>
<td>Satisfaction of desired and achieved social relations</td>
</tr>
<tr>
<td>Visibility</td>
<td>Usage for private events</td>
<td>Chatting</td>
<td>Formal</td>
<td></td>
</tr>
<tr>
<td>Buffer zones</td>
<td>Too much proximity</td>
<td>Participating in formal and informal activities</td>
<td>Informal</td>
<td></td>
</tr>
<tr>
<td>Centrality</td>
<td>Size</td>
<td>Intimate conversations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit size</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building layout</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 2.1: Conceptual model*

According to the HM Government (2018), housing can play a role in bringing people together. As example the HM Government (2018) focusses on cohousing solutions that aim to create a sense of community, placing community participation and social interactions between residents central. The role housing can have in stimulating or hindering social interactions, has been elaborated by Williams (2005). Williams (2005) identified social contact design principles that generate social interaction within a neighborhood and applied them to cohousing developments. Variables such as the availability of common spaces and centrality of communal facilities, have been identified as tools to stimulate
social interaction. Williams (2005) also identified barriers that can hinder social interaction such as poor quality of common spaces and too much proximity of residents. While Williams and the HM Government focus on cohousing in particular, this study aims to understand how housing other than cohousing can stimulate or hinder social interactions, focused on elderly and young adults as research groups. The first and second sub-question of this study are therefore:

*Sub-question 1: How can design of different housing models for elderly and young adults stimulate social interactions between resident or hinder them?*

*Sub-question 2: To what extent do social interactions take place, where do they take place and what kinds of interactions are there?*

As mentioned earlier, loneliness refers to a lack of social relations, while the term social support refers to the availability of interpersonal resources (Peplau & Perlman, 1982, p. 18) and the perception of being part of a social network (Tomaka, Thompson & Palacios, 2006). According to Helgeson (2002), social support can be classified into emotional, instrumental and informational support. However, within this study, informational support will not be considered.

Emotional support refers to having people to listen, to care and to make one feel valued and loved. Instrumental support refers to having people to provide concrete assistance such as help in the household and running errands (Helgeson, 2002, p. 25). A distinction can be made between formal support from professionals and informal support from family, friends or neighbors. (Kelman, Thomas & Tanaka, 1994). To what extent residents interact with each other, together with the nature of these interactions can therefore give relevant insights in whether people feel socially supported within their home. Sub-question 1 and 2 can therefore contribute to answering sub-question 3 and 4 that aim to get an understanding in the social relations and interactions that exist within a housing model, whether these relations make residents feel socially supported and which possible hinderances residents can encounter. Sub-question 3 and 4 are as follow:

*Sub-question 3: To what extent do elderly and young adults feel emotionally and instrumentally supported within their home?*

*Sub-question 4: To what extent do elderly and young adults experience loneliness within their home?*
Chapter 3 – Methodology

The previous chapter focused on the theoretical context of the research. Based on the theory, the main question of the research got shaped, together with four sub-questions. Within this chapter, the link towards the research practice will be made. First, the use of case studies will be explained together with the process and justification of the case selection. This is followed by the operationalization of key concept within the study. After the operationalization comes the method section where the used methods are introduced, explained and justified in relation to the research questions. Finally, the research limitations, ethical considerations and data analysis are discussed.

3.1. Case studies

3.1.1. Case study design

In order to answer the research questions, it has been decided to work with case studies. According to Baarda et al. (2013, p. 59), case studies are qualitative research methods that aim to create a holistic understanding of a phenomenon within its context. Herby, the focus is on obtaining detailed insights in interpretations and perceptions from participants involved within a certain social phenomenon (Baarda et al., 2013, p. 59). Within this study the role of the living environment and everyday lived experiences of residents are central. The use of case studies and qualitative research methods is therefore the most suitable way to approach this topic (Bryman, 2012). The methods used within the case studies are the go-along method, in-depth interviews an diaries. Each method will be explained in the method section.

The cases within this study consist of different housing models and their residents. In total a number of six housing models has been studied. The housing models consist of two nursery homes, two student accommodations and two co-housings. The nursery homes are located in the cities Breda and Deventer, in the Netherlands. The co-housings and one student accommodation are located in Vienna, Austria, and one student accommodation is located in Stockholm, Sweden. Per case there were one to four respondents between the age of 23-34 and 59-85 (table 3.1.). All respondents joined the interview and took part in the diary assignment, that will be explained further in the method section. Per case one respondent participated in the go-along method. The data collection took place in a period of five weeks between the 18th of March and the 11th of April.

Table 3.1: Cases studies

The table shows the respondents per case. The go-along method has been performed with the respondents whose names are bold. The names of the respondents are substituted with fictive names.

<table>
<thead>
<tr>
<th>Cases</th>
<th>Nursery home</th>
<th>Student accommodation</th>
<th>Co-housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents and age</td>
<td>Humanitas</td>
<td>Vredenberg</td>
<td>Lappkäärsberget</td>
</tr>
<tr>
<td>1. <strong>Adam</strong> (29)</td>
<td>1. <strong>Lena</strong> (85)</td>
<td>1. <strong>Sofia</strong> (27)</td>
<td>1. <strong>Sarah</strong> (26)</td>
</tr>
<tr>
<td>3. Thea (80)</td>
<td>3. Lucas (23)</td>
<td>3. Louisa (62)</td>
<td></td>
</tr>
</tbody>
</table>

3.1.2. Selection of the cases

The different cases were selected based on several criteria. First of all, the housing models were selected based on the age of the residents. According to Yang and Victor (2011), young adults and elderly are groups that are most vulnerable for loneliness. Both groups have in common that they are
more likely to experience changes in their social circles and their living environment, which are seen as risk factors for loneliness (Peplau & Perlman, 1982, p. 3). While elderly are more likely to face unwanted dependency, reduction in social activity and the loss of peers (Dykstra, Van Tilburg and Gierveld, 2005), young adults often move away from their home-centered social circles, which affect their relations, routines and roles (Diehl, Lucassen, Ishchanova, Hilger-Kolb, 2018). Within the topic loneliness, young adults and elderly are therefore interesting research participants. Young adults are defined as those aged between 18-30 years and elderly are defined as those aged 60 years or older (Yang & Victor, 2011).

Second, the cases were selected based on their diversity and their ability to represent a wide range of possible housing models and living situations for young adults and elderly. It was therefore decided to pick cases that represent typical housing models for these age groups, and to pick cases that represent living situations that deviate from standard housing models. According to Hagestad and Uhlenberg (2005), young adults and elderly are groups that are often geographically and socially segregated by their residence. Students are often assigned to special student accommodations and elderly often live in protective living spaces such as nursery homes. Within this model, students and elderly are separated from the wider community, which can lead to social isolation (Cannuscio, Block & Kawachi, 2003; Hagestad & Uhlenberg, 2005). As typical housing models for young adults, two student accommodation were chosen. These are Guesthouse Gasgasse in Vienna, and Lappkärrsberget in Stockholm. The accommodations are both for national and international students and have limitations in the duration of stay, making it a temporary living situation. As typical housing model for elderly, the nursery home Vredenbergh in Breda, was chosen. The nursery home has both a care wing and a wing where elderly live on their own. The cases will be discussed in detail in chapter 4.

Besides typical housing models for elderly and young adults, it was decided to include a case where both groups live together, referred to as ‘intragenerational living’. The selected case is the nursery home Humanitas in Deventer where students live together with elderly. The students live in the nursery home without paying rent. In exchange they should be a good neighbor for the elderly. Sánchez, García, Díaz and Duaigné (2011) showed in their study that intergenerational living has brought a solution for loneliness among elderly in Spain and stimulated social support among both young adults and elderly. This type of housing model is therefore an interesting case to include in the study.

Finally, two cases were selected based on their focus on collaboration and community. It was therefore decided to choose two co-housing initiatives. According to Tummers (2015), co-housing is a response to increasing loneliness. Co-housing can bring people together and reduce loneliness among residents (HM Government, 2018). It is characterized by a high degree of interaction and involvement of inhabitants. From the viewpoint of loneliness and social support, co-housing initiatives are therefore interesting research cases. The selected cases are Ro*sa Kalypso, and Die Mauerseglerei. Both are co-housing initiatives with a strong community focus, situated in the outer districts of Vienna.

3.1.3. Justification of the case selection
The cases were found via three different access options including: direct contact with residents, contact with a key person and contact with a person in the own social circle. In the case of Guesthouse Gasgasse, direct contact was made with the residents via Facebook, instead of contacting the OeAD Housing office. In this way, the communication could be faster and more personal. The residents of Guesthouse Gasgasse were approached via Facebook by joining the closed Facebook group for all students living in Guesthouse Gasgasse. Within the group a poll was created to find students that were
interested in participating in the research. The students that replied were contacted individually via Facebook Messenger. The cases Ro*sa Kalypso and Humanitas were found via internet. Both housing models have their own website and the possibility to get in touch with a contact person. This contact person had the role of key person and enabled contact with some of the residents. This way respondents were found. The communication went via email. The cases Vredenberg, Lappkärrsberget and Mauerseglerie were found via contact with a person in the own social circle. Via friends and family the cases were found and direct contact was made with one of the residents via email, phone and face-to-face contact.

According to Baarda et al. (2013, p. 104), the way a research is introduced influences whether respondents want to participate within the research. Therefore all respondents were introduced into the research prior to the interviews and go-along via email/phone/ Facebook or face-to-face contact. In the research introduction the goal of the research was explained, together with the research participants of interest, the research institution, the time needed to participate in the research, the procedure of the method, the data processing, guarantee of anonymity and information about the publication of the data. In this way all respondent were aware of the consequences of participating and got reassured of their anonymity if wanted. Finally, within the introduction, a small present was promised as a way of showing thankfulness for participating in the research.

The process of finding cases took place from the beginning of February until mid-April. Within this time many housing models were contacted and only a few respondents were interested to participate. Although this research focusses on young adults and elderly as research participants, fitting in the age group 20-30 or older than 60, some respondents outside of these age groups were included. The respondents in Die Mauerseglerie deviate from the ages groups. However, it was decided to include Die Mauerseglerie in the research because of its focus on community and social support. In addition, Lappkärrsberget was used in the first place, as a testing case to try out the go-along method, audio recording, interview questions and the diary method. However the information gained in the case was relevant for the study and it was decided to include Lappkärrsberget as its own case within the research.

3.2. Operationalization

3.2.1. Loneliness

Within the study the concepts ‘loneliness’ and ‘social support’ are central. According to Peplau and Perlman (1982, p.15), loneliness refers to a discrepancy between a persons’ desired and achieved network of social relationships and can be subdivided into emotional and social loneliness. Emotional loneliness refers to the lack of a close relationship such as a friend or partner that offers a feeling of security and intimacy, and social loneliness refers to the disconnectedness of a social network and a larger community that can provide a sense of belonging (Weiss, 1973). Previous studies within the discipline of psychology, have used the revised UCLA loneliness scale by Russell, Peplau and Cutrona, (1980) to measure whether a person experiences loneliness or not. The scale exists of 20 items with 4 answer categories that lead to a numeric score. Depending on the score one can see whether a person experiences loneliness or not. The scale is used within quantitative studies. Within this study several items from the scale were selected and made into interview questions suitable within a qualitative study. Since most items of the UCLA-score overlap each other only a few items were selected. The selected items are included within the interview template (table 3.2). Within the interview template, the questions concerning loneliness are put within the same category which makes the data analysis
easier. The interview template shows the theme, the questions under this theme and a topic list that can be used as guidance during the interview (table 3.2).

Table 3.2: Interview questions concerning loneliness

<table>
<thead>
<tr>
<th>Theme</th>
<th>Questions</th>
<th>Topic list</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>- What do you think of the group dynamics of the people living here?</td>
<td>Feeling part of the group</td>
</tr>
<tr>
<td></td>
<td>- Do you have things in common with other residents?</td>
<td>Feeling valued</td>
</tr>
<tr>
<td></td>
<td>- Can you find companionship when you want it?</td>
<td>People surround you, but are not with you.</td>
</tr>
<tr>
<td></td>
<td>- Can you hear or see others from your room?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Do you ever leave your door open?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Do you ever feel isolated from other residents?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- To what extent are there people who really understand you?</td>
<td></td>
</tr>
</tbody>
</table>

3.2.2. Social support

A similar approach is taken with operationalizing social support. Social support refers to the availability of interpersonal resources and the perception of being part of a social network (Peplau & Perlman (1982, p. 18; Tomaka, Thompson & Palacios, 2006). While social support can be divided into emotional, instrumental and informational support, this study only takes emotional and instrumental support into account. According to Helgeson (2002):

Emotional support refers to having people available to listen, to care, to sympathize, to provide reassurance, and to make one feel valued, loved and cared for. Instrumental support, sometimes referred to as tangible assistance, involves people providing concrete assistance, such as help with household chores, lending money, or running errands (p. 25).

Shakespeare-Finch and Obst (2011) use a 2-way social support scale to measure giving and receiving emotional and social support among students and members of a community. The scale exist of 29 items in which respondents can indicate to which degree a statement is true for them, resulting in a numeric score. Within this study several items from the scale were selected and converted into interview questions. Not all items were taken into account since this research does not distinct giving and receiving support and some of the items overlap each other. Within the interview template the questions concerning emotional support are put into one category, and the questions concerning instrumental support into another category (table 3.3)

Table 3.3: Interview questions concerning social support

<table>
<thead>
<tr>
<th>Theme</th>
<th>Questions</th>
<th>Topic list</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional support</td>
<td>- Do residents ever share any personal problems with you or ask you for help?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- To what extent could you talk to other residents if you are feeling down?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Do you feel like you can just knock on someone’s door when you want to talk about pressures in your life?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Are there people in your home/corridor that make you feel happy?</td>
<td></td>
</tr>
</tbody>
</table>
To what extent is there one person in your home you feel you can trust?

**Instrumental support**
- Can you give examples of things you share with other residents besides common areas? Is there any informal way in which you share with your neighbors?
- Can you give examples of ways you help other residents or they help you? (like small tasks)
- If you are physically unwell, to what extent is there someone in your home that could help you?
- Do you have any rules or tasks within the building (like cleaning)? To what extent can someone else take over tasks when you are unable to perform them?

**3.3. Methods**

**3.3.1. Mixed methods**
Within the case studies three different research methods were applied. These methods are the go-along method, in-depth interviews and diaries. According to Baarda et al. (2013, p. 53) the use of mixed methods to study the same phenomenon is referred to as ‘method triangulation’ and increases the validity of the research results. The three methods were used to complement each other and get a holistic understanding of the different case studies. The research methods aim to answer the main question of the research:

*To what extent can different housing solutions stimulate social support among elderly and young adults, and combat loneliness?*

**3.3.2. The go-along method**
The go-along method was used to get insights in the way the design of the housing model can stimulate or hinder social interactions, insights in the type of social interactions that take place between residents and the areas where they take place. The go-along method was used to answer the follow sub-questions:

*Sub-question 1: How can design of different housing models for elderly and young adults stimulate social interactions between residents or hinder them?*

*Sub-question 2: To what extent do social interactions take place, where do they take place and what kinds of interactions are there?*

In order to understand how the building stimulates interactions among residents, or hinder them, an understanding in the everyday life of residents and the way they interpret their spatial context, is needed. According to Kusenbach (2003), the go-along method can be used to understand ‘how individuals comprehend and engage their physical and social environment in their everyday life’. It is especially useful in understanding social relationships between people within their living space and it gives the opportunity to access lived experiences of residents *in situ* (Kusenbach, 2003). According to Kusenbach (2003), ‘‘Hanging out’ and moving along with a range of informants permits ethnographers to examine the naturally occurring patterns and variations of social encounters which they could not fully access as outside observers, nor as practitioners’. The go-along method is therefore suitable to observe social encounters and explore social interaction patterns that shape the social realm of a
territory (Kusenbach, 2003). While Kusenbach (2003) mainly gives examples of urban environments as living space, such as a neighborhood, the territory within this study is smaller and focuses on the housing model only.

Within this study, a number of 6 go-alongs were carried out. Within each case study one respondent joined the go-along (table 3.1). The length of the go-along varied between 25-70 minutes and was followed by an in-depth interview. In some cases the interview took place before the go-along. The total time spend with the respondents of the go-along, including an in-depth interview, varied between 60-120 minutes. During the data collection this time window proved to be suitable, while listening, observing, interviewing, taking pictures and making notes required concentration and focus. In some cases several interviews and one go-along took place on the same day, demanding a lot of energy and focus of the researcher. Therefore, a maximum time of 120 minutes spend with one respondent turned out to be suitable. According to Kusenbach (2003) the length of a go-along can vary between a few minutes and several hours, however 90 is seen as a productive time window.

According to Kusenbach (2003) ‘When conducting go-alongs, fieldworkers accompany individual informants on their ‘natural’ outings, and – through asking questions, listening and observing – actively explore their subjects’ stream of experiences and practices as they move through, and interact with, their physical and social environment’. While go-alongs often have a ‘natural’ character in which the respondents are followed in their living environment during their regular daily routines, the go-alongs within this study had a more ‘artificial character’ in which the respondents were asked to give a small tour through the building and the areas within the building where they normally go. Instead of following the persons’ daily routines within their living environment, the person showed the researcher around in their living environment. The respondents explained the different rooms in the building, showed the shared spaces and the areas where they spend their time. They explained what they do there and why do go there. They explained the things they like and did not like about their living situation. In addition, spontaneous meetings with other residents within the corridor, the elevator or in shared spaces, were encountered.

Depending on the situation, the go-along took place before or after the interview. In some cases the go-along did not only consist of a tour in and around the building, but also of meeting other residents and friends of the respondent. For example during the go-along in Humanitas, the respondent took the researcher on a visit to one of the elderly in the nursery home. According to the respondent, it was part of his weekly routine. The two meet each other once a week and spend time together. Also in the student housing Lappkärsberget the researcher joined a visit to a friend of the respondent, who lived in one of the other corridors. The two meet up regularly to cook and talk.

During the go-along the researcher carried an observation scheme in which design aspects of the building could be noted (appendix nr. 1). Design aspects such as the quality, suitability, flexibility, visibility and accessibility of the common spaces were observed. The scheme is based on the social contact design principles of Williams (2015) and served as a checklist of important observations for during the go-along method. The scheme is useful when comparing the different case studies with each other concerning the design aspects. The scheme could be filled in during or after the go-along method and the interviews. In some cases the researcher observed the design aspects individually after the go-along and interviews by walking around and exploring the inside and outside of the building.

One of the advantages of working with the go-along method was that the respondents were in their familiar surroundings. According to Kusenbach (2003), interviews are static encounters that separate respondents from their practices in their natural environments, which can affect the research
results. During the go-alongs the respondents seemed to be comfortable in their own spaces, which made it possible to discuss a sensitive matter such as loneliness. The researcher stepped into their living surroundings and adjusted to their norms, such as taking of shoes and greeting the other residents. Besides this, all respondents seemed to enjoy talking about their everyday living space and their routines. Some respondents proudly presented their homes and enjoyed explaining every little detail about the house, which made the go-along method an enjoyable experience. Kusenbach (2003), however also warns that the go-along method can disturb ordinary or unfolding events. Respondents can act different while being followed by a researcher and keep certain thoughts and emotions for themselves. In addition, the ‘artificial character’ of the go-alongs within this study do not entirely reflect everyday situations, which will be taken into account during the data analysis.

Prior to the data collection, the go-along method was tested with students from Lappkärrsberget. During the test the audio-recording was tested and other practical matters such as getting familiar with the method. During the go-along and the interviews an audio-recording was made with a recording device. All respondents were informed about the audio-recording. In addition, pictures were taken and field notes were made. At the end of each go-along, the respondents got a small gift that showed thankfulness. Furthermore, a short summary of the researcher’s experiences during the go-along was made in which the researcher described the atmosphere of the place, thoughts and general insights gained from the go-alongs. The entire audio-recordings were transcribed in detail including the emotions of the respondents while saying something, emphases on words and moments of silence while the respondent was thinking. The transcripts of the go-along together with the interview transcripts are analyzed by using a coding system, which will be explained further. The pictures and field notes are used to illustrate findings and results.

3.3.3. Interviews

The go-along method was performed in combination with in-depth interviews, that took place either before or after the go-along. The data from the in-depth interviews was used to complement the data from the go-along method and to answer sub-question 1 and 2. In addition, the in-depth interviews were used to get an understanding of the residents’ experience of feeling socially supported within their home and to find out whether residents experience loneliness. The in-depth interviews therefore aimed to answer sub-question 3 and 4, and contribute to answer sub-question 1 and 2. The interviews were used to answer the follow questions:

Sub-question 3: To what extent do elderly and young adults feel emotionally and instrumentally supported within their home?

Sub-question 4: To what extent do elderly and young adults experience loneliness within their home?

The in-depth interviews had a structured character in which the questions and the order of the questions were decided before the interview (appendix nr. 2). The interview questions were made in English, Dutch and German. All respondents got the same interview-questions, however depending on the information the respondents shared, further questions were asked and the order of the questions could be adjusted during the interview. The questions were asked in a specific order, starting with warming up questions and general questions in the first half of the interview, followed by questions about sensitive topics in the second half of the interview. According to Boeije (2009), interview
questions can influence each other since the interpretation of a question is influenced by previous asked questions. Boeije (2009) refers to this as the ‘order-effect’ of interview questions. The interview started with general questions about the respondent as a way to make the respondents feel comfortable. These were questions such as ‘How did you find this place and why did you move here?’ These questions were followed with questions about the building design such as ‘Are you satisfied with how the common room is equipped?’ And questions about social contact between the residents such as ‘Do you know your neighbors well?’ The second half of the interview consisted of questions about loneliness, social support and instrumental support. Questions such as ‘Do you ever feel isolated from other residents?’, ‘To what extent can you talk to other residents when you are feeling down?’ and ‘Can you give examples of ways you help other residents or they help you?’. The way of structuring the interview questions from general to sensitive topics proved to be successful in giving insights in loneliness, social and instrumental support. The full list of questions can be found in appendix nr. 2. In total a number of 15 interviews were taken (table 3.1) The length of the interviews varied between 40 to 90 minutes. Prior to the official interviews, a test interview was taken with students from Lappkärrsberget. The test interview served to find missing interview questions, find a suitable order of the questions and adjust questions.

According to Kusenbach (2003) one disadvantage of sit-down interviews is that it creates a static encounter in which the focus is on talking only and other activity is perceived as distraction. Because of this, the combination of the go-along method and interviews is a way to overcome this problem and to complement both methods. The interviews were recorded and transcribed the same way as the data from the go-along method.

3.3.4. Diaries

The diary method was used to complement the data gained from the go-along method and the interviews with more detailed insights in the type of social interactions that take place in the building and the areas where they take place. The diary method was used to answer the follow question:

*Sub-question 2: To what extent do social interactions take place, where do they take place and what kinds of interactions are there?*

Initially, it was planned to observe the residents in the building when they interact with each other. However, social interactions can take place simultaneously spread over different areas within the building and during early mornings to late evenings. Direct observations would therefore be time consuming and unrealistic without the help of a second researcher. It was therefore decided to use the diary method instead. According to Zimmerman and Wieder (1977) the diary method provides an alternative for direct observations. The diary refers to an annotated record of chronological actions. According to Zimmerman and Wieder (1977) ‘individuals are commissioned by the investigator to maintain such a record over some specified period of time according to a set of instructions’. The data gained from the diary is often complemented with in-depth interviews that are based on the diary.

Within the study all respondents were asked to keep a diary for a period of 2 days. The respondents could decide themselves which days they wanted to pick. Since days can look quite different it was asked to pick 2 days within the same week, preferable days that differ. For the diary, a diary template was developed in Dutch, English and German (appendix nr. 3). In the diary, the respondents were asked to record the social interactions that happen within and around the building. They were asked to note the time and place where interactions occur, to describe the sort of
interaction (marked in categories such as greeting, having a small chat, asking for help etc.), to give a short explanation of the interaction and the way it makes them feel (happy, neutral or other). To clarify how the diary should be filled in, an example of a fictional diary was added (appendix 3). After the interviews, the diary assignment was explained to all the respondents and practical matters such as agreements on the return date and hand in were made. While the diary method is often used in combination with in-depth interviews that are based on the diary (Zimmerman & Wieder, 1977), the diaries were completed after the interview in this study. Instead of using the diary as basis for the interview, the diary was used as an completion to the interviews. In a few cases the diary was discussed with the respondent after handing it in. However, because the research took place in several countries it was not always possible to arrange a second meetup after the diary was completed. The diary could therefore not be discussed with each respondent. Prior to the diary method, the diaries were tested on students from Lappkårsberget to see whether the diary template worked well.

Out of the 15 respondents, only 7 respondents completed the diary assignment. Among those that did not complete the diary assignment, some refused to participated out of privacy reasons, some explained that they do not interact with residents within the building and that they therefore did not know what to write in their diary, and some never handed in the diary. In the case of respondents that did not fill in the diary because they do not interact with other residents, the respondents explained how a regular day looks like and why they do not encounter others. Even though they returned an empty diary, this data also gives important insights for this study. However, data is missing for the respondents that did not fill in the diary due to privacy reasons, or did not return the diary. In addition, among the respondents that did fill in the diary, some only completed one day instead of two. The data of the diary method is therefore not complete. However, the impact on the research is relatively small since the data is only used to complement the data of the interviews. Within the interviews several questions cover the topic of social interactions between residents and they are asked to describe a regular day. Insights about the type of interactions and the places where they occur are therefore gained within the interview. The diaries only served to confirm these interactions.

Since the diaries were explained after the interview, it was necessary to make arrangements with the respondents about the way they would hand in the diary and the time they needed to complete the diary. Since the researcher could not be present to pick up the diary herself, the respondents were not bound to a specific deadline and could email the diary when they were ready. Even though several reminder emails were sent, some residents never replied. Since there was no concrete deadline and face-to-face contact was missing, it was difficult to get all respondents to fill in the diary. According to Zimmerman and Wieber (1977), the diary method is often followed by an interview. In this case the interview came before the diary, which can explain the difficulties in collecting the data. Within future research, the importance of a second meetup after filling in the diary, should be taken into account.

3.3.5. Summary of the data
To sum up, the different types of data gained during the data collection consist of 15 interviews, 6 go-alongs, 7 diaries and 6 building design observation schemes. In addition, 1 open-interview was taken with a staff member of the nursery home Humanitas. Furthermore a scheme with general information about the buildings was developed to make the case comparison easier (appendix nr. 4). The scheme consists of building features such as location, community focus, the number of residents, household types etc. The scheme could be filled in with the information gained from the data collection. Missing information could be found via the website or contact person of the cases study site.
3.4. Research limitations

3.4.1. Validity and reliability
When carrying out the go-along method there is a chance that the presence of the researcher affects the behavior of the respondent. Webb et al. (1966) warn for the risk of ‘social desirable behavior’ by respondents. For example, when following a resident, the resident could behave more social than normally. In addition, respondents could fill in the diary according to what they want the researcher to know and what not. The data gained in the research could therefore be affected. However, by using mixed methods it is aimed to support the validity of the research. Furthermore, by operationalizing the concepts of loneliness and social support it is aimed to support the reliability of the data. Within the method section it has been attempted to make the data collection and used methods as transparent as possible, in order to make the research reproducible and enhance the research’s reliability.

3.4.2. Limitation in selection of the respondents
As explained during the justification of the case selection, the different cases were found via four access options including: direct contact with residents, contact with a key person and contact with a person in the own social circle. Since it was difficult to find cases and respondents via sampling, other access options had to be used. The researcher was dependent on key persons that could bring the researcher in touch with respondents. For example in the case of Humanitas, the respondents were selected by one of the staff members of the nursery home. The selected respondents had done interviews before with other researchers and were used to talk about their living situation with other parties. They have a function as role models in the nursery home, which can affect the data. For example if a resident that is more in the background was asked to participate, other results would be gained. The ‘average’ inhabitant of the nursery home was therefore not included in the research, which can create distorted results. In addition, some respondents were found via family and friends which can influence the objectivity of the researcher.

3.5. Ethical considerations
When working with respondents it is important to follow guidelines concerning ethical considerations during the data collection and data report. According to Baarda et al. (2013, pp. 39-42) a research should meet four criteria concerning the respondents in order to be ethically justified. The four criteria are voluntary participation of the respondents, correct information about the research introduction, guarantee of anonymity if wanted and the absence of negative consequence of participating. As mentioned in the method section, the respondents were informed about the research and the data publication prior to participating. Furthermore their anonymity is guaranteed. Since the topic of loneliness is quite sensitive and stigmatized, possible negative consequences for respondents by sharing their stories will be taken into account.

3.6. Data analysis
The data generated from the go-along methods and the in-depth interviews was transcribed. Within the transcriptions the literal words of the respondents were transcribed including sound expressions such as laughing, amazement, anger and emphasizes on words. In this way, the transcriptions stayed as close as possible to the conversations. The transcribed interviews were analyzed by using a coding system. The analysis made use of two sorts of codes, including theme codes and variation codes. The
theme codes describe the themes that a fragment discussed (Baarda et al., 2013, p. 219). The theme codes where developed during the exploration phase of the coding. Within this phase, codes where made in vivo. According to Baarda et al. (2013), this type of coding can be described as coding with a marker in which you work from paper and mark groups of words that are relevant within the theme. The second phase of the coding consisted of axial coding in which variation codes were made. The variation codes describe the different conceptions and factors mentioned within the theme (Baarda, et al. 2013, p. 219). The axial coding consists of the constant comparison between the codes. Within this process, the similarities and differences between the conceptions and factors mentioned within a theme were analyzed and placed into categories. The final part of the analysis consisted of a reflection in which the found data was compared with the theory presented within the conceptual model (fig. 2.1).
Chapter 4 – Results

The previous chapter described the selected cases, and the research methods used for the data collection. Within this chapter the results of the data collection are presented and sorted per case study. The case studies are divided into three sections. The first section presents the two nursery homes, the second section presents the student accommodations and the third section presents the co-housing initiatives. Each case study starts with the background information of the building. This includes a description of the location, the building, resident participation and philosophy. This is followed by an in-depth description of the lived experiences of the residents, starting with the profile sketches of the residents. The lived experiences are sorted into the four main themes which are building design, social contact, loneliness and social support. Per case these themes will be presented in detail.
Nursery homes
4.1. Elderly service residence
Nieuw Vredenbergh - Breda, the Netherlands

4.1.1. Background information of the building

Location
Vredenbergh is a service residence for elderly that need care or want to live in proximity to caretakes. The residence is located in the city Breda, a middle big city with approximately 150.640 inhabitants in the south of the Netherlands. The residence is located on a 10 minutes’ walk from the inner city and is connected with several bus lines. It is situated in proximity to the Chassé Theater, museums, shops, and restaurants, and is located near green areas such as the city parks and the Matbos, a forest in the south of Breda. Next to the residence one can find the military academy, the university of applied sciences and several schools.

The building
Vredenbergh was built in the 1960 as a nursery home. In 2001 the building has been demolished and rebuilt to fit the current care needs and comfort standards (DAT architecten, 2019). The residence exists of two L-shaped buildings, the nursery home on the west side and the apartment block on the east side, called Nieuw Vredenbergh (fig. 4.1c). The apartment block has 7 floors and the nursery home has 5 floors. On the east side in the apartment block elderly live on their own, alone or with a partner. The elderly in the apartment block do not receive any care by nurses, but can make use of facilities offered by the nursery home, such as the restaurant, gym and hair dresser. Between the buildings there is an open space that functions as terrace and garden. Underneath the terrace there is a parking garage for the residents. The apartment block has 124 rental apartments varying between 102 to 183 m² with 3 and 4 rooms and a balcony (Vesteda, 2019). The apartments have a luxurious character and fall in a high price category.

Facilities are situated in west side, in the nursery home. Here you can find the grand café restaurant that provides lunch and dinner three times a week. There is a stage for music performances as well. In addition there is the fitness area with sauna, a workshop where you can paint, a library room where church ceremonies are held, a hair dresser and a small shop. In the apartment block on the east
side, there are no common areas except for the hallway entrance with a place to sit. Furthermore, there are some guest suites where family members of residents can stay for the night.

Resident participation
Within the nursery home activities are organized for residents such as concerts and workshops. The residents in the apartment block can also take part of these activities. Once a month on Fridays there is a drink for all the residents. Furthermore there is a billiard club, a choir, a reading club and a bridge club. In addition, there is the ‘tenants’ interests association that has formal meetings two times a year.

Philosophy
The apartment block on the east side is built with the idea that elderly can live independently as long as possible with high living comfort and care on call (DAT architecten, 2019). This type of living reflects the new governmental policy within the Netherlands in which elderly are encouraged to live independently as long as possible and residential stays in nursery homes are restricted (Van Duin, Stoeldraijer, Van Roon & Harmsen, 2016). According to Peter Daniëls, employed within the nursery home Humanitas in Deventer in the Netherlands:

It has become difficult to stay within a nursery home. The age to be accepted for a nursery home has been increased from 65 to 85 years old. In addition, only elderly with a serious physical or mental health problem can stay in nursery homes. From the total amount of the residents, 10 percent may deviate from these standards and can stay in the nursery home while being younger than 85 or having not so serious health problems. Especially there are a lot of elderly women who live alone.

The transition of the new care system in which independent living among elderly is stimulated, is visible when looking at the demand for apartments. While on the east side in the apartment block, it has been difficult to fill all the apartments, the apartments on the west side in the nursery home are full. In addition it is common that residents move from the east to the west side when they are in need of care.

4.1.2 Lived experience by the resident
Profile sketch
Lena is a 85 years old women that lived for two years in the apartment block on the east side, in a large three room apartment with a view on the courtyard. She has lived alone for more than 30 years, since her partner died. Before she moved to Nieuw Vredenbergh, she used to live in a semi-detached house in Laren in the north of the Netherlands. She lived there for 36 years in a street with four houses and a school. She could see the children bike to school every morning, she could see the parents picking them up in the afternoon and she could see Sint Nicholas on his horse giving candy to the children. She was part of the life taking place around her. Two years ago she decided to move to the south of the Netherlands to live close to her daughter and grandson. Taking the step to move out of her history, from a house on a street to an apartment on a block and from the north to the south of the Netherlands on an old age, has not come without hardship. After having lived in Nieuw Vredenberg for two years, she hopes to move back to the north of the country where she feels more at home and where she has her friends.
Building design

Lena is satisfied about the way the building and her apartment looks. She tells:

There is a very nice restaurant where you can eat three times a week. There is the reception, the fitness area and a hairdresser. There are a lot of facilities, really. You can even get a personal trainer at the gym. It is all well taken care of. There is also a workshop where they offer courses, but not so many. I used to join the painting workshop.

The facilities and common areas are well equipped, well maintained and fresh. However Lena does not really make use of it and spends most of her time in her apartment or takes the car to visit family and friends. Lena tells:

It is my own fault, I could have used the facilities more often, however since the first moment I arrived here, I had my doubts. I don’t want to commit myself to this place too much. I have my old curtains hanging before the windows and I did not invest in buying a sunscreen, because I thought I first need to be 100 percent sure I want to stay here. Until that time I don’t want to spend too much money on my apartment. I also don’t want to join any of the clubs because I don’t know if I want to stay here.

All the facilities and common areas are situated at the nursery home on the west side. The residents from the apartment block have to go to the other side if they want to make use of the facilities. The restaurant is right at the entrance of the nursery home, it is very central and visible from the entrance. The other common areas such as the gym and workshop are situated in the back of the building. From the hallway they are not visible. They can only be accessed with a key. In the apartment block on the east side there are not common areas.

One thing that Lena misses in the building is ‘life’. Lena tells: ‘I used to live in a street with a mix of young and old people. It is so important when you get older. You want to feel like you are still part of the society’. All the residents in Nieuw Vredenbergh are old and most of them are in their last phase of life. One thing that bothers Lena is the constant confrontation with old age, sickness and death. Lena tells:

Look at the view from my balcony. I look out on the grey wall of the nursery home. All the time I am confronted with sickness and death. On the others side on the 4th floor there is a man. I thought ‘He must be death’. I haven’t seen him for a while. The curtains are closed and I don’t see any movement. I wonder if he is still alive. And when I ask my neighbors if they know if he is still alive, no one knows. I wish I could tell the architect to create visibility of other people and create life.

Instead of looking out at the grey wall of the nursery home, Lena wishes she could look out at a green area or the street where people pass by. Lena tells: ‘They hardly made something nice out of the courtyard. It is a pity. I wish I could look out over the trees and on the street where you can see the people and birds. There is life’. Also inside the building Lena misses ‘life’. For example in the hallway. Lena tells:
How can you design such a death hallway? You have to keep the building inhabited. Make a residence for elderly open and show what is happening, for example by having a kitchen window next to the front door. I once told someone when I first arrived here ‘isn’t is funny? All doors open automatically, except for the doors of the apartments.
1. ‘From my balcony I look at the courtyard and the nursery home. Imagine, every couple of months a hearse stops outside the building. And then the ambulance comes and the police, followed by the children with flowers for their grandmother that passed away. You are here in the last phase of life. I think it is horrible. I wish I could tell the architect ‘look what you are doing’. All the time I am confronted with death.’

4. ‘When I enter the building it looks wonderful, really. Everything is clean and fresh, but I never meet people in the hallway. I go to the elevator and sometimes I might see someone else. We say ‘hi’ and that’s it. Maybe in the parking garage you might see someone and you say ‘hi’. But we never say more than that. There is a sofa at the entrance but I never sit there, because there is a big pillar right in front of your face so you cannot see when others get inside. It is also very sterile. Once someone put some old magazines on the table to make it more ‘homey’, but then some of the other residents got angry. ‘Who puts these old papers here?! Now I have to clean it!’ Old people are not easy to get along with. Really’.

3. ‘If I have to stay here, I would like to have my apartment at this side of the building so I look out at the trees and the military school. There you can see the young soldiers walking with backpacks, you see the students bike to school. There is life’.

6. ‘When I enter my hallway I cannot see anything. I am completely isolated from everything and everyone, and when I arrive here I feel like that. I feel isolated and that is not a pleasant feeling. I wish I could tell the architect to make a passage through the hall and small windows next to the doors. You have to keep it inhabited! I once was at a building where people had a kitchen window next to their door. You can immediately see if someone is at home. You look inside and see life. And if you don’t want people to look inside, you just hang something before it. In this hallway there is no life. You don’t see or hear anyone. It is something that has been bothering me for a while’.

Figure 4.2: Nieuw Vredenbergh building design (Floor plan adapted from DAT Architecten, 2019).
Social contact

On a regular day Lena hardly sees her neighbors. She wakes up in the morning feeling quite depressed, Lena tells: ‘I never had this before, but when I wake up, the day can look very dark and then I wonder ‘what shall I do today? Most of the days she gets out of the building and takes the car to visit family or friends and searches her social contact outside of the building. Within the building Lena hardly meets others unless she invites them to her apartment. Since the first moment she arrived in the apartment, she invited other residents for dinner and coffee. Lena tells: ‘I always invite others for dinner because I don’t like eating dinner by myself’. Lena tells she is in touch with all her neighbors. She knows everyone that lives on her floor and everyone on the floors above and below her. However, if she want to meet other residents she always has to take the initiative herself. Lena tells:

I have lived here for 2 years and no one has ever rang my doorbell. It doesn’t matter how much effort I take. I invite people. It is always really nice. However, no one ever invites me. It is unbelievable. People don’t realize it.

When Lena spontaneously meets others in the apartment block it is either at entrance where the postboxes are or at the elevator. The contact is mostly superficial and not more than a greeting. Lena says that she hardly meets others when she walks through the building.

Within the nursery home activities are organized by staff members for all the residents, including the residents in the apartment block. Sometimes Lena also takes part in these activities. For example once a month she goes to Friday drinks at the restaurant together with her neighbor and stays for dinner. She also subscribed for a golf activity together with her neighbor. Lena has the idea to organize a group trip to the Chassé theater around the corner and see a musical. She tells:

I can just tell the staff I want to organize something. Then I ask ‘is there anyone who would like to see this musical?’ I will see if there is any interest, but it is difficult to get the elderly out of their homes, you can’t imagine.

The residents in the apartment block change regularly. Lena tells:

Quite frequently people die. It’s that simple. Two floors above me an apartment got free. Sometimes when there is couple it can be that one of them needs health care and then they move to the nursery home. And that is my view, it drives me crazy because you are all the time confronted with death.

Loneliness

Lena tells: ‘My apartment is beautiful, really. There is nothing I miss. I also have a garage. But I miss the connection with other residents’. According to Lena the problem is not a lack of contact with others, but the lack of bonding between her and the residents. If she wants to find companionship she can ring the doorbell of some of the residents and have a chat. However, there is no bonding between her and the residents and that makes her feel lonely sometimes. She tells:

It is not the lack of social interaction. You can say ‘let organizes something together’. But afterwards you let each other go and everyone goes back to their own apartment again. It is the connection that I miss. It is difficult to get a connection with others. When you talk to people
it is always small talk. But no one ever asks me ‘how are you ‘really’ doing?’ They never ask me about my life before I moved here. No one asks further. It has to come from two sides. You have to make connection together, you have to find someone that wants it as well. I am afraid it is because of digitalization. We don’t look at each other anymore.

For Lena it is difficult to bond with other residents which makes her feel isolated from the group. Within the apartment block there are no places to interact with other residents. Cannuscio, Block and Kawachi (2003) argue that nursery homes ‘offer few private areas for congregation, minimizing opportunities for meaningful interaction among residents as well as between residents and their visitors’, enforcing isolation of the residents’. In addition, Lena feels like an outsider within the building. In comparison to the other residents Lena is still energetic and in good health. She tells:

_ I am 85, that is old. Some of the people that live here are 98. For some reason they isolate themselves. I still drive the car through the whole country. But each time I see that the older one gets, the more difficult it becomes to get others out of their apartments and do something together. I would love to organize something together, but no one has any interest to join._

Some of the residents in the building form a close group that is difficult to get into when you are not part of a certain club. It can be quite excluding. Lena tells:

_ One time I went to the restaurant. I was walking there alone and I saw a women sitting at a long table and there were still free seats. I asked her if I could sit there and she said ‘no because these seats are for the people that join the call circle’. So I couldn’t sit at that table even though we hardly knew each other._

Besides this she feel estranged from the culture and notices differences between the life in the north of the Netherlands and the south of the Netherlands. Lena tells: _I am not a Brabander. I just don’t feel at home here. I don’t have the courage to get to know Breda. Preferably I would go back to the North where I know everything. There everything is much easier for me_.

Not only does Lena feel isolated from the other residents, she also feels isolated from the broader society. She tells: _When you get older you want to be surrounded by younger people. In this way you still keep updated and you are still part of the society_. However, nursery homes often segregate residents geographically and socially from their families and communities of origin (Cannuscio, Block & Kawachi, 2003). When Lena has a free day she likes to take the car to a beach nearby and sit in a chair at the water side. She tells: _It is wonderful, I just bring a parasol and sit there with all the screaming children around me. At some point you just want to feel like you are part of things. But that is impossible in a house like this_.

_Social support_

_Emotion support_

Within the building it is difficult to find emotional support. The lack of bonding between her and the residents, creates a distance between them. Lena therefore never shares any personal problems with other residents. For example, she has never shared with other residents that she experiences loneliness. Lena tells:
You don’t share with others that you feel lonely. They will think ‘nonsense! You are healthy, that is all that matters. And if they don’t even ask me how I am ‘really’ doing, I don’t want to bring up the topic of loneliness. And that it something that makes me feel lonely.

Formal emotional support by an employee of the nursery home is also not available, at least not that she knows of. Although Lena can share personal problems with family members and relatives, it is sometimes difficult to talk about her problem of loneliness because they have busy lives and other concerns. Lena tells: ‘It has been a very hectic time. Everyone has much more important concerns than my problem. Grandmother will come on the last place’. Lena tells that other residents come to her to share problems sometimes. These problems are often related to the tenant’s interest association.

Instrumental support
When looking at instrumental support, the residents offer and receive instrumental support from each other. Lena tells: ‘If something happens I can go to the floor above and ring on Jenny’s door. She would absolutely do something for me if that is necessary’. She can also ask other residents for information. For example she can just ring someone’s door and ask what to do when she wants to receive care from the nursery home. The nursery home offers formal instrumental support when needed. In addition there is a new program set up in which students from the military academy take people from the nursery home that are in a wheelchair, for a walk. Lena likes the initiative to combine young and old. She tells: ‘In this way the students can show that it can be fun to be in a wheelchair’.

Lena also offers instrumental support to others. She calls herself ‘the chauffeur’ of the building. If someone needs to go to the doctor or wants to do groceries she says ‘Just call me. I got the car. I can bring you’. She also offered her neighbor to drive with her to the golf activity.
4.2. Elderly residential care center

Humanitas - Deventer, the Netherlands

4.2.1. Background information of the building

Location

Humanitas is a residential care center for elderly located in the city Deventer. Deventer has approximately 99,500 inhabitants and is situated in the east of the Netherlands. The care center is situated in a neighborhood from the 60’s and 70’s at the outskirts of the city (Humanitas Deventer, 2019). Within a 3 minute walk from the care center one can find a shopping center with all sorts of shops, including supermarkets, drugstores and the post office. Furthermore the dentist, orthopedist and hearing specialist are located in the shopping area. The residence is located next to a small park and close to the green areas outside the city. The residence is well connected with several bus lines that connect the care center with the inner city.

The building

Humanitas was built around the same time as Vredenbergh, in the 1960. Like Vredenbergh the building had to be adjusted to the current care needs and standards. Instead of constructing a new building, the rooms of the nursery home were enlarged and two rooms became one room with bathroom and kitchen. The room adjustments resulted in residual space at the end of each hallway. The residual spaces were too small to rent out according to new regulations, but are comfortable to live in. Nowadays these spaces are turned into 6 single-person apartments where students can live for free. The students live within the department of the nursery home, between the other residents. Within the building there are several departments. These are the nursery home, the psychogeriatric department, the care hotel and sheltered homes where elderly live independently. Within the nursery home there are 158 residents who stay long-term and receive daily care. In each hallway at the end of the floor, one student lives. In addition there 10 family apartments for couples, 1 room in the care hotel, 4 rooms for elderly that need a temporary stay in the nursery home, 9 residents who rent an apartment and 34 sheltered homes where elderly can live independently. The age range of the residents varies between 60 to 106. After a new law in the Dutch care system only people with an age of 85 or older and a medical condition can apply for living in the nursery home. The apartments are rental and the rental
time is approximately 0.5-3 years. The rent is relatively cheap, while the costs for care are the same as in other nursery homes.

On every corridor you can find an open space, furnished as a living room with a big table, sofa’s, a tv and kitchen. This space is used to sit and chat. Two times a week the residents drink coffee there together. In addition there is a restaurant where dinner is served every day, called ‘t praathuis, which is also used for cultural activities such as concerts. Other facilities are the boulevard where you can find a hairdresser, pedicure, shop and laundry service. There is a gym, a billiard room, a room for festivities and a garden. Furthermore, there is a special living room for the students. Throughout the building you can find places to sit and drink coffee, for example at the reception, at the end of each corridor and at the hallway where the stairs and elevators are.

**Philosophy**

In 2012 Humanitas got a new director who faced a number of challenges similar to other care institutions in the Netherlands. According Gea Spijkes (2019) the director of Humanitas:

> **While Humanitas Deventer provided excellent care to its residents, there was something missing. The staff was overworked and demotivated. The residents were bored and lonely. And the facility – although located in an active and vibrant neighbourhood – was isolated from the surrounding community (p.23).**

Instead of segregating the elderly from the broader community, the institution decided to focus on creating an inclusive climate in which young and old live together, facilities in the nursery home got accessible for people living in the surrounding neighborhood and youth with an intellectual disability got the opportunity to work at the nursery home and do an internship. The concept of students living with elderly has gotten national and international recognition. Peter Daniëls, employed at the nursery home tells that after the adjustments of the rooms according to new housings standards, the residual spaces that were created needed to be filled up. While the spaces were too small to legally rent out, Humanitas decided to let students live there for free. It started with taking in one student ‘Onno’. According to Gea Spijkes (2019, p. 25):

> **Just a few weeks after the first student Onno, moved in, the atmosphere at Humanitas Deventer began to change. Residents complained less about aching knees and elbows. They asked fewer questions about doctor’s appointments and absent relatives. Instead, they wanted to know how late Onno returned from his party. Whether the girl he was dating this week, was the same one from last week. And what in the world is Beer Pong? Would Onno teach them how to play, too?**

Nowadays there are 6 students living in Humanitas for free. In exchange they have to be a good neighbor in any sort of way. For example by having a chat, helping with small tasks and serving meals once a week. The agreement is based on trust.

Although there are only 6 students living in the nursery home, the atmosphere is totally different than in other nursery homes. According to Peter Daniëls it is the combination of all sorts of people together that create an open climate. Besides the students there are 6 young students with intellectual disabilities who work at Humanitas during the week, for example at the reception. In addition a couple of times a week there is a free cultural activity that is open for people from the
neighborhood. Furthermore there are 200 volunteers, staff members, researchers and scholars who do a project at the nursery home. All together there are a lot of people from outside the nursery home that create a climate that is inclusive and different from the standard nursery home. According to Peter Daniëls ‘While most nursery homes have difficulties finding staff, we have a waiting list for staff, residents, students and over 200 volunteers who want to be part of our community’.

Resident participation
The student that live in Humanitas are actively involved within the nursery home. Besides helping the elderly and being a good neighbor, they also perform tasks within the nursery home. They help out with organizational proceedings, set up activities and show researchers around. Some elderly also help out with small tasks such as watering the plants and repairing furniture. In addition, some elderly participate in research as well. They show researchers their apartments and take part in interviews. Almost every day of the week there are cultural activities that residents can join. In addition there are several groups, such as the knitting group and the gymnastics group of which residents can take part.

4.2.2. Lived experience by the residents
Profile sketches
Thea is a 88 year old women who has lived in Humanitas for 8 years. She lives in a single-person apartment in the nursery home department and receives daily care. She was born and raised in Deventer and her whole family lives in Deventer. Her mother has lived in Humanitas as well. Thea used to live in one of the sheltered homes where elderly live independently. After a surgery in her hip she moved to Humanitas to rehabilitate and later on she got a room in the nursery home. She tells: ‘Because I got an medical condition I could move here. Otherwise they wouldn’t let me in because I can still talk well and do everything. But if I would move here now, I probably wouldn’t have gotten a place’. She hopes to stay in Humanitas for a long time.

Johan is a 79 years old man who lives in the nursery home since 3,5 years. He lives in a two-person apartment with his wife. His mother has lived in Humanitas as well. Before they lived in the nursery home, they lived for half a year in one of the sheltered homes. Because his wife got dementia, they moved to the nursery home together. His wife spends most of the day at the psychogeriatric department while Johan stays at the nursery home. Johan is from the North of the Netherlands but has lived in Deventer for most of his life. His children live in Deventer too and one of his children is a staff member at Humanitas. Johan enjoys living in Humanitas and hopes to stay here for a long time.

Adam is 29 years old and is one of the 6 students who live in Humanitas. He has lived in Humanitas for 3 years. He was born and raised in Deventer, in the street next to the nursery home. His family still lives in Deventer. Via a friend, who was one of the first students that lived in Humanitas, he found out about the possibility to live in the nursery home. His reason to move here was the combination of zero costs of living in exchange for ‘just being myself’, the concept of being a good neighbor. Currently he is also active in communication proceedings for the nursery home. He enjoys living here and has no plans yet to move out.
Building design

Adam tells ‘When entering the building you immediately sense a certain vibe. People make eye contact and say hi. Everything is open and that creates an open atmosphere. An environment in which people are stimulated to get in touch with each other’. When you enter the building, the reception welcomes you in an open space with several places to sit, a coffee machine and a long table where visitors can wait with a cup of coffee. Adam tells: ‘At the entrance there is a big table where you can drink coffee and when people enter the building they sit down there and have a chat. That is something that we want to stimulate’. According to Adam there is always life in the building. Adam tells: ‘Because there are people doing internships, researchers, students, volunteers and other people, there is always something happening and you see a lot of young people. It does not feel like a home full of old people’.

From the entrance you can walk to the boulevard which functions as main passage through the building. It is a shared pathway that links the shop, the manicure, hairdresser and laundry service with the entrance, the stairs and elevators. Along the passage there is an open space with tables chairs and a small kitchen. The space can be transformed into a workshop room or small concert room. It is used for events such as interactive music activities for residents. When there is an activity, you can hear it all the way to the entrance. Because the space is open, everyone that walks in the passage can stop and have a look. At the end of the passage there is the gym, the party room, a billiard room and some offices. The residents and people from the neighborhood can book the party room for private events. The billiard room is also used by people from the neighborhood. Johan tells: ‘For my birthday I rented the party hall for my family, grandchildren and great grandchildren. We were with 20 people. I can order food in the restaurant or we can make food ourselves and that is really nice’. Adam also uses the party room to organize parties with his friends.

Thea, Adam and Johan are very satisfied with the common areas, the way they are equipped and maintained and the way they look. In each corridor there is an open space where people can sit, drink coffee and watch tv. The space is situated in the middle of the corridor. Johan spends most of his time in the open space in his corridor and in the restaurant. He tells: ‘Very often I sit in the space next to my room. It is a bit bigger than my room. And then we eat together and watch tv. We just got new furniture there. I also go to the restaurant a lot. They have good food for a good price’. Adam lives in the same corridor as Johan and spends most of his time in the open space as well. He often sits there with Johan and some other neighbors. They have a chat and watch tv. Furthermore he goes to the restaurant often. The restaurant opened since a few months. He often goes there to eat together with some elderly. Thea spends a lot of time in the open space as well. She tells: ‘Two times a week you can drink coffee there. And in the afternoon I go to the open space at the other side where we have gymnastics and physiotherapy. With all people from the corridor we do exercises for our legs and arms. It is always a lot of fun’. According to Adam, the open space encourages the residents to leave their rooms and interact with each other. When Adam walks to his room at the end of the corridor, he always passes the open space. When he sees that people are sitting there, he always stops by and joins the others. Unlike Vredenbergh, each common area is open and can be accessed without key. If there are doors towards the open area, they are either opened up or have a glass window so you can always see what is happening inside the room.
1. Adam: ‘In every corridor there is an open space where you can chill and drink coffee. These spaces stimulate others to sit outside of their rooms. For example if someone passes this space and sees ‘ah there are others sitting there’ then you can just join them’.

2. Adam: ‘Within the building there are a lot of common areas. At least 2 on each floor. Each has their own character. One for example looks like an Irish pub, while the other looks more like a living room. And there is one common room that has more of a ‘female’ touch with pillows and decorations. Because all common areas are different there is a big chance that there is a room that matches your wishes concerning furniture, light and color’.

3. Thea: ‘We often sit at the big window. There are some chairs. From there you can look over the entire parking place. You can see everyone come and go’.

Figure 4.6: Humanitas building design (Floor plan adapted from Humanitas, n.d.)
1. Johan: 'If I want to find company I often go to the entrance and sit at the big table. Everyone sits there. Mister and misses Vosmijer and their daughter. And then we have contact there'.

2. The restaurant. Positioned on the first floor above the entrance.

3. Adam: 'We are currently creating a room for the students on the second floor. It’s a room we can furnish and paint ourselves. We have a beer pong table and football table there. We plan to paint the walls orange and make it a chill place'.

4. The boulevard. Music activity with the elderly.

5. Adam: ‘People used to ask me ‘oh you live in a nursery home, but as a student you also want to party right? That is possible. I can use the party room. It is at the end of the hallway. There are only offices and no one lives there. In the weekend no one is in the office so you can turn on the music loud without disturbing others’.

**Figure 4.7: Humanitas building design (Floor plan adapted from Humanitas, n.d.).**
Social contact

When walking through the nursery home there is one thing that stands out. Most people leave the door of their apartment open when they sit in their rooms. From the corridor you can look into people’s living rooms (fig. 4.8). Johan and Thea leave their door always open when they are at home. Johan tells: ‘Everyone can walk into my room if they want. Only when I am not at home I lock the door’.

Thea sees her neighbors every day. They often sit together at the window where they chat and watch other people. She knows everyone in the corridor. They do gymnastics together. Currently everyone in the department is saving money for a group trip. Besides the people of the corridor she is also in contact with other residents in the building. Every evening she goes to the restaurant where she eats with the other residents. She also takes part of all the activities that are organized in Humanitas. She tells: ‘We always join the activities. No matter what kind of activity, we always go and have a look. If we don’t like it we go home. We don’t want to disappoint the organizers by not showing up haha. No we always go to every activity’. Thea tells there are a lot of things to do. She tells:

There are movies, you can play joule and there is bingo. On Saturday the Moluccans from the neighborhood will come and bake cake with us. They do that once a month. On Sunday there will be a sing performance and on Wednesdays the knitting club meets. So there is a lot to do.

Thea is also in touch with the students that live in Humanitas. She tells: ‘The students are our favorites in the building’. Currently she and other members of the client council have to select two new students that will substitute two of the students that are leaving Humanitas.

Adam sees his neighbors every day. Adam tells:

As soon as I leave my room, I see my neighbors. They often sit in the open area or at the entrance of the building. So I see them every day. On a normal day I do sports and when I get back from the gym I see if I can make contact with my neighbors in any sort of way. I also visit Greta often, she is 94 years old. Every time I visit her we hang out for several hours.

Adam tells that the social interactions with the residents emerge spontaneously. When he walks through the building he often meets someone and they decide to do something together. Adam tells: ‘The contact I have here with residents is just like the contact I would have with any of my friends. I just talk to someone and say ‘let’s do something. It happens spontaneously’. At least once a week the students get in touch with the elderly because they are assigned to prepare the bread in the restaurant. Adam prepares the meal on Fridays where he prepares sandwiches and makes coffee and tea for the elderly. Besides this, Adam regularly joins activities with residents such as the carnival celebration.

Johan and Adam often do things together. Johan tells: ‘The students do everything for us. Yesterday we all watched soccer together in the open area and Adam brought the snacks. Adam and I are also organizing a day trip for the whole department. Adam is also arranging a darting activity for
Johan tells that in his corridor he does not meet so many people, but in the boulevard there are always people. Johan tells: ‘All facilities are there so there you can meet more people’.

**Loneliness**

According to Peter Daniëls: ‘In humanitas you never have to be lonely. If you want to be lonely it is your own choice. We offer the residents many opportunities to make contact with others and anyone can make use of it’. Feeling lonely or isolated are two experiences that Thea, Johan and Adam are not familiar with. Thea tells:

> I have never felt lonely here. There is so much to do. However, it is up to you to find company. You should not stay in your room with the door closed. You should join as many activities as possible. The nurses also bring you to coffee meetings and other activities so you get to see others. In this way you get to know other residents and you start to recognize their faces.

Johan tells that he puts effort in meeting others as well. He tells: ‘We always try to find each other and do things together’. Although Thea does not experience loneliness herself she has seen many residents of whom the family never comes to visit them. Adam also tells that some elderly always sit in their room because it is their own choice.

However, when Thea was still living in the sheltered home, she used to feel lonely sometimes. She tells:

> I have lived 7 years alone in a sheltered home on the other side of the building. I was alone and I didn’t like it because I thought it was scary to sit there alone. In the nights sometimes people would ring my door. I am not the type of person that likes being alone. I need to have people around me. Here in the nursery home there are only old people, but in the evening I still have the feeling that there are people around me. That is a pleasant feeling.

Adam has never felt lonely in Humanitas. Before he lived in Humanitas, he lived in an apartment. There he had no connection with his neighbors. In Humanitas he feels at home. Adam tells: ‘When I just moved here I immediately felt welcome. I feel appreciated by the others, not only because I am a good neighbor but also because they are good neighbors for me’. He feels part of the group. With his neighbors he shares his passion for soccer and he can talk about his family, friends and studies. Adam tells that these are the topics that the residents are sincerely interested in.

**Social support**

**Emotional support**

When Adam feels down he can share his thoughts with other residents. Especially with Greta he has a strong bond. He can just knock on someone’s door when he feels down. Adam tells: ‘The people in this house enjoy making contact so when you knock on someone’s door, they always appreciate it’. Adam tells that he had a stressful period within his studies in which he did not have time to hang out with the other residents. He tells: ‘My final project in my studies was not approved and it was very stressful. I was very disappointed, but luckily Greta was very understanding. The other residents also felt sorry for me and understood my situation. I could always talk to Greta when I felt down’. Some elderly sometimes also share their personal problems with Adam. Adam tells: ‘Sometimes they share
family problems or tell about their partner that passed away and who they miss’. He also trusts his neighbors.

Johan and Thea tell that there are employees in the building that you can share personal problems with. Thea tells: ‘We recently got 2 people that can help you with personal problems but also with tasks such as doing groceries. When you have a personal problem they come and talk to you. It is really nice. I think it’s a good initiative’. Johan tells that his daughter, who works in the nursery home, is a death counselor and gives financial guidance.

**Instrumental support**

Johan tells that the nurses and the students do everything for you. Johan tells: ‘Every evening from Monday to Friday the students prepare sandwiches for us. When you ask them ‘can you do this or that’ they will do it for you. They take you on walks. Adam and I are now trying to arrange a day trip for the department’. Johan also does a lot of voluntary work within the building. He tells: ‘I help to clean the garden furniture. I also help the technicians with small tasks’.

Thea tells that the students always help you when you ask them something. She tells:

*Last Friday Chemain, a student who lives at the end of my corridor, took me to the shopping center. She brings me with the wheelchair. It is a lot of fun. And the other girl Anneloes is also really nice. You always see each other at the bread meal and then you can always ask them to help you with something.*

Adam tells that he helps the residents with technical things. One time he was asked to help on old women with her iPad. He went to her apartment and that is how he got to know Greta. Since that moment they have been close friends. Adam tells: ‘I always help the elderly when they have a problem with the tv, their laptop or computer. But also with small tasks such as groceries. I also offer to drive residents to the doctor. Then I can borrow their car or the car of the receptionist’.

However, instrumental support is not only in one direction, in which the students assist the elderly. Adam tells that the elderly teach him a lot as well. Adam tells:

*I believe that the elderly teach the young residents unconsciously. They teach me to enjoy small things. They also help me to grow as a person. They have more life experience so they can give me advice. For example me and Greta asked each other ‘if there were any things in life you could have done differently, what would it be?’*
Student accommodations
4.3. Student accommodation
Guesthouse Gasgasse - Vienna, Austria

Figure 4.11 (a) Location of the residence from the inner city (adapted from Google Maps, 2019).

Figure 4.11 (b) Location within the neighborhood (adapted from Google Maps, 2019).

Figure 4.11 (c) Building top view (Google Maps, 2019).

4.3.1. Background information of the building

Location

Guesthouse Gasgasse is a student accommodation located in Vienna, the capital city of Austria. The city has approximately 1.8 million inhabitants. The residence is located in the 15th district, next to Westbahnhof railway station, a major transit center. The residence is on a 2 km distance from the inner city and is well connected by metro, approximately a 10 minutes travel. Furthermore, the residence is located on a 15 to 35 minutes travel to several universities and colleges (OeAD, 2019). Right at the residence is the Maria Hilferstraße, which is the main shopping street of Vienna.

The building

Guesthouse Gasgasse is one of the many student accommodations provided by the housing office OeAD, which is the largest provider of student dorms in Austria (OeAD, 2019). The residence offers short term accommodation for international exchange students, PhD students and Austrian students. When applying for a university in Vienna, the OeAD student accommodations are recommended as place to stay during the studies. The rental contracts vary from 1 to 16 months. While Austrian students can also apply for a room, international students are prioritized. Most residents are international exchange students that only stay for a short period of time. The rooms are therefore fully furnished, bed sheets and cooking equipment are provided and the services are in English.

The student residence Guesthouse Gasgasse was constructed in 2011 and has gotten an award for architecture and sustainability for its energy planning. The building is constructed according to passive house standards (MA 20 - Energieplanung, 2013). There is place for 194 residents and there are 110 residential units. There are two different types of units. There are single rooms with private bathroom and shared kitchen, shared with 4 other residents and single-person apartments with one room, both with and without balcony (OeAD, 2019). The building has 8 floors. In the basement there is a laundry room and bicycle parking. On the ground floor is an office of the OeAD and on the 7th floor is a common room. The central location, availability of bike parking, barrier free access, natural
daylight, energy saving machines and a common room make the building special according to Next Room (2012).

While the OeAD housing office aims to provide affordable housing for students, with a focus on climate friendly living, a room at Guesthouse Gasgasse is more expensive than in a shared apartment, which is the most common way of living in Vienna as a student (Lebhart, 2016).

Philosophy
The OeAD housing office aims to provide affordable housing for students with a focus on climate friendly living. The OeAD housing office has won several awards for climate friendly and sustainable construction in combination with affordable housing, focusing on passive housing (OeAD, 2019).

4.3.2. Lived experience by the residents
Profile sketches
Sarah is a 26 years old student from Bulgaria. She lives in a single apartment with balcony on the 8th floor. She moved to Vienna when she was 19 years old to study. As a child she used to travel to Vienna with her family. She decided to move to Vienna for her studies because she knew the city, knew the language and had her sister and cousin living in Vienna as well. Prior to living in Guesthouse Gasgasse, she lived with her cousin and sister in a shared apartment in Vienna, which is a common way of living as a student in Austria. According to Sarah it was cheaper and bigger. However, she had to give up the shared apartment and decided to stay in a student dorm because she did not want to go through the trouble of searching for an accommodation for several months. Guesthouse Gasgasse is a temporary solution for her. She plans to stay here for 6 months in total.

Chen is a 29 years old researcher at the University of Vienna and comes from China. She lives in a single apartment without balcony at the 7th floor. She has lived in Vienna for 1 year. She is used to living in dorms. Since 12 years she has lived in dorms and always moved to different cities for her studies. She decided to move to Guesthouse Gasgasse because it was convenient for her, since she does not know German, lives alone and does not have any insight knowledge about the housing market in Vienna. The accommodation also provides furniture, bedsheets and cooking equipment, which is one of the reasons she decided to move here. She did not know anyone in Vienna and could not have a look at the building or the room. A place in a student dorm was a safe option to find accommodation. She
plans to live in Guesthouse Gasgasse for 1 year and hopes to find a shared apartment. According to Chen, it is easier to find a room in Vienna with friends than finding a room alone.

**Building design**
Chen tells that it is very convenient to live in Guesthouse Gasgasse. The building is clean, well maintained and has a good location. However, she tells:

> It is kind of lonely to live here. It is like everyone is so separated from each other. I don’t really know my neighbors. We have never met each other. The doors are always closed and I don’t know who they are. There is a common room but usually it is occupied by the American exchange students who have a party at midnight.

Within the building there are no spaces to meet others, except for the common room on the 7th floor (fig. 4.13 a and b; fig. 4.14). The room has about the same size as a single-person apartment. There is a kitchen, some tables and chairs. The room does not have a central position and is not visible from the hallway. In order to access it, you need a key. Chen tells: ‘The common room has exactly the same door as all other apartments. You don’t notice it is a common room. In previous dorms where I lived the common area was already an open space in the hallway. I think that is better’. The common room does not function as a meeting place. Chen hardly uses the common room. She tells:

> There are no people there. When you want to meet your friends you can just go to your own room. It is not about how it looks, but how it functions. There is no need for me to use it. I don’t feel like it is a place you meet your friends. Maybe if it was equipped in a better and more comfortable way it would be better.

Sarah hardly uses the common room either. She sometimes uses it when she wants to cook because the kitchen is a bit bigger and there is a dishwasher. When she has more than 3 friends over, she goes to the common room to cook. You have to bring your own cooking utensils and dishwasher tablets when you want to use the kitchen in the common room. Sarah tells she once cooked in the common room and put her dishes in the dishwasher. When she came back all her dishes were taken without any note. Sarah tells:

> I feel like it is not something wrong I have done because the common room is a space for everybody to use. The concept of living here is that you do not only pay for your room, but also for everything OeAD advertises, like the common room. I still have to figure out how to get my dishes back.

Chen tells that the common room had been closed for one semester because the OeAD got a lot of complaints from students and residents in the neighboring buildings. She tells that the American exchange students always make a lot of noise at midnight. They never clean the common room and don’t follow the night resting times. The OeAD had sent a couple of reminder emails that the students needed to keep the common area comfortable and peaceful, and that noise levels needed to be controlled, but after three warnings they closed the room for everyone.
Chen misses a place to communicate with other residents. She tells: ‘There is no space for us to communicate with each other, rather than having a noisy party at midnight. For example we can just chat with each other on a Saturday. But there is no space for that’. If she was the designer of the building she would have added a place to sit in the hallway. She tells:

On every floor there could be a sofa. There are open spaces in the hallway around the stairs. It would be possible to put two sofas there and a table and then we might have a chance to communicate with each other. Because it is an open space you know that people will not do something crazy. We used to have open spaces in the previous dorms where I lived and it functioned well. It also does not cost so much to put a sofa and a table there.

The empty spaces around the chairs could function well as a meeting point (fig. 4.15). It has a central position and is visible from the hallway. Everyone that takes the stairs or the elevator and walks to his or her room would pass the open space. Like in Humanitas, the space could stimulate residents to leave their room and interact with others.

Figure 4.13 a and b: The common room.

Figure. 4.14: Door of the common room without window. It is the same door as the apartment doors and does not invite to come in.

Figure. 4.15: Empty space in the hallway that could be turned into a meeting space when adding couches and a table.
Social contact

During a regular day there is not so much life within the building. Chen tells that there is hardly any social interaction and that it is hard to tell whether there are people at home or not (fig. 4.16). She tells:

On a regular day I don’t really see anyone in the building. There is no interaction. Almost every day there is nothing happening here. If you stay for instance for a night you never know whether there is someone and you are unable to talk with anyone. I only see the cleaning lady.

Chen and Sarah spend most of the day outside of the building. Sarah spends long days at the university, goes to dancing lessons and meets friends. Chen works and goes to German classes in the evening. Chen never sees her neighbors. She tells:

I never see my neighbors. The doors are always closed and you cannot see anyone. When you arrive at the building you just go to your room. You don’t see others. Especially when I have German class and get home quite late, I don’t see people. Only after several months of living here I found out that my neighbor is Chinese as well. I never saw here although she was living next door.

a.  
b.

Figure 4.16 a and b: The hallway is empty. There are not places for residents to meet each other. It is not possible to see whether the neighbors are at home.

Chen tells that she used to live on the third floor in a shared apartment with 3 other students. On the third floor she used to encounter people sometimes. Since a couple of months she moved to a single-person apartment on the 7th floor where she hardly sees anyone. She tells:

After moving in to the 7th floor it seemed like no one was living here. You don’t know where everyone is. Of course in every room there is someone but we never see each other for some reasons. You don’t know what they are doing. But when I was still living on the third floor I could sometimes see someone. On the third floor, all rooms are shared apartments and there are 4 people in one apartment. So there were more people than on the 7th floor, where there are only single-person apartments.
When Chen meets other residents, it is at the elevator or at the laundry. She tells: ‘Sometimes you talk to someone who is also waiting at the laundry. You probably talk to each other, but usually it is just a very superficial small talk. Nothing meaningful. Sarah tells that approximately two times a week she meets other residents in the corridor when she walks to her room. She tells:

*What I really appreciate is that we say ‘hi’ on the floors. But I like to ask ‘how are you?’ I like to start a conversation, but I feel like everyone minds their own business. We all accept each other and we are friendly, but everyone is rushed so we don’t really get to ask ‘how are you?’*

Among the residents there are sometimes events organized (fig. 4.17). But they are often for the Erasmus exchange students. Chen tells:

*S sometimes they sent adds about going to the pub or going on a trip to Salzburg or something. But it is mostly for the Erasmus students at the University of Economics. But I am not an Erasmus student. I am working.*

Sarah tells that sometimes there are parties within the building but they are never announced to the other residents or within the Facebook group. The parties are often among the Erasmus students, but Sarah is not an Erasmus student, she does her entire studies in Vienna. Sarah tells:

*There are parties but I never know it beforehand. So I just hear the noise and figure out there is a party. I thought about dropping in and joining, but then I thought that probably everyone knows each other.*

**Loneliness**

The American and Erasmus exchange students form the majority of the residents within the building. Both Sarah and Chen are not Erasmus students and don’t feel part of the group with exchange students. According to Sarah it is difficult to make a friendship with the exchange students because they only stay in Vienna for a short period of time and have different interests than those who stay for several years in Vienna. Sarah tells:

*I feel like the number of Erasmus students is a bit bigger. Because I have been an Erasmus student myself, I know that the Erasmus students just stick to each other and mind their own business. So in this sense the environment in the dorms is quite superficial. You say ‘hi’ to each other but you don’t really have contact and you can’t built a friendship because of this dynamics of having so many Erasmus students. They have class together, do parties together and they don’t invite other residents.*
Chen experiences the same dynamics. She tells:

The exchange students came to a new country and meet new students. They all take the same courses so they know each other. They have their own network and go to a lot of parties.

Chen feels sometimes isolated from other residents. She tells: ‘You are just not connected with each other’. Sarah tells that she feels isolated from other residents, but believes that the other residents who are not exchange students, feel the same. She tells:

I feel isolated as much as anybody else here. Because I analyzed the behavior of my neighbor and I think there is a group of Erasmus students and people that just live here. So basically, we are the people that just live here, mind our own business and try to sleep while others have a party.

The diversity of people makes it sometimes hard to connect with other residents. Sarah tells:

In this building you find students from all different universities, Erasmus students, PhD students and people that work. So there is a big diversity. As a person who lives here you notice that not everybody is in your cohort. So when you knock on someone’s door, you don’t know what to expect. For example in other dorms there are just people from one university. Even if you don’t know the person, you at least know something about them. So you already have something to talk about. Like a common ground.

Chen finds the diversity of people also difficult. She tells:

The American students do a lot of things together like partying at midnight. But I feel like it is so different from my culture. Even though we go to the university, we don’t really have a common topic to talk about. They have a different background and their way of expressing is different. So it is difficult to communicate with them.

Chen used to live in a shared flat on the third floor where she lived with 3 exchange students. While normal students need to study, exchange students often party a lot and go travelling. However, when you apply for a room in a shared flat, the OeAD does not take into account who is an exchange student and who is working. Because of this, people with different lifestyles are living together in a shared flat. Chen tells that she wished her roommate were Chinese as well so they could communicate better and cook together. Because it was difficult to live together with the exchange students, she decided to move to a single-person apartment. She tells:

How to communicate with each other was really a problem. The OeAD could not do anything about it, so the only option was waiting for the next semester for people to move away, or stay in a single-person apartment.

The diversity of residents together with a lack of spaces to interact makes it difficult to make the residents bond. Chen tells:

If you want to establish a relationship you need to have something in common. But here you don’t even have the chance to talk with others. There are not spaces to communicate with others. So you can’t find whether you have something in common with others. Here we don’t know each other and that is a problem.
Sarah tells that she has some friends who live in dorms where people interact much more with each other because they have to share facilities. She tells:

There are dorms where the dynamics are really different and everyone knows each other. I think one important factor was that they didn’t have a kitchen in the room. So they had to cook outside of their rooms, which made them interact much more.

Even though Sarah misses a bond with other residents, she does not experience loneliness. She tells:

If this would be the first semester I would live in Vienna, I definitely would feel lonely. But then I would eventually push myself out of the loneliness by trying to blend myself into the people that are partying. But I guess I don’t feel lonely because I have been living in Vienna for 4 years. I have my group of friends outside the building. I also believe that living alone does not equal loneliness. I need a lot of social interaction and when I moved by myself I thought I was going to feel more lonely than I actually am. Before I used to have my social interaction in my home, but now I actively have to go outside to see others. I actually have more contact with my friends now than before.

Chen sometimes feels lonely. Although she is used to living in student dorms and moving to different cities, she feels sometimes like an outsider. She used to live with others and this is the first time she is really living alone. She would like to find a shared flat with other Chinese people or with her friends in Austria, but it is not easy to find other Chinese people and her Austrian friends already have their lives in Vienna. She tells: ‘Most of my friends are from Austria. They have studied together and they have their own friends. I am kind of an ‘outsider’. That is always the case. Vienna is not so international I think’.

Social support

Emotional support
Both Sarah and Chen do not experience emotional support within the building. If Sarah wants to share a problem with others, she goes to her friends outside to the building. Chen would also go to her friends if she wants to share a personal problem. She tells that she can knock on someone’s door to ask simple questions, but not to talk about personal things. She tells: ‘I could knock on someone’s door and ask ‘do you have a lighter?’ These simple questions, but never something deep and about your feelings’.

Instrumental support
Chen tells that there is an informal way of sharing items between residents. Always at the beginning and at the end of the semester the exchange students move away and others move in. During this time people often leave items such as shampoo, pasta, oil and coffee at a table at the entrance of the building. Other residents can take it for free. Chen tells it is something the residents always share. However it is an anonymous way of sharing.

When Chen was still living in a shared flat on the third floor it was easier to find instrumental support. She tells: ‘When I lived with other flat mates we could help each other. But when you live in a one room apartment it is different’. Chen sometimes helps other residents by taking post packages for the neighbors when they are not at home and one time a residents helped her when she needed to move to the 7th floor. She used to have a neighbor she could ask for help, but her neighbor moved out
some months ago. She tells that it is sometimes difficult to ask for help because it is difficult to communicate with other residents. She tells:

*When there is really a problem, for example I feel physically unwell, I could ask for help. But for me, I would ask my colleges from work or my friends. Because we just don’t know each other. There are sometimes even people that might not speak English. It is still a problem to communicate with others in German.*

When Sarah has a problem, she would ask her neighbor for help. She talked with him a few times and would trust him. She tells: *‘I feel like I know him well enough to feel comfortable ringing at his door and ask him something like ‘Did my package arrive?’*
4.4. Student quarter  
Lappkärrsberget – Stockholm, Sweden

4.4.1. Background information of the building  

Location  
Lappkärrsberget is a student quarter situated in the north of Stockholm. It is located on a 5 minute walk from the Stockholm University campus, and on a 10 minutes’ walk from the metro stop. With the metro it is a 4 minutes travel to the Royal Institute of Technology and a 10 minutes travel to the city center. The student quarter is situated on a hill and is not connected to other neighborhoods, which gives it an isolated character. In the quarter one can find a small supermarket, a student bar, a sushi restaurant and a gym. Furthermore there is a kindergarten. For other facilities such as a pharmacy, you need to travel to the city. On a 5 minute walk you can reach the museum of natural history and a small beach.

The building  
Lappkärrsberget is the biggest student accommodation in Stockholm (SSSB, 2019). The student accommodations are rented out by Stockholms Studentbostäder [SSSB], which is the largest provider of student accommodations in Stockholm (SSSB, 2019). In order to be eligible to rent a room in a student accommodation, you need to be member of the student union SSCO (SSSB, 2019). Student rooms are rented out to both Swedish and international students, exchange students, fulltime students and PhD students. There are both furnished and unfurnished rooms. The rental contracts are maximum 11 months. The price of living in a student accommodation is cheaper than average rental prices in Stockholm. However in comparison to other student accommodations in Stockholm, Lappkärrsberget is more expensive because of its location close to the inner city and the universities.

Lappkärrsberget was built in the late 60’s under the million homes program. It consists mostly of typical student corridors (SSSB, 2019). There are 22 low-rise apartment buildings with single-person rooms within a student corridor (AIX Arkitekter AB, 2012). Each room has a separate bathroom. The kitchen is situated in the corridor and is shared with 10-12 students. In addition, there are 8 middle-rise apartment buildings for families, with a parking garage, and one circular building from 2000 with single-person studios (AIX Arkitekter AB, 2012). For a single-person room in a corridor, you have to be in a queue for approximately 309 days (SSSB, 2019).
In the middle of the student quarter there is a small center with a supermarket, bar, restaurant, a gym and laundry facilities. Between the buildings there are green spaces with picknick tables where it is possible to grill. Furthermore there are a few recycling places. The buildings from the inside consists of several student corridors with one shared kitchen.

**Philosophy**
The SSSB aims to provide comfortable and high quality student housing to students who are members of the student union (SSSB, 2019).

### 4.4.2. Lived experience by the residents

**Profile sketch**
Ana is 24 years old and has a room in one of the corridors. She has lived in Lappkärsberget since August 2018 and plans to stay until July 2019. She is from Bulgaria and moved to Stockholm to study her master. Before she moved to Lappkärrssberget she was living in a single-person studio in Södermalm. However, she wanted to move out because she wanted to live together with other people. On the same time she got on update on the queue for the student accommodations. She moved to Lappkärrssberget because it was the only place where there was a room available. She has some friends that live in Lappkärrssberget as well.

Lucas is 24 years old and has lived in Lappkärrssberget since August 2018, like Ana. He lives in the same corridor as Ana and wants to stay until July 2019. He is from Belgium and is on a one year exchange in Stockholm. Prior to moving to Lappkärrssberget he lived at his parents’ house. He and Ana met in the kitchen and became good friends.

Sofia is 27 years old and lives in one of the corridors. She is from Mexico and studies her master in Stockholm. She has lived in Lappkärsberget since February 2019 and has a 11 months rental contract. Prior to Lappkärrssberget she was living in a shard apartment with 2 other girls, during an exchange semester in Milano. When she moved back to Stockholm she wanted to live in Lappkärrssberget because she wanted to be surrounded by other students. She applied for a room with furniture, but the only place available was an unfurnished room.

Jose is a close friend of Sofia. He is also from Mexico and lives in a student corridor in another building than Sofia. He has lived in Lappkärrssberget since August 2017 and studies a master in Stockholm. During the first 11 months in Lappkärrssberget, he was living in another corridor than he lives now. Because the rental contracts are only 11 months, he had to move between different corridors. He has some Mexican friends that also live in Lappkärrssberget, but in different corridors.

**Building design**
Ana, Lucas, Sofia and Jose spend most of their time outside of Lappkärrssberget. They spend long days at the university. Lucas tells that he prefers to study at the university over studying in his room in Lappkärrssberget because at the university there are more people and he can interact with others. In addition the corridor room is very basic and studying there the whole day would not be so stimulating. According to Lucas: ’When you live here they basically only provide you space. I don’t like anything and my room is very basic. We have heating and water so I can’t complain. Sofia also thinks that the corridor
rooms are very plain, however she tries to make it feel more comfortable by hanging pictures on her wall and buying plants. She tells:

Everything here is very basic. When I arrived here I was feeling so sad because the room was very empty and it didn’t feel cozy. It doesn’t look fresh and it is quite run down compared to the other student corridor where I lived. The lights are very uncozy. My window is next to the sidewalk so everyone can look inside in the evening. But I look forward to the summer because I look out over a small green space. I put my desk at the window and this is my favorite place to sit.

Also the corridor is not very comfortable. Sofia tells: ‘The corridor is very dirty. It is nobodies place. No one cares about it’. Ana is also not satisfied with how the corridor looks, however she likes her room. She tells:

The corridor is completely empty. I want to have some windows because the air is really bad and maybe a place to sit and put your bag on when you try to find your key. I like my room because I have a view on the lake, I have a private bathroom and a lot of storage space.

When Ana is in the building she spends most time in the common kitchen. It consists of a cooking area and a dining area. This is the place where she meets some of her corridor mates and cooks together with others. The kitchen is the only place where she can interact with her neighbors. She is happy that the kitchen window is next to the entrance of the building so she can see if there is someone. She tells:

My neighbor told me that sometimes when she comes from the ICA, she can see that the kitchen light is on through the window. And every time when she sees light she wants to walk faster because she wants so see if someone is in the kitchen. And I do the same thing! When you see there is light in the kitchen, you always come to see if there is someone. The window is next to the entrance of the kitchen so you can see if someone is there. I don’t like eating alone so I always go to the kitchen.

Also Lucas likes that the kitchen has a window and that you can see if there is someone. He likes that the kitchen door is situated next to the entrance of the corridor and that is has a window. He tells:

One thing that I like about living here is that there is a glass door in the common room and that the common room is next to the entrance of the corridor. Everyone always has to pass the common room when they enter. If it was the opposite, no one would ever meet each other. For example each time I come home I look through the window and see if there is someone. When I see people I drop my stuff in my room and go to the kitchen. If I don’t see anyone, I take a shower first and check later if there are people. I always prefer eating with someone instead of alone.

The kitchen is the only shared spaces in the corridor. When residents want to meet up, they can only go to the kitchen. Jose tells: ‘The kitchens are the gathering places of Lappis’. Those are the only common spaces. It is the best you can have’. Also Sofia tells that the kitchen is the only place where
she can interact with her neighbors. When she invites friends she invites them in the kitchen because there is no others space to hang out. She tells:

> Normally we meet in the kitchen because it is the only common space. If you don’t go to the kitchen, there is no way to meet your neighbors. The kitchen is the only thing we have in common. People meet in the kitchens for parties, because the room is too small for a group of people. So you invite your friends there. There is a party room that you can rent but it costs a lot of money. We go to the kitchens because it is the only free space.

Currently there are two types of kitchens in Lappkärrsberget, the old kitchens and the renovated kitchens. The renovated kitchens have besides new kitchen equipment also a modern dining area. Ana tells that the kitchens are in need of renovation, but that she wishes that the dining area could stay the same. She tells:

> Sometimes when I open the fridge, I get an electrical shock, so they really need to renovate the kitchen. But they should only renovate the kitchen, not the dining area. I make a big distinction between the two of them. Because the kitchen is something that needs to be changed when it gets broken, but the dining area is like a living room. People leave their stuff there and it accumulates naturally. I don’t like how the new dining areas look because they are very strict. You can’t move anything. The chairs and tables are fastened to the floor. I think it is nice to have a sofa, a carpet, big tables and chairs. To make it feel like a living room.

There is a lack of spaces for residents to interact, which makes the kitchens the gathering places of Lappkärrsberget. However, the residents whished that there were other spaces to hang out. Sofia tells: ‘In the kitchen you just drink and cook. That’s it. Because we don’t have any other space, we had our Christmas party and new year’s dinner in one of the kitchen’s. Also Lucas is not satisfied with the common kitchen as only gathering place. He tells:

> What I don’t like about the common area is the lack of chilling space. They just put this couch here and it is not really clean. The tv is right next to the table so you can’t really watch comfortably. The kitchen is 80 percent of the shared space. And the other 20 percent is the dining area. I would love to have a second couch or a third room with just a tv and a table. I usually meet my friends in my room. As the corridor lacks chilling space, we go to others’ rooms.

Sofia and Jose also suggest more spaces to meet others. Not only common spaces within the corridor but also common spaces for everyone that lives in the building. Sofia tells: ‘I would not only have the kitchen as shared space, but also something else. Maybe a library or something like a common space for the whole building. Not just for the floor, but the whole building’. Jose suggest the same. He tells:

> In order to make this place feel more comfortable I would like to have a common room for the whole building. So you can meet people from different corridors. Have a pool table, a game room. Just be around people and get to know people. So you can hang out together in a different place, because in the kitchen you can only cook.
2. The old kitchens before the renovation. 3. The old dining areas before the renovation. 2. The renovated kitchens. 3. The renovated dining areas.

1. When the residents enter the building they first pass the common kitchen. The door of the kitchen has a window so residents can look inside the room and see if there is someone. Visibility of others gives the residents the possibility to approach each other and join others’ activities.

It brings life within the corridor. Windows that connect the kitchen and dining area with the exterior environment make it possible for residents to see from outside of the building whether someone is in the kitchen or not.

4. The hallway is a ‘no mans place’. It is completely empty, the air is bad and there are no windows. Poor hallway design hinder the hallway from functioning as a meeting place. However, since residents have to pass the hallway several times a day and it is one of the only shared spaces, it has the potential to function as a meeting place.

Figure 4.21: Lappkärrsberget building design (Floor plan adapted from AIX Arkitekter AB, 2012).
Social contact

Lucas and Ana see their neighbors every evening. They meet in the kitchen around dinner time. Ana tells: ‘I see my corridor friends every night between 19.00-21.00. We cook together almost every evening’. Cooking and eating is the social activity that residents like to do together. Ana and Lucas tell that they don’t like eating alone and that’s why they try to coordinate the dinner plans with their corridor friends. However it happens often quite spontaneously. Ana tells: ‘It is not really organized. We just chat and ask each other at what time they will eat and we arrange it so we can cook on the same time’. Lucas tells that cooking is a social moment for him. He tells:

I am in the shared space at least twice a day, for breakfast and dinner. And if there are people there, I stay a bit longer. Usually there is more than one person, so you are not alone. I normally wait for the others to finish their dinner. Sometimes it is just 30 minutes in which I cook and eat and sometimes it is two hours. Cooking, waiting for the others, having a nice conversation.

Also Ana likes to hang out in the kitchen with other people, even though she does not want to cook sometimes. She tells: ‘Even if I don’t cook or eat, I just come to hang out with them’. Lucas and Ana are quite active in organizing meetups with the other students in the corridor. Even though they invite all 11 people, there are often only a few that join and it is always the same people that participate. Ana tells: ‘We organize birthdays and sometimes dinner. We try to organize a dinner with the people from the corridor once a month. Usually it is only the 5 of us. Sometimes other people come by and say hi as well’.

On a regular day, Lucas tells that he meets 3 to 5 people in the corridor unplanned. He does not meet everyone. He often meets the same persons. Ana likes the possibility to randomly run into others. It is something that she missed when she lived by herself. She tells:

What I like about living here compared to other places I have lived, is that you get to meet random people that you usually not plan to meet. People from the corridor. And you really ‘meet’ in the kitchen. You have the opportunity to interact if you want to. You can see them. Because in a normal building you just see your neighbors but it is really short.

Lucas enjoys this kind of spontaneous interactions. Meetups happen naturally and you are not obliged to take part always. According to him it is a good balance between his personal and his social life. Furthermore the people in the corridor are open to each other’s friends and accept each other’s lifestyle’s. Lucas tells:

We have WhatsApp groups, we organize parties, we celebrate birthdays. I like it a lot and it does not take too much time. We do things together but it is not like each day we have an activity. You can still have your private life and meet corridor friends. Each person brings their own friends and we accept each other.

Sofia just moved to Lappkärsberget and does not have so much contact yet with the other students in the corridor. There is a Chinese couple who she sometimes sees in the kitchen. However she has many Mexican friends that live in Lappkärsberget and with who she hangs out a lot. Like Ana and Lucas, cooking is the main social activity since people do not like to eat alone. Sofia tells:
Two buildings to the left, I have some friends. During lunch time they sometimes just write me a message ‘We are cooking together, do you want to join us?’ There is always someone who invites you for dinner in the kitchen. If you enter a kitchen, someone who is cooking would just invite you. For me it is nice to live in a place where students live instead of a place where normal residents live.

Jose is in the same Mexican friend group as Sofia and tells that cooking is a very social activity. He tells: ‘The people that are cooking together and hang out are the ones who become close friends’.

While the people that live in the same corridor meet each other, there is hardly any interaction between people that live in other corridors within the same building. Sofia tells: ‘There are 12 people in this corridor, but you never really interact with people that live in the same building’. Sofia tells that sometimes there are events organized that are open for all residents of Lappkärrsberget. In the SSSB office there is a pin wall where students hang announcements. There are for example yoga groups, students that want to learn a language or day trips. Sofia has not participated in any of these events yet, but she would like to try it.

Loneliness

Lappkärrsberget’s is situated on a hill, disconnected from any neighborhood. Only student live here. While for some this island of students with student parties every weekend can be attractive, for others it can feel quite isolated. Sofia, Lucas and Ana explicitly wanted to live in a student accommodation in order to be surrounded by people. Lucas tells:

I was looking for a type of accommodation in a corridor or a shared flat. I could not live by myself. I would get crazy. I could live in any situation except for living alone. I already knew how it is like to be alone from my experience in Belgium. I like that I can meet up with others here.

Also Ana has experienced how it is like to live alone and wanted to find a place in a student corridor. She tells: ‘I like to be surrounded by students. When I lived by myself in an apartment, it was too quiet in my room and I could not meet anyone in an informal way. It was very anonymous’.

Sofia wanted to live in a student corridor because she has some friends that told her that there are a lot of things going on in the weekend and students meet up. Some of her friends are living in Lappkärrsberget as well. Living in a student corridor was a way for her not to feel lonely. However, Sofia feels that Lappkärrsberget is quite isolated from everything else. She tells:

I feel like I am segregated in some way. You don’t have contact with anything else when you live here. There are just students and you are out of the city. There is no option to go to the pharmacy. You only have the ICA. If you are here and you need anything, you can only get it at ICA, while in the city you have so much other options. In places where I lived before, I was living in a neighborhood. There were many shops, I used to know the person who was selling magazines and you had the opportunity to learn the language, but here no one speaks to you. My mam is always saying that it is good that I am segregated so I can focus on my studies.

Living in a student corridor is quite anonymous, however it depends on the people that you share the corridor with. Per semester the group dynamics in the corridor can be quite different. While in some corridors people meet each other for dinner, in other corridors there is no contact between the
residents. Jose used to live in corridors where there is not so much contact between the residents. Jose tells:

When I first arrived in Lappis in August 2017, I cooked in the kitchen and ate my food, stayed to see if someone would come around. I wanted to know who the people were that lived near me. The people that entered the kitchen would just say ‘hi’ and went in and out. I realized that they were not interested in talking. So in the end I just started to eat in my room.

Sofia tells:

It is the same in my corridor. Sometimes I see people in the kitchen with headphones on. They don’t seem to be open for a conversation. I don’t know who they are because I don’t get the opportunity to talk to them.

The atmosphere in Sofia’s corridor is quite anonymous. She knows some of her neighbors, but most of the students in the corridor she does not know. Sometimes she meets someone in the kitchen that is not even a student and she sometimes does not feel comfortable. She tells:

I think there is a women who lives here who is not a student. She must be in her 40’s. I don’t trust her because the people that live here are students and we are in the same position. We study and we are paying the rent. We share the kitchen and take care of it. But if somebody is coming from the outside, things could happen. We recently had a problem in which someone stole some kitchen equipment. And once I baked a cake and put it in the fridge. When I went back, someone had taken a part of it (fig. 4.22).

Jose has experienced as well that there are suddenly older people in the corridor that do not look like students. He tells: ‘Recently there was an older couple here. I think they are living here. Some of the students must be subletting his/her room to them’.

While Sofia and Jose live in a quite anonymous corridor, Lucas and Ana live in a corridor where some residents know each other very well. They also take care of the common room and try to make it look cozy. Lucas tells that he is lucky that he lives in a corridor with some people that are open for interaction. He tells:

I am very lucky with my corridor mates. My other friends in Lappis don’t know anyone in their corridor and don’t meet up. They just have bad luck. There are people that are less open to others. I am just fortunate that my corridor is good.

Not only within the corridor but also around the student quarter, the atmosphere can be quite anonymous. Sofia tells: ‘Always when I sit at my window and look outside I wonder why nobody has the curtains open. They are always closed. On all floors the curtains are always closed. When I go to
the laundry there are always people with headphones on and nobody seems to want to talk’ (fig. 4.23).

One aspect that enhances anonymity is the high fluctuation rate of the people that move in and out. Because the rental contract are only 11 months, people can only stay for a short time. This makes it difficult to bond with others. Jose tells:

There is a lot of movement here. Last semester I had two close friend in my corridor. But they both left. No one that I used to know is left. So everyone is new and no one has tried to talk to me, even when I try to make a conversation.

Figure 4.23: Students close the curtains of their room.

According to Sofia the short rental contracts are affecting the bonding between the resident. She tells:

Your contract is only 11 months so you have to renew it when you want to stay longer. And then you move to another room in another corridor and in another building. If you would have the opportunity to live on the same place for 2 years, during the whole master program, maybe you could have a close relation with your neighbors.

Social support

Emotional support
Lucas and Ana are close friends with some of the students in their corridor. If Ana has any problem or she is feeling down, she can always knock on the door of her neighbor. She can also talk to Lucas. If Lucas is feeling down, there are at least two people in the corridor he could talk to. Lucas tells: ‘It is not rare that we talk together about personal things. That is also what I like about living here. It feels like a privilege’.

Within Lucas’ and Ana’s corridor, the residents trust each other. Ana always keeps her room door unlocked when she is in the kitchen. Ana tells: ‘I noticed that almost everyone leaves their door open when they cook. It is interesting because sometimes we stay in the kitchen for two hours’. Lucas tells that he never locks his door. He tells: ‘People just know that they can come in and take whatever they want’.

Sofia just moved to a corridor in Lappkärsberget and does not know her neighbors so well. If she is feeling down she would not talk to the students in her corridor, but she would contact Jose or some other friends that live in Lappkärsberget. She would feel uncomfortable to knock on someone’s door in her corridor. One of the reasons that she wanted to move to Lappkärsberget was that she already knew people that could help her in case of a problem. She tells: ‘I came to live here because I knew that my friends were going to live here as well. So I knew that I would be in a place where I could get some help’. Jose used to have close friends in his corridor, but they moved away. If he wants to talk about pressures in his life, he would probably talk to Sofia or some other Mexican friends, but not to
students in his corridor. Jose and Sofia are part of a friend group that is really close. Most people of the group live in Lappkärrsberget as well. Sofia tells:

*I think that when you live in this kind of places, your friends become your family. If you need help or you want to talk, you just call each other. Or if you need help with school, you don’t have food, or any other problem, you can get help from each other. So I think in the end your friends will become part of your family, part of your everyday life. You are living together but in your own place. Especially when you are far away from home it is nice to have such a group of people you can count on.*

Unlike the corridor where Lucas and Ana live, Sofia and Jose live in corridors where there is a low level of trust between the residents. Since students sometimes sublet their rooms to strangers the atmosphere in the corridor is less intimate. Sofia has experienced that someone took her food and her kitchen utensils.

*Instrumental support*

If Ana and Lucas need help with something, they would ask their corridor friends. For example when they are feeling physically unwell, they can ask them for help, Ana tells: ‘*If I get ill, I can ask my neighbor for help and also the other way around. When she got sick I made here tea and when I was sick she brought me medicines’*. Lucas can also relay on is his neighbors when he is sick and in case of an accident he could ask anyone in the corridor for help. He tells:

*Some days ago I had an headache and I asked a friend who lives next to Ana, if she had some medication for me. The same happened when I had stomach pain. I know that if I would cut my finger while cooking, I could basically knock on anyone’s door here. If they are at home they would help me.*

Within Ana’s and Lucas’s corridor, everyone has a cleaning week in which they clean the kitchen. But if there is a party, the students are very helpful and don’t mind shifting the cleaning week or helping with cleaning. Ana tells:

*This week I am cleaning the kitchen but it is not really my cleaning week. The week before it was Emma’s birthday and she had a big party. She said that we should switch cleaning week because it would not be fair if I had to clean the kitchen after the party. So we switched and she got a lot of friends who helped her to clean.*

Sofia does not know her neighbors very well, but there are 3 people she could ask for help, with small tasks. There is a Chinese couple that is very helpful. She helped the Chinese couple once by giving them some of her storage space in the kitchen shelves. As a thank you, they gave her a small gift in exchange. Also when Sofia just moved to the corridor, she got help from some students with carrying her furniture. Helping each other goes hand in hand with chatting and getting to know each other. Sofia tells:

*I was waiting for the bus to take a big chair with me and then some people came and said ‘we will help you’. They carried the chair. I did not expect that anyone would help me. As a thank
you, I told them that I would bake a cake for them. So the next day I baked a cake and we had dinner together.

While Lucas and Ana would just knock on someone’s door when they have a problem, Sofia would probably write a message in the Facebook group, instead of knocking on people’s doors. She tells:

I have no idea which person lives in which room. So I don’t want to bother everyone by knocking on their door. The other day the Chinese guy knocked on my door to ask something and I almost jumped from my chair. Who is knocking on my door? It was very strange. So if I have a problem I would probably write a message in the Facebook chat.

Figure 4.24: Dining area in the common kitchen.

Figure 4.25: View from Sofia’s room.
Co-housings
4.5. Co-housing
Die Mauerseglerie – Vienna, Austria

4.5.1. Background information of the building

Location
Die Mauerseglerie is an intergenerational co-housing project situated in Wien Liesing, the 23rd district of Vienna. The building is located on a distance of 8.5 km from the inner city. Within a 5 minutes’ walk there is a train station from where you can take the train to the center of Vienna. The train travel takes approximately 10 minutes. The residence is located in an suburban neighborhood, in proximity to supermarkets, schools and kindergartens, and a public swimming pool. On a 2 kilometer distance one can find the natural area Wiener Wald, which is a popular recreational area for the inhabitants of Vienna.

The building
Die Mauerseglerie was completed in 2016 and was designed by Ralf Aydt, who is one of the founders of the co-housing initiative. The building is L-shaped and has 5 floors. A basement area, a garage and a community garden. The house was built according to passive house standards and has gotten an architectural award for meaningful architecture (Open House Wien, 2018). One of the principles within the building is creating flexibility. Between each large apartment, there is a small apartment that can be used to increase or decrease the size of apartments by removing or adding walls or doors. In this way the rooms can be adjusted to the needs of the families.

Die Mauerseglerie hosts 39 adults and 27 children (Mauerseglerie, 2017). The age of the residents varies between 72 and 0 years old. The residence has several types of units varying from one-person apartments to family apartments with 3 bedrooms. The size of the apartments is comparable to social housing, approximately 30m² per person. However, in addition to the private space, the residents share several common areas, facilities and a large garden. While the house is newly constructed the rent is comparable to other newly built places, however according to Ralf in the long term the prices will not rise as much as in other places since the focus of the association is not on making profit, but on communal living. Within Vienna the number of co-housing initiatives is quite small, however since the last 20 years co-housing is becoming more popular (MA 18 -Stadtentwicklung
und Stadtplanung Wien, 2017). Since the demand is bigger than the supply, finding an apartment in a co-housing initiative is quite difficult.

The ground floor is a semi-private area with an elementary school, a therapy center and a hall that can be rented out for events. Besides this, one can find toilets, a kitchen, a storage room, the entrance to the garden and to the residential area. The hall is large and can host all the residents within the building. It has a sliding wall that connects it with a music room with a stage. The children in the school sometimes use the hall for theater and music performances. The residents use the hall for meetings, events, theater shows, storytelling and other activities. The hall can also be rented out to people outside of the building. The kitchen on the opposite of the hall can be used during events and is often used by the school. The inner garden is used as playground for the school children and is connected to a bike parking. Within the basement area one can find the Food Korb, an initiative whereby the residents can order local food products for everyone and store it in a room where other residents can pick it up. Besides the Food Korb, there is a children playroom, a saloon, a fitness/music room, a workshop, a storage and technical room. The saloon has a small library and is used by the youth and adults to watch movies and discuss. The children use it to play and do theater. The workshop is used to build and repair things. It is well equipped and has many tools. The first and second floor are the residential area and are entirely private. On the first floor one can find an open space along the hallway that is used as playground for the children. Furthermore, there are two laundry rooms, a reading corner, the room of silence and a guest room. The room of silence is used for mediation, yoga and storytelling. On the fifth floor one can find a large community kitchen with terrace and Ralf’s working space. From all floors you can access the garden or roof garden. In the back of the garden there is a grill place.

**Resident participation**

Within Vienna co-housing is becoming more and more popular. One can see a trend in which people actively want to shape their living arrangements by participatory building and want to realize their dream of communal living (MA 18 - Stadtentwicklung und Stadtplanung Wien, 2017). Nowadays there are approximately 20 communal living initiatives in Vienna (MA 18 - Stadtentwicklung und Stadtplanung Wien, 2017). Die Mauereglerei is one of the few projects in Vienna that was built without developers (Open House Wien, 2018). In 2009 a group of 7 people founded an association for individuals and families that wanted to establish a co-housing project together. Between 2009 and 2010, they worked on plan to establish the project and organized workshops, weekend trips and information events to get to know each other and find other families that were interested in joining the project. In 2013 they found a plot to establish the building and in 2015 they started constructing the house (Mauereglerei, 2017). During the process the group of interested people grew. While some residents have been involved since the beginning of the process, others joined after the building was realized.

Everyone that lives in Die Mauereglerei is part of the association that manages the house and the community. The association works with the principles of sociocracy in which everyone has responsibilities within the association. Within the association there are workgroups that are responsible for certain themes such as finances, communication and community. Each workgroup is subdivided into themes such as the garden, Food Korb and carsharing. Besides being part of a workgroup, the residents take part of community meetings, need to solve problems together, pay membership and give 1 percent of their income to the community hoard.
Philosophy

When Ralf designed the building he wanted to create the feeling of a single-family home for one big family, rather than an apartment block where several families live separately. Therefore there is only one balcony on the front of the building, which symbolizes a single-family home. While in the apartment block on the other side of the street every family has their own balcony facing towards the street, this building has only one balcony where only one voice can be heard. The voice of the community. The balcony is colored in orange which symbolizes a place where everyone is welcome.

Within the community the residents live according to common values, which are community, solidarity, ecology and spirituality (Mauerseglerei, 2017) (fig. 4.27). According to Mauerseglerei (2017) the community aims to promote social interactions by the architecture of the house, offering many common areas, and by working together on the community. According to Mauerseglerei (2017):

In our common areas there is always something going on. When you are looking for company or support, you can find someone that is there for you. We live in a pleasant mix of privacy and community, integrated in one community. We make sure that every residents feels socially and emotionally integrated. We are interested in our co-residents, open for different lifestyles and deal with differences between each other, despite possible conflicts. We solve conflicts in a transparent way with understanding and honesty and find support among others. In case of financial emergencies we help other residents with our solidarity fund.

4.5.2. Lived experience by the residents

Profile sketch

Ralf is 59 years old and is founder and architect of Die Mauerseglerei. He studied architecture in South-Germany where he had an Austrian professor. During his studies, political issues such as nuclear waste and house occupations were discussed and students had the possibility to express themselves politically by architecture. However most project were just a dream. Since 15 years he applied his knowledge and ideologies within an own project in Austria. Ralf grew up in a big family in an area with single-family homes where he has experienced a feeling of isolation and loneliness. Every family lived in their own house and when the children were old enough, they moved out to different cities. The parents often stayed behind, while getting older, less mobile and cut off from the wider community. He walked around with the question “What to do when you get old?” Ralf wanted to establish a place where people could grow old, live within a community with a minimal ecological footprint.
David is 34 years old and is one of the co-founders of Die Mauerseglerei. He grew up in the inner city of Vienna and lives since 10 years in Wien Liesing with his wife and children. His wife is from Wien Liesing and grew up in a co-housing project. The family of his wife still lives in the neighborhood. Prior to living in Die Mauerseglerei, he and his wife lived in a building with common areas that were shared among the residents. However, these areas were hardly used. David’s reason to move to a co-housing project was the advantage of sharing things with others, such as being able to use more space, facilities and equipment. In addition he is fascinated by the amount of things people can achieve by collaborating. Building the entire house is an example of this.

**Building design**

Die Mauerseglerei is designed as a house for the community. Ralf tells:

> I always say ‘our house is like one big single family house’. There is one entrance, one hallway, one living room and the private rooms of each family member, but then 20 times bigger. So the different apartments represent the private rooms in a single family house.

David tells:

> When we started this project we wanted to create the feeling that this is ‘our’ home. So I don’t just live in an apartment, I live in a house. And within this house I have an apartment. Because of this concept everyone uses everything with care and love, as if it is their own.

According to Ralf, living here also feels like living in one big family. Ralf tells: ‘You meet each other in and around the house and you pick the children of your neighbor up at the kindergarten. These are things I enjoy about living here’. Also David enjoys the feeling of living in one big family. He tells: ‘There are so many possibilities for social contact. We have beautiful common rooms and together we can achieve a lot in one day’.

Within the building the line between the private family sphere and the community sphere is slightly blurred. Design aspects such as the availability and variety of common areas enhance a feeling of living in a community. However, less obvious design aspects such as the design of the storage room and the design of the door handles increase the blur between private and community. Ralf tells:

> Although everyone has their own apartment with kitchen and bathroom, everyone shares common areas and does their wash in the laundry room, which takes away the feeling of anonymity. As a resident you are always in social interaction. There is no distance between people, which can sometimes be difficult.

Within the storage room the blurred line between private and community becomes visible. In order to optimize the space there are no walls and doors between the different storage spaces of each family (fig. 4.32). Instead, tape is used to mark each storage space on the floor. There are no curtains between the storage spaces. Ralf tells: ‘There is a feeling of trust between the residents. Everyone can see and access each other’s stuff. You can’t find this in any other place’.

A less visible, but quite significant example of the blur between community and private is the door handle design of the apartments. While all apartments have a door handle, David and his family chose to have a doorknob instead, to safeguard the line between community and private. David tells:
All apartments here have a door handle that can be opened from the outside. Normally you don’t see this in a standard residential building. It means that everyone can open your door from the outside, unless you locked it intentionally. When all families moved in we could decide between a door handle and a doorknob. Ironically everyone decided for a door handle except for my family. So we are the only ones in the house with a doorknob. So at the other apartments you can just open the door and walk in each other’s apartments, but at my family you have to wait until we open the door. There are people that don’t sense this border between public and private. But we wanted to prevent other residents from situations in which they just walk into our apartment with a bad timing and do something wrong.

Within the community, one or several people take the responsibility for the layout of a common room. According to David, some people take it more serious than others and spend more time and work into the layout, while others have other priorities. Because of this, the common areas are not all evenly well equipped. David tells:

Some residents take many responsibilities in the house and when they also take the responsibility for the layout of a room, they sometimes have to prioritize other things. For example the children’s playroom is still underdeveloped. Also the common kitchen is still unusable. We waited 2 years even though it is one of the most important rooms for the community. As long as there is no progress in the development of a room, I am unsatisfied with the common area.

However David is very satisfied with the workshop where he spend most of his time (fig. 4.30). He tells:

My family and I used to live in a building with common areas. There was a hobby room and a bike garage, but no one ever went there. Those areas were ugly and dirty. No one wanted to be there. There was also a garden, but you would never meet other residents there. But in Die Mauerseglerei there are much more common areas and they are much better equipped. The workshop is very well equipped. I work a lot with wood and metal and there are many opportunities for me to work with it. At the moment I am building something for my neighbor. Within the community I take the responsibility for the maintenance and functioning of the workshop.

Ralf spends most of his time in his office and at neighbors. He lives next to the community kitchen that is still in construction and thinks he would spend a lot of time there when it is finished. According to Ralf, he probably spends less time in the common areas than the other residents. Ralf tells:

Everyone moves around in different areas in the building. For example the families with young children make use of the children’s play corner and the playroom. These are places I don’t go. They also sit in the garden a lot. I move between my apartment and my office a lot. So I probably don’t move as much as other people in the building. One time a day I come in a common area. I think that other residents will come 3 or 4 times a day.
However, Ralf sees the hallway as common area as well, where he comes several times a day. The hallway is designed to function as a meeting pace. Ralf tells:

*In our house we have a hallway that is not a ‘cold’ and ‘open’ hallway. Instead it is as warm as the apartments itself. You can find a communication area across the laundry room. So every time I go outside my apartment, I always see people and have a small chat. I don’t need to enter a specific room to chat. And this is also why our house is like one big single family house. The hallway is part of the house.*

*Figure 4.29: Community kitchen in Construction.*

*Figure 4.30: Workshop.*

*Figure 4.31: Garden.*

*Figure 4.32: Storage room.*
1. The children's play corner is part of the hallway and functions as childrens' meeting place.

2. The communication corner.

3. Windows connect the apartments with the hallway and the exterior environment. From the hallway you can both look into people's kitchens and into the inner garden. You can see when people are at home or sit outside. In this way, the hallway is as warm as the apartments themselves. When walking in the hallway, you feel part of the community.

4. Apartment windows that point towards the hallway, give the hallway a more cosy feeling. It brings life within the building.

Figure 4.33: Die Mauersegler building design (Floor plan adapted from Ralf Aydt, n.d.).
Social contact

On a regular day David meets his neighbors several times. David lives at the end of the corridor next to the children’s play corner. Next to him there is a family with 4 children. The children always play with his children in the children’s play corner across their apartments. Because of this, David sees the children all the time and he also meets the parents several times a day. Ralf used to live next to a man with down syndrome who would have his door open all day. They saw each other daily. Ralf used to pass by and his neighbor would give him some cookies. However, since a couple of years his neighbor passed away. Ralf also meets his other neighbors, but less frequently. Some he sees daily and others he sees 2-3 times a week.

Ralf and David are also in touch with other residents in the building. David tells:

I have frequent contact with a family that lives one floor above because our children go to the same kindergarten. I always play with the children in the garden and then I often meet them. When you live with several families you start to know their daily routines. For example I know that in one family the children never play with us on Tuesday because their grandparents visit them and take them on a day trip. Knowing each other’s daily routines is something that feels quite intimate in a good way.

Even though the community is central within Die Mauerseglerie, Ralf and David mention that the contact with other residents is not always optimal. David says:

It would be interesting to ask me ‘which residents in the building do I not meet regularly?’ About 30 percent of the residents have a different live rhythm than my family and I hardly see them. Or some live at the entire back of the house on the first floor. Some enter the building, take the elevator to the third floor and go into their apartments. When these people do not take part in the community life, I don’t see them.

Ralf tells that with the majority of residents he does not have a lot of contact. He tells:

There are 27 apartments and with the residents of 5-6 apartments I have quite good contact. However with most of the residents I don’t have so much contact. You see that there are certain friend groups. I try to be in touch with everyone, but I see that the youth often looks for social contact outside of the building. The families with young children are always occupied with the children. They sit together in the garden or in the children areas and therefore have close contact which each other. The elderly have a lot of time during the day so they have late breakfast together. And some residents isolate themselves. There once was an elderly women that never took part in the community.

Ralf meets other residents in the hallways and at the stairs. He lives next to the community kitchen and looks forward to the moment that the kitchen can be used and function as a meeting place (fig. 4.29). He also meets residents in the garden and outside the house on the way to the train station. David meets residents in the garden and in the hallways as well. On the way to the kindergarten he sometimes meets other residents too.
Within the building the residents both meet in formal and informal ways. There are formal organized meetings with workgroups, monthly meetings with the entire community and community work weekends. Besides this, the residents meet in an informal way. Once a month there is an evening where all residents celebrate the birthdays of the people that had birthday that month. There is a cooking club, a yoga group, theater, storytelling and Tatort movie nights. Ralf likes all these initiatives and wishes that there would be even more community activities.

There are plenty of options for social contact, however for David it can be sometimes too much. When living in the community you both have your life within a private family sphere and within the functioning community. The line between contact on a personal level and contact on a professional level is often blurred. According to David this can be quite exhausting. David tells:

In the last years I tried to reduce the amount of contact with the other families because it can be very exhausting. I enjoy to talk about daily things with them, but when you live here you are also taking part in workgroups. You are responsible for certain aspects in the house. I used to be responsible for all the technical things. So if something got broken, people came to me and asked me for help. So when you are sitting in the garden with the others, you are not just a friend, but also a member of the workgroup. People want to discuss things all the time. So sometimes I need to distance myself.

David also notices that too much social contact can be exhausting for his children and the children of other families. David tells that he and his wife decided to limit the amount of time the children play with the children of other families. For example during lunch breaks and after dinner the children stay in the apartment. The concept seems to work well and other families started to implement it as well. David tells:

Everyday around 14.30 the children ask ‘can I go in the house?’ They will walk around the building and see if there are other kids to play with. Sometimes it can be very exhausting for them. The other children have different ages and different lifestyles. Sometimes they need a break and just play by themselves. So during lunch and dinner time you can notice that it is quiet in the building while all families stay in their apartments.

Loneliness
Living in a community offers many possibilities for social contact, however the group dynamics can sometimes be challenging. Ralf tells:

There are many options for social contact which creates a feeling of bonding between the residents, however the contact can be challenging. Contact between the residents should be taken seriously since everyone lives in proximity of each other and fulfills tasks in the community. There are individuals that can become quite dominant. Therefore you always have the situation of individuals versus the group. It is difficult to make decisions. I can sometimes feel quite constrained by this.

David also experiences difficulties with the group dynamics. The continuous interpersonal conflicts between residents is too exhausting for David, which is one of the reasons he withdrew himself from parts of the community life. David tells:
We are a group of 60 people including 30 adults. This is quite a critical size in the sense that it can become quite unpersonal. Because of this the different dynamics of the community are not following the same pace. Some residents always participate and others don’t. This dynamics can be exhausting. Some people abuse their power and get angry on others. They start to curse and offend you in person. I don’t want to get personal insults and attacks. I decided to participate only in those areas where I feel personally well.

The group dynamics can sometimes be isolating. While David does not experiences a feeling of isolation, Ralf recognizes the feeling quite often. He tells:

The group dynamics in this house sometimes bring situations in which I feel isolated. There are people that say ‘Ralf is the one who makes everything expensive’. Because I made the plans of the building, residents say that things are expensive because I decided that. Don’t ask me why. The people that started and organized this project will at some point become a target. For example in a family where the children oppose their parents. I don’t feel like I am the ‘founder’ but the others feel that way. Because of this I can become isolated from the community. When things go wrong, I will be blamed because in the eyes of the residents I am responsible for all problems.

However Ralf does not feel lonely. Ralf tells: ‘You can feel isolated but you don’t need to feel lonely because there will always be residents that do not isolate you. So complete isolation is not possible and feeling lonely is unnecessary here’.

Both Ralf and David can find company when they want it and can share personal problems with some of the other residents. The shared lifestyles and ideologies of the residents are important factors that create close friendships between them and some of the community members. Nevertheless Ralf tells that most of his close connections are with friends that live outside of the building. He tells:

I can always find company when I want and I can talk about personal things. However, in the back of my head I know that when a connection with a person changes, this person will know a lot about me, but you still need to collaborate. Because of this I believe that most of my personal contacts are with friends that live outside of the building. But maybe in 10 years’ time, this will change.

Social support

Emotional support
Within the community helping each other in times of hardship is central. David tells:

We are not only a community, we also share our destiny together in some ways. Only when everyone of the community feels well, the community can function as a whole. When one person is not doing fine, it will affect us all. When someone is feeling physically or emotionally unwell, the other residents will notice it. So when someone has problems, we all share some of the sorrow.
Asking other residents for help and support is something that is strongly encouraged within the community, however within the community it is wished that residents would do more together. David tells: ‘Knocking on someone’s door to talk is something that is highly encouraged, wished and wanted. But exactly this topic has been the theme of the week. Some of the residents wished that the community would be closer, share more things and do more things together’.

Both David and Ralf can find emotional support within the building. They both find their emotional support in a small group of people. Ralf tells: ‘There are a few people here that really understand me. About 2-3 people. And maybe 3-4 people that I have very well contact with. And maybe 5-6 people that I can talk to about personal things’. David tells: ‘There are 1-2 people in the building I could talk when I don’t feel well. These problems are often related to things that happen within the community’. In addition, residents sometimes share their problems with them. Ralf tells: ‘When I need help, I search at other residents and they come to me for help as well’.

Within the community there is a lot of trust. David tells:

Since we are self-governing we have to trust each other in performing tasks and organizing things. There is a strong trust among us because we know each other well and we know each other’s skills since we worked together. You learn about each other’s families and backgrounds which builds a trust between us.

Instrumental support
Besides emotional support the residents also provide instrumental support to each other. Ralf often babysits for a family one floor above, he shares food with neighbors, helps students with geometrics, supports the children of the school on the ground floor and helps with repairs. David helps residents with physical problems. He used to work as a physio therapist and is often asked for help. He also helps with small tasks around the house. David tells: ‘During the day I spend a lot of time in the building. Before lunch there are not so many adults at home. So when someone needs help they always go to me’. The residents also help each other without specifically asking for help. David tells:

I always join the children when they play together in the garden. When children with ages of 3 to 12 years play soccer together, it is challenge to keep it peaceful. I know out of experience that the children play together peacefully until a certain amount of time, so I always join them to make it easier to play together. In this way both the children and the parents can have a nice afternoon. No one asked me to help, but I like to do this. In addition, I believe that other residents help without me realizing it. We know each other so well because we have similar lifestyles.

Within the community there is also a solidarity form. Within the form, all residents give 1 percent of their income to people in need outside of the community. In addition, the residents share a load bicycle, equipment and collective know-how. Helping and sharing often go together with social interaction. For example residents cook for others and see it as an opportunity to chat. They knock on each other’s doors to borrow something and stay to talk.

Everyone has their duties in the house such as taking part in workgroups and cleaning. Since everyone has many responsibilities it is difficult to take over tasks from others. David tells:
Often you need to beg others for help. When the garden group needs help in the garden I always offer my help because I know how hard it can be to find volunteers. There are many tasks and it is difficult to find people to take over work. I sometimes think that the tasks are not equally divided among the residents.

Figure 4.34: Back side of the building.

Figure 4.35: Back side of the garden.
4.6. Co-housing
Frauenwohnprojekt Ro*sa kalYpso – Vienna, Austria

4.6.1. Background information of the building

Location
Frauenwohnprojekt Ro*sa KalYpso is an association and co-housing project for women. It is situated in Wien Meidling, the 12th district of Vienna. The building is located in a relatively new neighborhood from 2001, called Kabelwerk, on a distance of 5 km for the inner city. The neighborhood is a car free area with a mix of living, shops, offices, kindergartens and recreational activities (Kabelwerk, 2019). One can find a fitness club, a soccer club, doctors’ offices, supermarkets and restaurants ([Ro*sa] Kalypso, 2019). In addition there is a cultural center and a theater where many cultural activities are organized ([Ro*sa] Kalypso, 2019). The building is on a 5 min walk from the metro stop. It takes approximately 20 minutes to travel to the city center.

The building
The building was completed in 2009 and is designed by the architect Sabine Pollak in collaboration with the women from the association. The building is U-shaped and has 6 floors. In the middle is a garden. There are 43 rental apartments of which two third belong to the association. The other apartments are rented out by the municipality. The apartments are rental but there is the option to buy them. The size of the apartments vary between 40m² and 120m², from one room apartments to 4 room apartments. All apartments have a balcony, terrace or small garden ([Ro*sa] Kalypso, 2019). The rent of the apartments is relatively low, however the contribution to the construction costs are quite high. Together the prices to live in the building is similar to other apartments in the area. On the ground floor there are 7 offices that are rented out by Das Kabelwerk GmbH. The offices are rented out to female entrepreneurs. Currently the offices are in use within the field of consultation and therapy ([Ro*sa] Kalypso, 2019).

Ro*sa KalYpso is an intergenerational co-housing project and the age of the residents varies between 0-72 years old. Within the building there is a large common room with kitchen and toilet, a workshop, a laundry room, a bike and stroller garage, a garden and two large terraces. The residents that rent out an apartment over the municipality instead of the association, can also make use of the
common areas and can take part of events organized by the association. All residents can make use of
a pool area with fitness and sauna, located in the neighboring building ([Ro*sa] Kalypso, 2019).

Resident participation
The residents of Ro*sa Kalypso were actively involved in the planning and design of the co-housing
project. Together with the architect Sabine Pollak they realized their plans. The women participated in
workshops and workgroups and organized community days in which their wishes and ideas could be
realized. In 2004 the women even won a prize for participation from the Österreichischen Gesellschaft
für Umwelt und Technik ([Ro*sa] kalypso, 2019). The association organizes informal activities such as
monthly brunches and yoga events, and formal association meetings. There are workgroups such as
the garden group. While the women do not need to participate in the community life, they need to
contribute a monthly fee to the association ([Ro*sa] kalypso, 2019).

Philosophy
Ro*sa Kalypso was the first co-housing project for women in Vienna. The central idea behind the
project is based on a feminist ideology in which only women can sign the rental contract in the building and shape their own living environment. The building is designed and planned by an
female architect together with the women of the association in order to create a living climate for
women. In addition the women use a female dominated language. Only women can be part of the
association, however men are also welcome as partners. Since only women can sign the rental contracts, the man has to move out in case of a divorce. In this way the women aim to safeguard living
spaces for women and create a decision making structure that empowers women (Diesenreiter, 2015).

The association welcomes women from all ages and backgrounds, families and couples. By
taking care of special target groups such as single mothers, elderly and women with physical or mental
problems, the association creates a social safety net for women in need (Diesenreiter, 2015). In
addition the association stimulates job opportunities for women within the building by integrating
work and living spaces ([Ro*sa] kalypso, 2019).

A central thought behind uniting women in a co-housing association is that the women can support each other and simultaneously live an independent life. By living together, women can share
talents and resources which make their lives easier ([Ro*sa] kalypso, 2019). In addition the association
tries to counteract the trend of increasing isolation within the city and discusses the topic of ageing.
Currently the women are exploring options to support elderly, for example by providing space for
nurses.

Nowadays there are 3 women co-housing projects in Vienna that are originated from Ro*sa
women co-living association. Ro*sa Donaustadt was completed in 2009 and is designed by the same
architect. It is situated in the 4th district of Vienna. Ro*sa Simmering was completed in 2012 by another
architect and situated in the 11th district of Vienna.
4.6.2. Lived experience by the residents

Profile sketch

Barbara is 72 years old and joined the women association in 2008. She has lived in the building since the opening, 10 years ago. Barbara was born and raised in Vienna and used to go to school in Wien Meidling, where Ro*sa Kalypso is situated. Her sons live close by. She enjoys living here and wants to stay here as long as possible. Prior to living in Ro*sa Kalypso, she used to live in a co-housing project for families where she was actively involved in the initiation. Coming from a big family with a large friend group that always used to do things together, the idea of living in a community fitted to her. In addition she comes from a man dominated world with 2 husbands, 3 sons and a brother. When she retired and had to sell her house, she joined the woman association where she could both live in a community and be independent.

Therese is 70 years old and lives since 2014 in Ro*sa Kalypso. She was born and raised in Vienna and used to live in a neighborhood close to the inner city together with her female partner and children. They lived in a building with a strong community life where the residents organized projects and events together. After she retired she and her partner wanted to find a new place to live. They were befriended with another women couple who lived in Ro*sa Kalypso and introduced them to the concept of women co-housing. The focus on women and the community life was something that appealed to them and they were willing to pay every price to move in the housing project, even though they had to wait for quite some time. They took the first available apartment, even though it was too small for both of them. Later on her partner got another apartment within Ro*sa Kalypso.

Louisa is 68 years old and lives since the opening in 2009 in Ro*sa Kalypso with her female partner and dog. She was born and raised in Vienna and used to live in the same neighborhood as Therese with her partner and children. She moved to Ro*sa Kalypso for several reasons. She had always worked with women focused projects and wanted to live in a women co-housing project. In addition the rent of the apartment close to the inner city became too high after she retired and she needed to find another place to live. She is founder of a women psychological clinic where she support women in need.

Building design

Louisa, Barbara and Therese enjoy living in Ro*sa Kalypso. They enjoy the community life with all the advantages and disadvantages, the green surroundings, the wide view over the hills, the friendships they have within the community and the way the building is planned. Therese tells: ‘I think the building
is very well organized. It is pleasant to live in. Every apartment is accessible for disabled, so I would manage to live here when I have a rollator as well’.

Within the building Louisa, Barbara and Therese meet other residents often in the hallway, at the elevator or during association meetings once a month. Also outside of the building the residents meet at the metro stop, when walking the dog or in the super market. In the common room, the residents do not meet each other so often. Barbara tells: ‘I only meet residents in the common room when there is an event’.

Louisa and Barbara are very satisfied with the kitchen in the common room (fig. 4.40). Two times a week Barbara cooks food for her neighbors in the kitchen. Louisa tells: ‘The fully equipped kitchen is great. There are many tables and you can make them bigger. You can make a really long table and sit all together here’. There were times that some of the residents would meet up in the common room and do things together like sewing or crafting, however now the common room is mainly used for monthly meetings with the association and the monthly brunch. Residents only meet each other in the common room when there is a planned activity.

Barbara, Louisa and Therese don’t spend much time in the common room. Therese likes to travel a lot and spends much time abroad. When she is at home she does not make use of the common room. She only goes there for meetings with the association and for the brunch. Also Louisa only goes to the common room for association meetings and brunch. She also hardly sits in the inner garden. She tells:

*I only go to the common room when there are association meetings and at the brunch once a month. I also don’t sit on the terrace a lot because I have two balconies. It is a bit of a pity. There are often people in the garden, but mostly those with small children. They play in the sandbox or with water. But since I don’t have young children and they don’t allow dogs in the garden, I hardly sit there. So I don’t spend so much time in common areas. But we are thinking of organizing something new, like a game evening, so we come together more often. Maybe in the summer we will sit outside more often and chat.*

Therese is not so satisfied with the common room and other common areas. She tells:

*I wish the building was planned in a more women focused way. I would like to talk to all the women and ask them which wishes they have. For example there are a lot of vacant spaces that are not used, like the sitting areas in the hallway. The intention is well, but we noticed that no one sits there. We already have the common room and our apartments, so there is no need to sit there. I also miss a room for activities. We have a workshop but it is underused. In the common room we have a corner for children, but it is poorly equipped (fig. 4.39). In my opinion it is child unfriendly. There are no games. I wish there would be a tv where the children can play videogames on a rainy day for example.*
Therese used to be part of the group that is responsible for the equipment of the common room. However it was very difficult to make basic democratic decisions with the other women and since she does not spend so much time in the common room she decided to quit. She experiences that the younger residents have other desires concerning the design of the common room, than the elderly. While the younger residents want to save money on the design, the elderly want to make something out of the common room. She tells:

I used to be part of the design group. One thing that I don’t like is that some residents put their old furniture here as if it is a gift and we should be thankful for it. However, no one wants to have it there. When you are older you have another view on this kind of things than when you are young. When I was young we did not have so much money so we kept things basic, but now I am older I want to make something out of the common room. But the other residents don’t prioritize the design of the common room since everything costs money and they have to spend it on their family.

Within the building there is also a workshop, however the workshop is not practical and is hardly used. Therese tells: ‘The workshop is a dead room. There you can find the marmalade jars that are only used once a year and unused equipment’. Louisa is also unsatisfied with the workshop. She tells:

The workshop is way too small. There is no space for equipment. Currently you can’t do anything there. It is also dirty and full of dust. So when you want to do something that should stay clean, like sewing, we use the common room instead.

Social contact

Louisa, Therese and Barbara see their neighbors and other residents daily. Barbara cooks two times a week for her neighbors in the common kitchen. Every morning Therese invites Barbara and Louisa for coffee in her apartment and Louisa and Therese also play cards together. Louisa tells: ‘I always meet
someone I know around the house. I play cards with Therese, but we never plan it. You just meet each other in the hallway and chat’. This kind of spontaneous meet-ups is also something that Therese enjoys. She tells: ‘It is very convenient that you don’t have to make difficult arrangements to meet up. It is very casual’.

Once a month there is a brunch for all the residents. The residents that rent an apartment via the municipality are also welcome to join. Furthermore there are birthday parties, Christmas parties and trips every now and then (fig. 4.41 a & b). Once a month there is a formal association meeting with all residents. Some residents are organized in groups that do yoga together, go walking and go to the cinema. However, Louisa sometimes wishes that there would be more communal activities. She tells:

Within the building there is less going on than I hoped. I am a bit disappointed. I believe the reason is that the residents are quite mixed. There are women that live alone, women with partners, children, pets, young and old. The contacts are often between those who have the same age or have children and so on. The women that live alone often hang out together, and those who work hang out together. So there are quite big discrepancies. For example those who work, like to go to a movie after work, but I would prefer to do something during the day.

a.  

[Image 1]  

b.  

[Image 2]  

Figure 4.41 a and b: Pictures of community activities that were organized during previous years.

Loneliness
The group dynamics within the association can sometimes be quite difficult. Louisa tells:

There are always conflicts that are not dealt with properly. The problems are swept under the carpet. There will always be people in the building that you like, some that you don’t like and some that always have a neutral attitude. These things reflect the group dynamics in the house. Nevertheless I think that we have a pleasant co-living as a community.

Therese is part of the board of the association and has the role as secretary. One of her tasks is to bring all the women together no matter how different they are. She tells:

Because I am the secretary it is my moral and ethical duty to create a harmony between the women. I chose to live in a co-housing project and this is part of it. But sometimes I think that the community where I lived before was much more harmonic even though we shared different
political views. Only women together can be very difficult. Sometimes it is too much for me. Basic democratic decisions can be so difficult.

Respect and tolerance is a difficult theme within the community. Barbara tells:

I am from a male dominated family, but I found out that living together with women only is a challenge. The first two years I lived here I was very frustrated about the way people treated each other. People always find something to complain about.

Although the group dynamics can sometimes lay on the bottom, the women feel part of the community and have many things in common with the other residents. Therese tells:

I believe I fit in the group. First of all we are all women and we the power to make decisions. Second, we have special women rights here. We talk with a female dominated language. In general I feel much better in a women focused co-housing project. Also the men are partners and don’t behave like machos. They live much more conscious and treat their children more conscious as well. Their children grow up with a human just view. These are all things that are accomplished within this house and that I find important.

Therese, Louisa and Barbara have never felt isolated or lonely within the community. Being surrounded by women can be an advantage since everyone understand each other more or less. Therese sometimes even needs to distance herself otherwise she gets too much input. She tells:

I have so many things in common with some other residents. First of all we are all retired. Second, we all have children. Third, I have both been hetero- and homosexual and finally I have enough free time. If I don’t distance myself people would come over to talk all the time!

Barbara actively tries to be in touch with other residents to avoid isolation of others. Even when residents have conflicts she tries to connect them. She tells:

Out of experience I know that isolation and loneliness among residents can be overcome when people continuously try to connect to each other. That is why I keep approaching others. I talk to them in the hallway or on the street to create some sort of community feeling. It is only possible when someone tries to connect others. I have become that person and it gives me joy.

Louisa has experienced a feeling of loneliness but tells that this feeling is not related to the situation in the building. She never felt isolated but sometimes has the feeling that there are some residents that isolate themselves. She tells:

There are some residents that withdraw themselves from the community and then I wander whether they are still there, or whether they left. But I know they are still there because once in a while you would see each other around. But they don’t show themselves much.
Social support

Emotional support
Within the building there is no lack of emotional support. Creating a social safety net for women is one of the central ideas behind the women co-housing project. Barbara, Therese and Louisa can just knock on someone’s door when they want to talk about pressures in their lives. Barbara tells:

_There are several psychotherapists within the building. Some have their office downstairs. These two psychotherapists do not give therapy to the residents, but they are amenable for residents as well. We have several women here that are or have been in a psychological crisis. There is always someone there for them._

As a psychotherapist Louisa has sometimes offered help to other residents. Louisa tells: ‘There have been 2 or 3 situations in which someone came to me and talked about the things they had difficulties with. We just exchanged our sorrow. It is also a bit part of my profession’.

Therese tells that she and other residents often exchange personal problems and support each other during difficult times. She tells:

_There was a time that my partner and I broke up. I believe I cried in front of everyone haha. I felt so sad. Everyone knew my daily mood and everyone watched how my partner and I came back together. That’s how things go in the association. Many have problems with their partners and then we gather and cry together. Those who are experiencing significant hardship are treated extra careful by us._

Also Barbara had a time in which she received a lot of emotional support from the community. She tells: ‘Last year my son was very ill and had to undergo a surgery. During that time I got a lot of support. I went to others and cried and cried. They supported me a lot’. Barbara tells that residents often go to her when they need some personal advice. Barbara tells:

_I am the ‘mother’ of the association. When someone has problems, they often go to me. Especially young women come to me when they need advice. They often come with personal problems. Sometimes the problems are related to conflicts between residents._

All together there is a stimulating atmosphere to share personal problems with each other. For Therese it can sometimes even be too much. She tells: ‘I really need to distance myself sometimes. There are many heterosexual women here that believe that homosexual women understand their problems better. It can be too much input sometimes’.

Instrumental support
Within Ros*sa KalYpsos a central thought is that women can support each other by sharing talents and resources and make each other’s lives easier. Barbara tells: ‘I approach others when they have a certain talent that I don’t have and ask for their support’.

Therese, Barbara and Louisa can easily find help with small tasks. Louisa tells: ‘When I go on a holiday my neighbor will collect my post and water the plants. When she is away, I do the same for her.'
Others will feed someone’s cat. That functions very well within the building’. Barbara tells that she can always ask for help with small tasks such as lifting something heavy.

When feeling unwell there will always be someone to help. Louisa tells: ‘When I am ill and can’t leave the apartment, I just call a neighbor and ask her to bring me some things from the supermarket’. Therese tells that she always helps when someone is ill and that others help her too. She tells:

When I am ill and my partner has to work, I can ask others to take the dog for a walk. My neighbor had a mountain accident and was in a wheelchair for a while. I took her to the supermarket and did everything with her.

Within Ro*sa KalYpso, Louisa, Therese and Barbara are the elderly. The other residents are not retired yet, have young children and are much younger. While elderly could need support from the younger people, in Ro*sa KalYpso it is often the other way around. Louisa tells:

In theory you would think that the younger residents would help the older residents. However it is often the other way around. We are the elderly and we are often asked to help the younger residents with babysitting or something like that. In 10 years from now, we will probably need help. Before that time, we need to come up with a concept.

Barbara tells that she sometimes plays the role of grandmother and takes the small children for a walk to the playground. Also Therese sometimes plays the role of grandmother, however she would prefer not to. She tells:

I have a lot of free time and I am one of the elderly, but because of this I don’t feel obliged to do all the ‘grandmother duties’ like picking others children of from school. These are tasks that the mothers like to shift to others, but that is not what I aspire. Where the mothers really were in need of help I have picked up their children from the music classes. But I try to distance myself from these things.
Chapter 5 - Analysis

The previous chapter showed the results of the data collection and presented them per case study. Within this chapter the results of all the case studies will be combined and analyzed as a whole. Based on the theory and the conceptual model, the findings will be interpreted and an answer on the research questions will be formulated. Per sub-question the findings will be presented and discussed. Finally, all the findings will be presented in a table that gives an overview of the final research outcome and helps to answer the main research question.

5.1. Factors that stimulate and hinder social interaction

Sub-question 1: How can design of different housing models for elderly and young adults stimulate social interactions between residents or hinder them?

Within the conceptual model (fig. 2.1) factors that can stimulate or hinder social interaction between residents are summarized. These factors are based on Williams’ (2005) social contact design principles. When comparing the findings of the cases with the findings in the theory we can confirm some of the factors that stimulate social interactions. Formal social structures, shared facilities, visibility and centrality turned out to be key in stimulating social interactions between residents. However, adjustability, shared paths, buffer zones, unit size and building layout were not mentioned in the case studies as important factors that stimulate social interaction. In addition, one aspect that was not mentioned in the theory, but that turned out to have a significant impact on stimulating social interactions, can be added. This is ‘the necessity to use a space’.

Concerning factors that hinder social interaction, some of the aspects mentioned in the theory can be confirmed within the case studies. Poor quality, equipment and maintenance of common spaces, the usage of a space for private events, too much proximity between the residents and the size of the community turned out to hinder social interaction between the residents. On top of these, some factors that were not mentioned in the theory can be added. These are the lack of spaces to interact, common rooms that are not central and visible, and a poor hallway design.

5.1.1 Factors that stimulate social interaction

When analyzing all case studies, two important factors that stimulate social interaction between residents can be identified. First of all the organizational structure within the building is key in stimulating social interactions between residents. Second, building design is key in stimulating social interactions between residents. According to Williams (2005), the combination of these two stimulates both formal and informal meetings between residents. While the building design can stimulate informal encounters between residents such as chatting, the organizational structures bring both fixed moments of contacts such as participating in monthly association meetings, and opportunities to join additional activities. According to Williams (2005), the combination of these two is typical for co-housing initiatives.

1. Organizational structure

Organizational structures that stimulate social contact can be found in the co-housing initiatives Die Mauerseglerei and Ros’ sa kalYpsos and in the nursery homes Vredenbergh and Humanitas. However each case has a unique organizational structure with an unique impact. While some organizational
structures provide fixed contact moments between residents, others provide opportunities to join activities, or both. In this way they aim to stimulate social interaction between the residents.

Within Die Mauersegleirei and Ro*sa Kalypso the organizational structure offers both fixed contact moments between residents and opportunities to join activities. All residents are members of the association that actively promotes communal living. The residents, from different ages, are organized in workgroups and take responsibility for tasks within the community. They meet frequently with all members of the association and they organize fun events together, like birthday parties. In addition, some residents take initiatives to do something together, like going to a movie or cooking. By offering this organizational structure, the residents have many opportunities to be in touch with each other. While some of the contact moments are fixed, they can decide themselves whether to join additional activities or not.

Also within Humanitas one can find an organizational structure that offers both fixed contact moments and the opportunity to take part in activities. Within Humanitas the residents are not organized in an association, however the organization of the nursery home actively promotes residents to get in touch with each other and with people that come from outside of the nursery home. They provide a cultural program, workshops, fixed coffee and dinner moments and contact with students. Staff members actively stimulate elderly to get out of their rooms and sit together with others. The concept of taking in students to work and live in Humanitas actively aims to integrate young and old and prevents loneliness and boredom of the elderly. Even though joining an activity is voluntary, the residents are stimulated to take part. In addition, the coffee and dinner moments create a fixed moment of contact between the residents. Like Die Mauersegleirei and Ro*sa Kalypso, the residents have fixed moments of contact and the opportunity to join additional voluntary activities if they want.

Within the nursery home Vredenbergh a fixed moment of contact is missing. Although the nursery home offers moments of contact by organizing activities and monthly drinks, the residents can decide themselves to take part or not. In contrast to Humanitas, the nursery home does not open up their activities and facilities for people from outside of the nursery home, which creates a segregated atmosphere of a place where only elderly live. A philosophy of communal living is missing which results in a concept in which the elderly are living together separately. The same is visible within the student accommodations Guesthouse Gasgasse and Lappkäärsberget. Here an organizational structure that creates fixed moments of contact and the possibility to join activities, are missing.

2. Building design

Besides offering activities and fixed contact moments between residents, the design of the building is key in stimulating social interactions. Social contact design principles increase the potential for residents to meet each other within the building and create the possibility for residents to interact. One of these principles is offering shared facilities that could function as a meeting place (Williams, 2005). However in order to make it function as a meeting place, several factors are important.

According to Williams (2005), the visibility of shared facilities is key in stimulating interaction. When residents can observe what happens in a common space, they can decide to join an activity or not. The importance of visibility has been confirmed within the case studies. In Lappkäärsberget, the door of the common kitchen has a window, which makes it possible for residents to see what is happening in the kitchen. When someone is preparing food or sitting in the dining area, the residents can decide to join this activity or not. The other way around, when a common space is not visible, it does not have a stimulating effect on social interactions. In the case of Guesthouse Gasgasse, the common room has the same door as all the student apartments. You cannot look inside and residents
do not know what is happening behind the door. Since the residents cannot see others and their activities, the common room does not invite them to sit there and chat.

Visibility of others is not only a way to stimulate social interactions, but also a way to make the residents feel more connected to each other and less isolated. Windows makes it possible for residents to see each other and create life within the building. Those residents that felt isolated, wished that there were options to see others, for example by having a window between the apartments and the hallway. In this way the building feels more lively and inhabited, and you get the feeling that you are not the only one in the building. Within Die Mauersglerei, all apartments have a window that looks out on the hallway. It creates a feeling of ‘warmth’ and connection between the residents. Within the nursery home Vredenbergh, visibility was also mentioned in the context of contact with the exterior. The possibility to see others walking on the streets and to feel connected with the outer world.

In most cases, visibility goes together with centrality. Williams identified centrality of common spaces as an important aspect for creating social interaction. The centrality of the common space together with visibility has a stimulating effect on social interaction. In the case of Lappkärrsberget, the door of the common kitchen has a glass window and the kitchen is situated next to the entrance of the corridor. Every time someone enters the corridor, he or she passes the common kitchen and can look inside to see if someone is present. In this way spontaneous interactions can occur. Within Humanitas, the combination of visibility and centrality has a stimulating effect on social interaction between the residents. Instead of a separate room, common spaces are part of the hallway. In the middle of each hallway there is an open space where people can sit, drink coffee and watch tv. Each time residents leave or enter their apartments, they can see and hear others and can observe what is happening in the open space. In this way the open space can invite the resident to join and socialize with others.

Another factor that is key in stimulating social interaction, is the necessity to use a space. While Williams argues that a shared facility should be designed for a certain kind of use, he does not emphasise the necessity to use a space as way to stimulate social interactions. However the case studies showed that the necessity to use a space creates the potential for residents to meet each other. Within the student housing Lappkärrsberget, there is a necessity to use the common space. The common space consists of a kitchen and dining area. The students do not have a kitchen in their own room and need to use the kitchen in the common area to prepare food. This means that residents spend time in the common area at least 2 times a day, during breakfast and dinner. Since everyone in the corridor has to use the kitchen, the residents get the opportunity to meet other students that live in the same corridor.

If there is no need to use a space, the space will most likely be underused. Within the student housing Guesthouse Gasgasse, the students have their kitchens in their apartments and there is no need to use the kitchen in the common room. In addition, the common room has about the same size as the student apartments, has not toilet and no special facilities and therefore offers nothing extra to the rooms of the students. There is no use for the students to use the common room. The students can invite their friends to their own apartment instead. Another example are the seating areas in Ro*sa kalypso. The seating areas within the hallway should activate others to sit and have a chat. However, the residents noticed that no one ever sits there because they already have a common room and their own apartments where they could sit and have a chat. The seating areas are therefore abundant and the space could be used for something else.
5.1.2. Factors that hinder social interaction

According to Williams (2005), social interactions take place where people have the opportunity to meet, live in proximity to others and have suitable spaces for interaction. However, there are certain barriers that can hinder social interaction between residents. Within some of the case studies, the residents missed places where they have the opportunity to interact with each other in a meaningful way. The lack of spaces to interact is the first and most important barrier that is mentioned within the case studies. Within the student housing Guesthouse Gasgasse, there is one common room that is meant as a meeting space for the residents, however the room is mostly used for noisy midnight parties. The students miss a place where they can just sit and chat with each other. Also within the student housing Lappkärmsberget, the students miss a place where they can sit and hang out with others, other than the kitchen. The kitchen is the only common space and that is why the students meet each other there, but in the kitchen you can only cook and eat. There is no space for the student where they can hang out, play a game or chat. The same situations is present within the east apartment block in the nursery home Vredenbergh, where there is a lack of places for residents to interact with each other. The residents do not have the opportunity to get to know each other which can enforce a feeling of isolation.

Another barrier for interactions is when common places are not central and visible. When a common space is not central or visible and there is no need to go there, residents do not go to the place. In this way the place will never function as a meeting point. For example the common room in Guesthouse Gasgasse. Instead of having one common room on the 7th floor, that is not visible and only accessible with a key. The residents wished that there would be a sofa and a table in each hallway next to the stairs. Each time a resident would enter the floor, they would pass the sofa and get the possibility so see if other people are sitting there, like in the nursery home Humanitas. The centrality and visibility would increase the potential for spontaneous meetings between residents. It would create life in the building, the opportunity to see your neighbors and diminish the feeling of isolation from other residents.

Another barrier for social interaction, is the usage of a space for private events. Williams (2005) also mentions this as a barrier for social interaction. When a space is occupied by one group of people, others can feel excluded from the space. Within Guesthouse Gasgasse, the common room is often occupied by the American exchange students who have their midnight parties there. They do not invite the other residents. However, other residents often need to coop with the noise. In addition, because of noise disturbance and lack of cleaning after parties, the OeAD housing office even locked the room for all residents during one semester. This meant that the only place that the residents have in common, was closed for all the residents.

Another barrier for social interaction is too much proximity between the residents. Williams (2005) identified this as a barrier as well. According to Williams (2005), residents can withdraw themselves from the community when there is too much proximity between the residents. Within both co-housing initiatives, the problem of too much proximity was mentioned. Within Die Mauerseglerei, the line between private and public is slightly blurred. While most residents enjoy this blur, some residents experience it as too much input from the other residents. Because of this they decided to withdraw themselves to their apartments during certain times of the day. The constant interaction with other people can be very exhausting. While all residents have a door handle and everyone can just walk into their apartments. One family decided to get a door knob to get more privacy and distance.
**Poor quality, maintenance and equipment** where mentioned as barriers to use a space, and indirectly as barriers for social contact. Williams (2005) sees poor quality of common spaces as hindrance for people to use the space. For example the workshop in Ro*sa Kalypso is a place where old equipment and junk is stored. The room is dirty and too small to use it for any sort of crafting. Because of this no one is using the workshop. Also in Lappkärrsberget, the dining areas in the kitchens that are not renovated yet, have dirty furniture and lack comfort. Some residents prefer to bring their friends to their own rooms, instead of the common kitchen/dining area because it is fresher.

Another factor that can form a barrier for social interaction is the **size of the community**. According to Williams (2005), within a big community there is more anonymity and a greater diversity between the norms and values of the residents. Because of this residents are less likely to participate in communal activities and to use common spaces. Die Mauersregerei and Ro*sa Kalypso are both intragenerational co-housing initiatives. While the concept aims to integrate people from all ages and stages of life, the residents noticed that people with similar ages and lifestyles group up and separate themselves from the others. The families with young children cling together and so do the retired and the full-time workers. This means that there are several groups within the building, instead of one big group. The result is that residents only have contact with 5 out of 27 apartments in the building. Also within Gueshouse Gasgasse, the diversity of the residents was experienced as a barrier for social interaction. There are full-time students, there are exchange students that party a lot and there are PhD-students. The exchange students hang out together and it is difficult to get into their group. In addition, the residents were afraid of knocking on each other’s doors for help, because they had no idea what type of person they could except to open the door. Since most students are international students, there is also a great diversity of cultures, norms and values, which form a barrier for interaction. There are communication barriers and misunderstandings between residents.

Finally, one identified barrier for social interaction is the **poor hallway design**. Since William’s social contact design principles are focused on a neighborhood scale, he does not mention the importance of the hallway as meeting place. The hallway is often one of the only shared space within the building. Since residents pass the hallway several times a day, it has the potential to be a meeting place for residents. However, the hallway design does not always stimulate residents to get in touch with each other. Within Vredenbergh, the resident experiences a feeling of isolation when entering the hallway. There are no windows, it has a death end and there is no possibility to see or hear other residents. Also within Guesthouse Gasgasse, residents do not see or hear others when they are in the hallway, which creates a feeling of isolation. Within Lappkärrsberget, the hallway is a ‘no mans’ place that no one takes care of. The air is bad, it is dirty and there are no windows. Making the hallway more comfortable, by adding a place to sit or a table to put your bag on while finding the key, could change the entire atmosphere of the hallway. Within Die Mauersregerei, the hallway is the place where most social interactions occur. There are windows that connect the apartments to the hallway and to the exterior environment, there is a place to sit and there is a children play corner. As the architect says: ‘It is not a cold hallway, but the hallway is as warm as the apartments themselves’. The architect aimed to create life in the hallway and keep the building inhabited.
5.2. Superficial encounters versus intimate friendships

Sub-question 2: To what extent do social interactions take place, where do they take place and what kinds of interactions are there?

Within the conceptual model, different kinds of social interactions are listed, from greeting and chatting, to participating in formal and informal activities, and having intimate conversations. When analyzing the case studies a difference can be made between formal and informal encounters between residents. While formal encounters are often between all residents within the building, informal encounter happen between neighbors and residents with similar lifestyles.

5.2.1. Social interaction between the residents

When looking at the social interactions that occur in the different cases, one simple observation can be made. In those cases where the organizational structure and the building design stimulate social interactions, the residents know their neighbors well and are also in touch with the other residents within the building. However, in those places where an organizational structure is lacking and the building design hinders social interactions, the residents do not know their neighbors nor other residents within the building.

The first situation can be found in the nursery home Humanitas and the co-housing initiatives Die Mauerseglerlei and Ro*sa KaLypo. Here the residents are both in touch with their neighbors and with the other residents within the building. The organizational structure and the building design make it possible that both formal and informal encounters happen between the residents. While the formal encounters happen for the entire community, for example during association meetings, informal encounters happen between individuals or small groups, like having a chat on the hallway. The formal encounters make it possible that residents get in touch with residents they would not encounter on a regular day, such as residents that live on different floors and have different lifestyles. Formal encounter such as fixed contact moments therefor create an atmosphere in which all residents are familiar to each other. They recognize each other’s faces and know each other’s names. In addition, informal encounters often happen between residents that live in proximity to each other and have similar lifestyles. For example residents that live on the same floor have a higher chance to meet each other informally. Furthermore, residents with similar lifestyles and routines have a higher chance to encounter one another. For example, they bring their children to the same kindergarten around the same time. Consequently, the informal interactions result in an atmosphere in which the residents know their neighbors well and see them on a daily basis.

However, formal and informal encounters bring different sorts of social interaction. The residents that only meet each other formally, during fixed contact moments and activities, know each other more superficially. They greet and chat, but do not talk about personal things with each other. Within Die Mauerseglerlei, superficial contact is also re-enforced by the situation in which residents do not actively take part in formal meetings and never show their face within the community. This results in an anonymous atmosphere. However, the residents that have similar lifestyles, live in proximity to each other and meet informally, often have a more intimate friendship. As discussed earlier, the residents that have similar lifestyles form close groups. For example in Ro*sa KaLypo, the retired women hang out together because they have similar routines in which they are free during the day, while others work or take care of their children. In addition the women have many things in common which bonds them. So even though there are many possibilities for interaction between residents, in practice the residents only have frequent contact with a small group of residents. Within the co-
housings, Ro*sa Kalypos and Die Mauerseglerei, some residents wished that there was more interaction between all the residents and not only between small groups. However, there are also residents that wished there would be less interaction between the residents, because they already experience too much interaction.

The second situation can be found within the nursery home Vredenbergh and the student accommodations Guesthouse Gasgasse and Lappkärrsberget. Here an organizational structure that stimulates social interaction is not strong enough or is missing, and the building design hinders social interactions. This results in an situation in which the residents hardly know their neighbors nor other residents within the building. The contact between the residents remains superficial and there is an anonymous atmosphere. Residents greet each other on the hallway, but do not talk about personal things together. Within Guesthouse Gasgasse there are no formal or informal encounters between the residents. Some of the residents have never seen their neighbors and they hardly encounter other residents within the building. Within Vredenbergh, the residents meet sometimes formally, during activities and the monthly Friday drink. The residents recognize each other’s faces and are familiar to one another. However, the residents hardly meet informally and there are no intimate friendships between them. Within Lappkärrsberget, the residents only meet informally. The residents never get in touch with other residents within the building, except for the residents that live in the same corridor. While in some corridors the shared kitchen creates informal encounters between the residents that result in intimate friendships, in other corridors there is a more anonymous atmosphere. An anonymous atmosphere is enforced when some residents never use the kitchen, they do not show themselves, or sublet their room to strangers. In the corridors where people actively meet in the kitchen, more intimate friendships evolve, however the friendships are often only between a small group of the corridor mates. With the majority of the residents they are not in touch.

5.3. Social interactions are key in stimulating social support

Sub-question 3: To what extent do elderly and young adults feel emotionally and instrumentally supported within their home?

Within the conceptual model, different types of social support are listed. Helgeson (2002) distinguishes instrumental and emotional support. In addition Kelman, Thomas and Tanaka (1994) distinguish formal and informal support. When comparing the theory with the findings, one can both find instrumental and emotional support, and formal and informal support. However in addition to this, another form of support can be identified, which is social support from the association and support from individuals.

5.3.1. Social support

When analyzing all case studies, two observations concerning social support can be made. First of all, social interactions are key in stimulating social support among residents. Second, instrumental support is easier to obtain than emotional support.

Social interactions open up the possibility for residents to approach each other when they need help. In those cases where the residents interact with each other and know their neighbors well, they can easily ask other residents for help and support. However, in those cases where the residents only have superficial contact with each other, residents do not feel comfortable to ask for help and search for help at friends or colleagues that live outside of the building. Social interactions can therefore remove the barrier between residents to ask each other for help. In addition, providing help and social interaction often go together. Asking a resident for help is often accompanied by a small chat, a visit
and a gesture of thankfulness. When receiving help, the resident would do something in exchange. However it is easier for the residents to approach others for asking instrumental support, than to approach others for asking emotional support. For instrumental support, the relationship between the residents does not have to be as strong. Residents can help each other with simple tasks or count on each other when someone is feeling physically unwell. However for emotional support, residents need to know each other very well. Emotional support can therefore only be found at residents that have a close friendship. Therefore, the group of people that one can find instrumental support from is bigger than the group of people one can find emotional support from. The latter often exists of only 1 or 2 people.

The co-housing initiatives Die Mauerseglerei and Ro*sa KalYpsos are place where social interactions between the residents are stimulated. As mentioned in the previous paragraph, the residents are familiar to each other and know their neighbors well. In addition, helping each other is part of the philosophy of communal living. Here the residents are encouraged to ask each other for help. While residents can both find help from the association, they can also ask help from individuals such as neighbors and close friends. The co-housing communities aim to create a social safety net for the residents. Within Ro*sa KalYpsos, residents in need such as elderly and single mothers, are assisted by the community. Within Die Mauerseglerei, the residents strive for each other’s well-being in order to make the community function as a whole. When one person in the community experiences hardship, all residents will share some of the sorrow. In addition, residents can find instrumental and emotional support by individual residents within the community. While within Die Mauerseglerei emotional support can only be found at very close friends, within Ro*sa KalYpsos emotional support is actively provided by the community. There is both formal and informal emotional support available. Among the residents, there are psychotherapists who the women of the association can turn to for formal emotional support. In addition the women can receive informal emotional support from residents that provide a sympathetic ear.

Within the student housing Guesthouse Gasgasse in contrast, there is hardly any interaction between the residents and the residents do not feel comfortable to ask each other for help. Here the residents would turn to their friends that live outside of the building for instrumental or emotional support. The residents could knock on the neighbors’ door for minor favors such as taking the post package when someone is not at home. However, in case the residents would feel physically unwell or want to share a personal problem, they would not ask the neighbors for help. The same situation can be found within some of the student corridors within Lappkärrsberget. In some corridors there is hardly any interaction between the residents which forms a barrier to ask each other for support. Since the residents do not know each other, they do not feel comfortable to knock on each other’s doors and ask for help. Instead, they search for help at close friends. However, there are also corridors where some of the residents interact with each other on a daily basis and have a strong bond with their neighbors. The residents that live in such corridors can ask each other for instrumental and emotional support. Likewise, the group of people they can turn to for instrumental support is bigger than the group of people they can turn to for emotional support.

Within the nursery homes Vredenbergh and Humanitas, one can find a big difference in the availability of social support. In Vredenbergh the contact between the residents is quite superficial. Here the residents could ask each other for instrumental support to some extent. For example they can ask each other information or lend each other things. However, since the contact is superficial, the residents would not approach each other to talk about personal matters. In addition, if they feel physically unwell, they can receive formal instrumental support from nurses. In Humanitas the
residents also receive formal instrumental support from nurses, however as a bonus the students provide the residents with instrumental support as well. Because the students and the elderly see each other daily, the elderly have the opportunity to ask them for help. The students help the elderly with their iPad or phone, do groceries together, bring them to the doctor and so on. In addition there are staff members who provide formal emotional support to the elderly, however the students sometimes provide emotional support as well by offering a sympathetic ear. Likewise, the elderly offer a sympathetic ear to the students. While within Humanitas, it is the younger residents who would provide social support to the elderly, in Ro*sa KalYpsos it is the other way around. Here the younger residents ask for social support from the elderly. Since the elderly have a lot of free time, the younger residents ask the elderly to babysit, pick up their child from the kindergarten and so on.

5.4. Segregation and the lack of a common ground contribute to loneliness

Sub-question 4: To what extent do elderly and young adults experience loneliness within their home?

According to Peplau and Perlman (1982) loneliness is the experience of being disconnected and isolated from others. The findings of the case studies identify the lack of a common ground as important factor that causes disconnectedness and isolation of residents. In addition the geographical and social segregation of residents enhances a feeling of disconnectedness and isolation, which matches the theory of Canuscio, Block and Kawachi (2003).

5.4.1. Loneliness

Among all the resident within the case studies, some residents experience a feeling of loneliness within their home, while other residents do not recognizes this feeling. While loneliness is a complex issue shaped by personal experiences, it boils down to a feeling in which there is a discrepancy between a person’s desired and achieved network of social relationships (Peplau & Perlman, 1982, p. 33). While the housing situation does not cause this discrepancy, it can reinforce an already existing feeling of isolation by making it difficult for residents to meet each other. In addition, in those places where the housing situation stimulates social interactions, residents can still experience a feeling of loneliness, related to personal matters. The housing situation therefore, cannot avoid loneliness, but different housing solutions can offer possibilities for social interaction between residents.

Within Guesthouse Gasgasse, Lappkärssberget and Vredenbergh an organizational structure that stimulates formal encounters between residents, is missing. The only way residents can meet each other, is during spontaneous and informal encounters in and around the building. However, the building design in these places does not stimulate social interactions. There are no spaces where residents can interact with each other. Residents can only meet at the elevator or the entrance where they pass briefly. They greet each other, but meaningful interactions do not occur. There are no places where residents can just sit, chat and get to know each other. Because there is no opportunity to get to know the other residents, the residents also do not have the opportunity to find things that they have in common. However, a common ground is essential in establishing trust and friendship between residents. When the residents trust each other they can more easily ask each other for instrumental support. Likewise, a friendship between two people is needed in order to feel comfortable to ask each other for emotional support. Because there is a lack of spaces where meaningful interactions can occur, residents do not have the opportunity to find something that connects them. Short rental contracts also complicate the possibility to find a common ground between residents. A high
fluctuation rate of the residents that move in and out makes it difficult to establish friendships between residents.

In addition a big diversity between the residents enhances difficulties in finding a common ground. Within Guesthouse Gasgasse and Lappkärrsberget, there are students from different countries and universities with cultural differences that complicate communication between residents. In addition some residents sublet their rooms to strangers and there are also residents that are not studying. Therefore the atmosphere in these places is quite anonymous and social interactions remain superficial. While some residents feel isolated within these places, they do not experience loneliness because they have contacts outside of the building that they can turn to. However there are also residents who do experience loneliness in these places. They feel disconnected from others because they moved to a new city, feel like an outsider and do not have people they can turn to. According to Peplau and Perlman (1982, p. 33), especially people that recently moved and experienced a change of environment, have a higher risk to experience loneliness. While the housing situation is not the cause of this feeling, it reinforces the feeling of being disconnected from others, as the housing situation can limit the possibility for residents to get to know each other.

One aspect that can strengthen the feeling of disconnectedness is the segregation of the residents from the outer world. Some residents within Lappkärrsberget and Vredenbergh mentioned the feeling of being geographically and socially segregated from the wider society. Especially students and elderly are often segregated by their housing situation (Hagestad & Uhlenberg, 2005). Lappkärrsberget is geographically segregated by its location on a hill, disconnected from any neighborhood and far away from facilities such as a pharmacy. Furthermore it is socially segregated. There are only students, which creates a different atmosphere than in a regular neighborhood. It can be seen as an island of students. Vredenbergh is socially segregated from the wider society as well. It is an island of elderly, separated from youth, families and other groups in the society. However, it is exactly the contact with young people that the elderly want most. The elderly still want to feel like they are part of the society. The young people keep them updated and give them new energy. Nevertheless, within Vredenbergh all residents are in their last phase of life and the housing situation constantly reminds them of that. The residents are constantly confronted with old age, sickness and death. They do not feel like they are part of the society anymore.

Within Die Mauerseglerei and Ro*sa KalYpsos the diversity of the residents is quite big, however all residents share a common ground. The philosophy of communal living bonds the residents. In addition, the residents of Ro*sa KalYpsos share their feminist viewpoint. Even though the residents have different ages and lifestyles, they are connected by the philosophy of the association. What Die Mauerseglerei, Ro*sa KalYpsos and Humanitas have in common is that the organizational structure and the building design stimulate social interactions. The residents are familiar to each other and know their neighbors. The residents have close friendships with some of the other residents and they can both find formal and informal instrumental and emotional support. While Humanitas is also a cluster of elderly in their last phase of life, the board of the nursery home actively tried to change this atmosphere by taking in students, young staff members and opening up facilities for people in the neighborhood. In this way, the elderly get in touch with a diversity of people that bring a fresh air in the nursery home. They are connected to the outer world and get distracted from sickness and death. The residents that live in the above housing models and do experience loneliness, mention that the loneliness is not connected to the situation within the housing models, but is caused by their personal situation. However within the co-housing initiatives the group dynamics can sometimes bring situations in which the residents can feel isolated from other group members. Conflicts between
residents can lead to a feeling of isolation. So the housing situation cannot avoid loneliness, but can offer possibilities for interaction with other residents.

5.5. Link between housing, social support and loneliness

Main research question: To what extent can different housing solutions stimulate social support among elderly and young adults, and combat loneliness?

In order to answer the main research question, the findings of the different cases are combined and presented relative to each other (table 5.1.). This first observation that can be made, is that the table confirms the causal relation between building design, social interactions and social support, that was constructed based on the theory (fig. 2.1). This implies that within the housing models where the organizational structure and the building design stimulate social interactions, the residents are in touch with each other, know their neighbors well and can ask each other for social support. In addition, in those cases where the housing model does not stimulate social interactions, the residents do not know each other nor their neighbors and they cannot find social support within the building. This means that different housing solutions can indeed stimulate social support among the residents. This is the case within Humanitas, Die Mauerseglerrei and Ro*sa Kalypso. By providing fixed contact moments between residents, opportunities to join activities and spaces where meaningful interactions can occur, residents have the possibility to encounter each other, build trust and establish friendships. In this way residents feel comfortable to approach each other and ask for social support.

The second observation that can be made is that in those cases where there is a lack of social support, the resident also miss a common ground, are segregated and feel isolated. The table therefore implies a causal relation between the housing situation and loneliness. However, this relation is not entirely true. As mentioned earlier, loneliness is caused by a discrepancy between a person’s desired and achieved network of social relations (Peplau & Perlman, 1982, p. 33). The discrepancy can be caused by moving to a new city and changes in a person’s social network. The housing situation does not cause this discrepancy, but it can reinforce a feeling of isolation by making it difficult to encounter other residents, build trust and friendships and approach others for social support. Therefore, the housing situation cannot cause loneliness but it can reinforce a feeling of loneliness. In addition, within cases where residents have a common ground, are not segregated and not isolated, residents can still experience loneliness related to personal matters, for example within Ro*sa Kalypso. Therefore the housing situation cannot combat loneliness, but it can provide opportunities for residents to meet each other, build trust and friendships and possibilities to approach each other for social support.
Table 5.1: Overview of the main research findings.

<table>
<thead>
<tr>
<th>Building design</th>
<th>Interaction</th>
<th>Social support</th>
<th>Loneliness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed contact moments</td>
<td>Availability of shared facilities</td>
<td>Necessity</td>
<td>Spaces to interact</td>
</tr>
<tr>
<td>Vredenbergh</td>
<td>Humanitas</td>
<td>Guesthouse Gasgasse</td>
<td>Lappkärsberget</td>
</tr>
<tr>
<td>Nursery home</td>
<td>Co-housing</td>
<td>Die Mauerseglerrei</td>
<td>Ro*sa Kalypso</td>
</tr>
</tbody>
</table>

*Including help from the association
Chapter 6 – Conclusion and recommendations

This chapter starts with a summary of the main findings of the research. The findings will be interpreted within the theoretical context and an answer on the main research question will be given. Based on the research findings, policy recommendation are developed and discussed. This is followed by a section that discusses suggestions for future research concerning loneliness and urban planning and design. The chapter ends with a reflection on the research outcomes and the way they are generated.

6.1. Retrospect of the research
This research aimed to get an insight in the way different housing models for elderly and young adults can stimulate social interaction between residents, provide social support and combat loneliness. The main question within this research is therefore:

‘To what extent can different housing solutions stimulate social support among elderly and young adults, and combat loneliness?’

In order to answer the research question, four sub-questions were composed. The first sub-question focused on ways different housing models can stimulate or hinder social interactions between residents, by looking at social contact design principles of Williams (2005) and the organizational structure within the building. The second sub-question focused on analyzing different kinds of social interactions between residents in relation to the housing model. Within the third sub-question it was investigated to what extent residents feel instrumentally and emotionally supported within their home. Finally, the fourth sub-question aimed to investigate to what extent residents experience loneliness within their homes.

The research consists of six qualitative case studies, spread over Sweden, Austria and the Netherlands. Among the cases there are two nursery homes, two student housings and two co-housings. Per case, one or several residents participated in the research. The methods used are the go-along method, in-depth interviews and diaries.

6.2. Housing can stimulate social support, but cannot combat loneliness
The research found that different housing solutions can stimulate social support among residents by creating possibilities for residents to interact and encounter each other. It was found that formal and informal interactions between residents contribute to building trust between residents and establishing friendships, which take away barriers for residents to approach each other and ask for social support. Social interactions are therefore key in stimulating social support. In addition, some housing models offer formal social support by professionals, for example within nursery homes. Within the co-housing initiatives, social support is also provided by the community. Here providing social support is part of the philosophy of communal living. One finding of the research is that instrumental support is easier to obtain than emotional support. The group of residents one can find instrumental support from is bigger than the group of residents one can find emotional support from.

It was found that the building design and the organizational structure of the building are key in stimulating or hindering formal and informal encounters between residents. The availability of shared spaces that are visible and central are key in stimulating interactions, which is in line with
Williams’ (2005) work. However, the research also identified ‘the need to use a space’ as important factor to stimulate encounters between residents, which is a factor that Williams did not mention. The research also confirmed Williams observations that poor quality, equipment and maintenance of common spaces, the usage of a space for private events, too much proximity between the residents and the size of the community, are important barriers for social interactions. In addition, the research identified the lack of spaces to interact, common rooms that are not central and visible, and a poor hallway design, as important hindrances for social interaction, which are factors that Williams did not mention.

It was found that the lack of social interactions and social support can be linked to a lack of common ground between residents and the experience of being segregated and isolated. The lack of a common ground, together with the social and geographical segregation of residents can reinforce an already existing feeling of loneliness among residents. However, since loneliness is related to personal matters, it was found that the housing situation cannot cause nor combat loneliness, but it can offer possibilities for social interactions and social support between residents.

6.3. Housing cannot combat loneliness, but can reinforce it
Based on the theory, a causal relation between building design, social interaction, social support and loneliness was constructed. This research confirms a causal relation between building design, social interactions and social support. However, it was found that loneliness must be considered separate from this.

According to the theory, designing neighborhoods and housing for social interaction, and building social support networks, are seen as ways to combat loneliness (HM Government, 2018). Williams (2005) proves that design is an important factor in stimulating social interactions. While his work focused on the design of neighborhoods, this research confirms the importance of design on stimulating interactions within the context of the building. Within this research it was found that social interactions are key in building social support networks. Therefore a causal relation between building design, social interactions and social support can be confirmed.

Besides building design, the HM Government (2018), argues that innovative housing solutions such as co-housings can combat loneliness by the focus on social interaction and social support networks. In addition, intergenerational living is also seen as a way to combat loneliness (Sánchez, García, Díaz & Duaigües, 2011). Within the research it was found that intergenerational living and co-housing initiatives indeed offer more possibilities for social contact and social support, and that the residents do not experience loneliness that is connected to the housing situation. However, residents within these kind of housing models can still experience loneliness related to personal matters.

Cannuscio, Block and Kawachi (2003), argue that some types of housing can enforce loneliness. Especially the geographical and social segregation of residents, can create a feeling of isolation. The geographical and social segregation is typical for student accommodations and nursery homes (Hagestad & Uhlenberg, 2005). Within the research it was found that within the nursery home and the student accommodations, the residents were feeling more lonely. The geographical and social segregation of the residents, in combination with a building design that hinders social interaction and social support, resulted in the residents’ experience of isolation and loneliness. While the housing situation did not cause the experience of loneliness, it reinforced this feeling by making it difficult to interact with others.

So according to the theory it was expected that housing models can combat loneliness,. However this research found that housing models cannot combat nor avoid loneliness, however they
can reinforce an already existing feeling of loneliness. This means that residents who are experiencing loneliness due to personal matters, can feel extra isolated and lonely by their housing situation. While the housing situation cannot combat loneliness, it can contribute to stimulating social interactions between residents and building social support networks.

6.4. Policy recommendations
While the research has shown that housing models cannot avoid nor combat loneliness, they still play an important role within the societal problem of increasing loneliness. Some housing models for young adults and elderly can reinforce a feeling of loneliness by segregating residents from the wider society and offering limited options for social contact between residents. Therefore the way housing models are designed and organized, need to be reconsidered. Based on this research it is recommended that housing models for young adults and elderly should become more integrated within the society and offer more possibilities for social interactions.

6.4.1. Integrating students and elderly within the society
Nowadays it is still common to segregate students and elderly by their residence. Separate student accommodations and nursery homes are the norm. However the segregation of young adults and elderly can enhance a feeling of isolation by disconnecting these groups from the wider society. Within the nursery home Vredenbergh, the residents lack contact with groups of the society other than elderly. Especially when getting older, the need to be surrounded by younger people that keep them updated about the world and offer a distraction from ageing, is growing. The negative impact of segregating elderly, is addressed by the nursery home Humanitas. Within this housing model it is aimed to bring young and old together and keep the elderly connected to the outside world. By taking in students within the nursery home and opening up the facilities of the nursery home for people from the neighborhood, segregation of the elderly is counteracted. Humanitas is therefore an example of a housing model that integrates elderly within the rest of the society. This housing model can therefore be an inspiration for other nursery homes.

Also student accommodations should become more integrated within the wider society. Instead of positioning them separate from other neighborhoods and facilities, they should be integrated into neighborhoods. In this way, students have access to more facilities and have the opportunity to get in touch with other groups of the society.

6.4.2. Stimulating social interactions
Some housing models can reinforce an already existing feeling of loneliness by making it difficult to get in touch with others within the building. Especially students and elderly that experienced changes in their social network, for example by moving to a new city, felt even more isolated by the difficulty to meet others within the building. The research found that a building design and organizational structure that stimulate interaction are key in creating opportunities for residents to meet each other. It is therefore recommended that housing models should offer more possibilities for social interactions between residents.

Housing models could offer central and visible common spaces where residents can encounter each other informally. Besides this, rather than a ‘no-man’s place’, the hallway should be designed as meeting place. Within the co-housing Die Mauerseglerrei, the hallway is especially designed to stimulate social interactions. By adding windows that connect the hallway with the apartments and
the exterior environment, life can be created within a building. Small interventions such as placing a sofa in the hallway and creating a communication corner also encouraged residents to interact with each other. Since the hallway is a central and visible point, residents can observe other residents and their activities. In this way, residents have the opportunity to join others and interact with others. In addition, an organizational structure can create fixed contact moment between residents and offer opportunities for residents to join activities. In this way, residents can meet each other formally as well. It is therefore recommended that housing models offer an organizational structure that can bring residents together. Within co-housing initiatives, an organizational structure creates a common ground between the residents, which is seen as an important factor to build trust and establish friendships that help to build social support.

6.5. Future research
This research has a qualitative character and shows signs of a causal relation between building design, social interaction and social support. In addition, it shows signs that loneliness is separate from this. However, this relation has to be verified by an extended quantitative research. While the results of this research are based on six case studies with 1-4 participants, an extended quantitative research could include more cases and more residents. In this way, it can be found whether there is a statistical significant relation between the variables. The results could tell more about the impact of building design on social interactions, social support and possible loneliness. Based on this, more concrete measures to combat loneliness could be developed.

Within the research a bridge between the disciplines of psychology and urban planning and design is made. Overarching research concerning these topics has hardly been performed so far. However, this research shows that the two disciplines are intertwined and can complement each other. The research methods used within this study are developed with help of methods used within the discipline of psychology, such as the loneliness scale and the social support scale. This shows a potential for the use of psychological research methods within urban planning and design. Future research could investigate how research methods within the discipline of psychology can be used within the field of urban planning and design. The complementation of research methods could bring valuable insights for the two disciplines. Furthermore, future research could try to make the bridge between the two disciplines stronger, by putting more attention on the relation between psychology and urban planning and design.

6.6. Reflection on the research
The conclusions of the research reflect the data gained from the selected cases and their residents. However, the selection process of the cases and the residents showed limitations that affected the formation of a representative group of housing models and residents. First of all, the case selection was influenced by limited possibilities to get in touch with the residents. Since the research focused on young adults and elderly it was hoped to find a co-housing initiative for elderly and young adults. Although there are some examples of this within Vienna, it was difficult to get in touch with them. Therefore the co-housing initiatives within this research include co-housings that were willing to participate, even though the residents include other groups such as young families with children. In addition, within the research a case study that represents a single-person households in a private dwelling, is missing. According to the literature, this type of living is associated with loneliness and
therefore would have been interesting to include. However, because it was difficult to get in touch with these residents, single-person households in private dwellings were not included in the research.

The case Lappkärrsberget was initially used as a tryout case to test the different research methods on. After the visit to Lappkärrsberget, the research methods were adjusted and new interview questions were developed. However, since the visit to Lappkärrsberget generated interesting findings, it was decided to include the student accommodation within the case studies, even though the interview questions were not complete yet. Therefore some relevant data is missing.

The selection process of the respondents also showed limitations which affected the formation of a representative group of respondents. Within the co-housing projects only the respondents that play an active role within the community participated in the research. Less active respondents were difficult to get hold on and are therefore underrepresented in the research. Also within the nursery home Humanitas, the residents were selected by staff members based on their previous experience with interviews and their representative role within Humanitas. If less representative residents took part in the research, the research could have had different outcomes. Since the research made use of time consuming qualitative methods such as the go-along method and in-depth interviews, it was not possible to include more residents. The formation of a representative group of residents could have been improved by working with questionnaires that include all the residents from the housing model.

Finally, the interview with the architect of Die Mauersglerei generated valuable information about the influence of the building design on stimulating social interactions. Additional interviews with architects of the housing models would have been valuable. While an interview with the architect of Guesthouse Gasgasse was planned, the interview unfortunately got cancelled. Since it was difficult to get hold on the other architects and the research took part in several countries, there was a limitation in the time that could be spend per place. Therefore there was not enough flexibility to arrange meetings with the architects.
Literature


# Appendix 1 – Observation scheme

**Building:**

<table>
<thead>
<tr>
<th>Design aspects</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout (row, cluster etc.).</td>
<td></td>
</tr>
<tr>
<td>Landscaping (Greenery).</td>
<td></td>
</tr>
<tr>
<td>Shared pathways linking activity sites.</td>
<td></td>
</tr>
<tr>
<td>Transition from public to private space (semi-private space outside units/gradual, rapid).</td>
<td></td>
</tr>
<tr>
<td>Types of common areas (kitchen, garden, outdoor spaces, guest rooms, laundry, storage, workshop, gym etc.).</td>
<td></td>
</tr>
<tr>
<td>Quality of common spaces (fresh, modern, clean, well equipped etc.).</td>
<td></td>
</tr>
<tr>
<td>Flexibility of common spaces (multiple purpose of one room).</td>
<td></td>
</tr>
<tr>
<td>Suitability of common spaces (gym too small for sports, acoustics bad for parties etc.).</td>
<td></td>
</tr>
<tr>
<td>Accessibility of common spaces (physical accessible).</td>
<td></td>
</tr>
<tr>
<td>Centrality of indoor common spaces.</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td></td>
</tr>
<tr>
<td>Visibility of common spaces.</td>
<td></td>
</tr>
</tbody>
</table>

## Appendix 2 – Interview questions in English

<table>
<thead>
<tr>
<th>Theme</th>
<th>Question</th>
<th>Topic list</th>
</tr>
</thead>
</table>
| **Personal characteristics** | - Can you tell something about yourself?  
- Since when do you live here?  
- How did you find this place and why did you move here?  
- Was it difficult to find a room here?  
- Where did you live before?  
- How long do you plan to live here/what are your future plans?  
- What is your connection to this place?  
- Do you have any family, relatives or friends close by?  
- Do you experience any differences between living here and previous places you have lived? | study  
profession  
age  
price (high), size, housing situation/difficult or easy to find a room  
staying/moving  
place of birth  
nationality  
Reasons of stay  
Family |
| **Building design**     | - How do you experience living here? What do you like and what not?  
- Is there anything you miss within the building? If you where the designer what would you change?  
- Where do you spend most time in the building?  
- How often do you visit common areas? (per week or day)  
- Are you satisfied with how everything looks?  
- Are you satisfied with the maintenance?  
- Are you satisfied with how the common room is equipped? | comfortable, pleasant, satisfied etc.  
cleanliness |
| **Social contact**     | - What do you do on a regular day? How often do you see your neighbors?  
- Do you know your neighbors well?  
- Do you have any contact with other residents within the building? (neighbors)  
- Are there any events organized by residents or staff members of the building?  
- Do you ever participate in these events? (why not?)  
- How often do you meet with others in the corridor/building?  
- How are you in contact with other residents (fb groups?)  
- Are there any groups you can join? (like sport groups or book clubs?) |
| Loneliness                      | - What do you think of the group dynamics of the people living here?  
|                                | - Do you have things in common with other residents? Explain  
|                                | - Can you find companionship when you want it?  
|                                | - Can you hear or see others from your room?  
|                                | - Do you ever leave your door open?  
|                                | - Do you ever feel isolated from other residents?  
|                                | - To what extent are there people who really understand you?  
| Emotional support              | - Do residents ever share any personal problems with you or ask you for help?  
|                                | - To what extent could you talk to other residents if you are feeling down?  
|                                | - Do you feel like you can just knock on someone’s door when you want to talk about pressures in your life?  
|                                | - Are there people in your home/Corridor that make you feel happy?  
|                                | - To what extent is there one person in your home you feel you can trust?  
| Instrumental support           | - Can you give examples of things you share with other residents besides common areas? Is there any informal way in which you share with your neighbors?  
|                                | - Can you give examples of ways you help other residents or they help you? (like small tasks)  
|                                | - If you are physically unwell, to what extent is there someone in your home that could help you?  
|                                | - Do you have any rules or tasks within the building (like cleaning)? To what extent can someone else take over tasks when you are unable to perform them?  

feeling part of the group feeling valued  
people surround you, but are not with you.  
e.g. sharing food/objects
Appendix 3 – Diary template in English

Day and date............................................................................................................................................................

Name of the accommodation....................................................................................................................................

Your name (not mandatory).......................................................................................................................................
<table>
<thead>
<tr>
<th>Time</th>
<th>Place (e.g. room, corridor, picnic table outside etc.)</th>
<th>Interaction:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- Greeting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Having a small chat.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Talking about personal/private matters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sharing feelings.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Asking for help.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Helping someone with small tasks such as cooking, lifting heavy things or other..... (please specify).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sharing possessions such as lending a chair or borrowing something.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- * Performing an informal planned activity such as preparing meals together.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- * Performing a formal planned activity such as monthly cleaning task.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other..... (please specify).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please specify if you know this person well or only from recognition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explanation of the interaction</th>
<th>How it makes you feel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Happy</td>
</tr>
<tr>
<td></td>
<td>- Neutral</td>
</tr>
<tr>
<td></td>
<td>- Other... (please specify)</td>
</tr>
<tr>
<td>Time</td>
<td>Place (e.g. room, corridor, picknick table outside etc.)</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>10.15</td>
<td>Corridor</td>
</tr>
<tr>
<td>12.00-12.30</td>
<td>Common kitchen</td>
</tr>
<tr>
<td>19.00-20.00</td>
<td>Common kitchen</td>
</tr>
</tbody>
</table>
## Appendix 4 – Building information

<table>
<thead>
<tr>
<th>Location (centrality).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community focus (social, health care, cheap accommodation etc.).</td>
</tr>
<tr>
<td>Number of residents (population size).</td>
</tr>
<tr>
<td>Number of units.</td>
</tr>
<tr>
<td>Household types (singles, couples, families)</td>
</tr>
<tr>
<td>Unit type (number of rooms/kitchen bathroom included).</td>
</tr>
<tr>
<td>Age range.</td>
</tr>
<tr>
<td>The tendency for private dwellings to be smaller than average unit size (with limited kitchen and laundry facilities provided). Leaving more space for common areas.</td>
</tr>
<tr>
<td>Tenure (renal or owner occupied).</td>
</tr>
<tr>
<td>Rental time.</td>
</tr>
<tr>
<td>Affordability.</td>
</tr>
<tr>
<td>Organized activities (meals, maintenance, social events, board meetings etc.).</td>
</tr>
<tr>
<td>Resident participation (design, maintenance of common spaces, organization of activities, management of the community).</td>
</tr>
<tr>
<td>Diversity of common spaces.</td>
</tr>
<tr>
<td>Quality of common spaces.</td>
</tr>
</tbody>
</table>