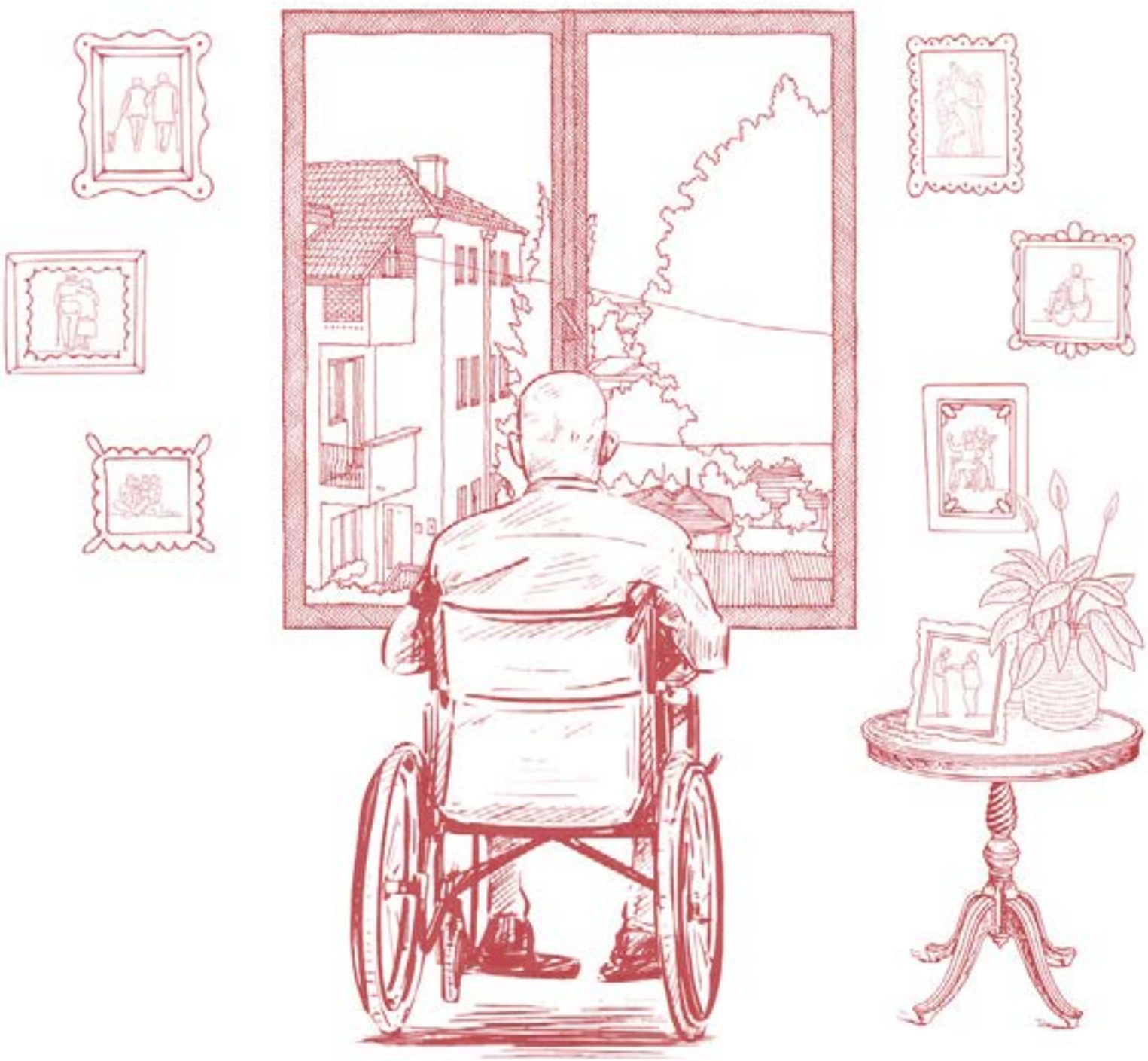
DESIGNING DIGNITY

Designing care facilities to enhance autonomy and quality of life for people with dementia



Dwelling Graduation Studio: Designing for Care in an Inclusive Environment
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RESEARCH PLAN

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Date:
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Course:
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CHAPTER 1. INTRODUCTION

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INTRODUCTION

1.1 PROBLEM STATEMENT

The Netherlands is aging rapidly, with the percentage of people aged 65 and older expected to rise from 19 percent in 2020 to 25 percent by 2050. This increase is largely driven by the growth of the oldest age groups, particularly those over 80 years old. As a result, The Netherlands is experiencing 'double aging', with the number of people over 80 set to double from 800.000 in 2020 to 1.5 million in 2050 (Nidi & CBS, 2020).

As life expectancy continues to rise, the number of people living with dementia is also increasing at an alarming rate. Currently, an estimated 300.000 people are living with dementia in the Netherlands, and this number is predicted to reach 620.000 by 2050 (Alzheimer Nederland, 2021). This development presents major challenges for society, particularly in terms of care and housing. As of October 1, 2023, 22.218 people are on a waiting list for a place in a nursing home, with an additional 11.835 waiting as a precaution. Securing a spot in a preferred nursing home has become increasingly difficult, largely due to the severe staff shortages in the healthcare sector, which cannot meet the current demand (ActiZ, 2023). Research shows that 80 percent of care professionals consider the current housing supply for elderly with dementia inadequate. Additionally, relocation from a familiar environment is seen as distressing and disruptive for individuals with dementia (Buuse & de Boer, 2021).

These issues surrounding the growing elderly population with dementia and the inadequate housing supply demand innovative, future-proof solutions in the care sector. The design of care complexes plays a crucial role in addressing these challenges. A well-designed care environment can not only enhance residents' physical well-being but also significantly improve their mental and emotional health (Golembiewski, 2022).

Many care facilities for people with dementia in the Netherlands often face challenges in creating an environment that prioritizes humane and inclusive care. In fact, many facilities are characterized by rigid routines, sterile environment and limited attention to residents' individual needs. As a result, residents often follow strict schedules, with little regard for personal preferences or habits. These challenges faced by care facilities can result in feelings of isolation, loss of autonomy, disconnection from society, and a reduced quality of life among people with dementia. In addition, the physical environment in these institutions often emphasizes safety and functionality at the expense of comfort, freedom and meaningful interactions (Toebes, VerpleegThuis, 2021). A thoughtful design can significantly enhance the quality of life of people with dementia by creating feelings of autonomy, safety, security and connection.

In summary, several key issues highlight the urgent need for innovative architectural solutions for care homes to improve the quality of life for people with dementia by balancing autonomy, safety, comfort and social interaction:

1. The increasing number of elderly people with dementia;
2. Challenges in creating humane and inclusive environments;
3. Sterile and rigid environments within care facilities;
4. Insufficient focus on well-being and social integration in care complexes.

Addressing these challenges through thoughtful design can significantly enhance the living conditions and overall well-being of people with dementia.

1.1 PROBLEM STATEMENT

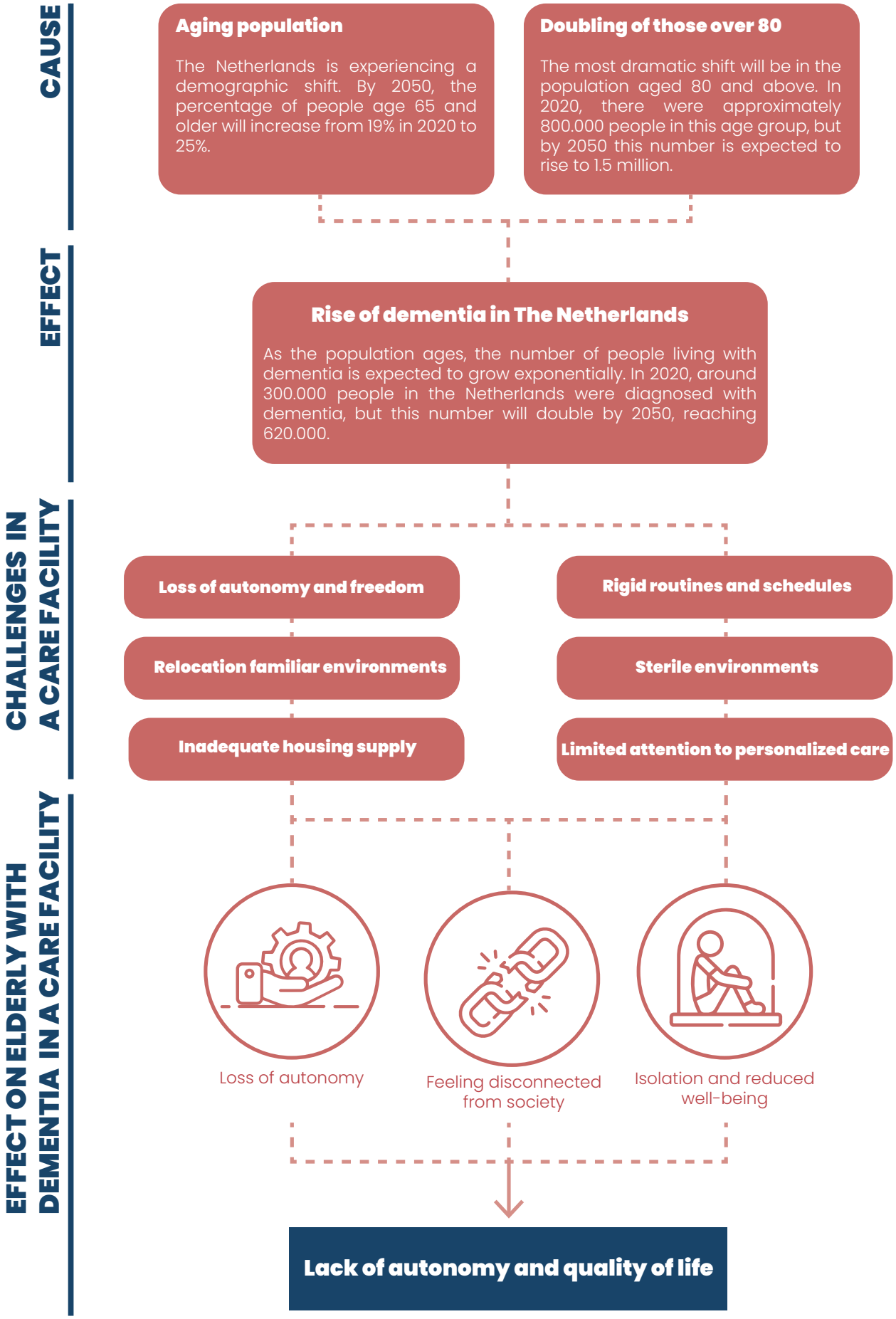


Figure 1. Problem statement diagram. Made by author.

1.2 RELEVANCE

The aging population in the Netherlands is rising, including in Rotterdam-South's Tarwewijk. Rotterdam-South has about 207.000 residents, making up one-third of the city's population (Ministerie van Volkshuisvesting en Ruimtelijke Ordening, 2024). The Charlois district, which includes Tarwewijk, is also experiencing an aging population. Charlois has 70.489 residents, 12,4 percent of whom are over 65, totaling 8.741 seniors (Gemeente Rotterdam, 2024). Given that 1 in 5 people will develop dementia, around 1.750 seniors In Charlois are likely to need care, a number that is expected to increase (Alzheimer Nederland, 2021).

Tarwewijk has 12.322 residents, with 8 percent over 65, representing 986 seniors (Gemeente Rotterdam, 2024). This number is likely to grow in line with national trends. Given that 1 in 5 people will develop dementia this means that around 200 seniors in Tarwewijk are likely to develop, or already have dementia (Alzheimer Nederland, 2021). It is crucial for these elderly residents with dementia to stay in familiar environments. Moving to unfamiliar settings worsens their condition (Toebes, Een wereld te winnen, 2023). However, there are no dementia care facilities in Tarwewijk. Nearby districts Charlois and Zuidplein have two large scale nursing homes, but there are no small-scale options. Tarwewijks senior apartment complex only offers independent living, forcing residents with dementia to leave the neighborhood. This contradicts the principle of continuity of care in one's own living environment.

Additionally, A new pedestrian and bicycle bridge will soon connect Tarwewijk to Katendrecht (Mecanoo, 2021). This connection will enhance the relationship between these two neighborhoods. In Katendrecht there are 7.094 seniors, of which 12,2 percent are aged 65 and older, resulting in approximately 860 seniors (Gemeente Rotterdam, 2024). Around 175 of them may develop dementia in the future. Like Tarwewijk, Katendrecht also lacks dementia care facilities, underscoring the need for integrated solution for both neighborhoods.

Furthermore, Tarwewijks infrastructure is poorly suited to elderly residents, with many homes featuring high entrance steps, which pose a significant challenge for elderly with mobility issues. These infrastructural barriers create a substantial obstacle for elderly residents who wish to continue living in the Tarwewijk.

A dementia friendly care complex in Tarwewijk would not only fill a gap in the housing market but also allows elderly residents to remain in their familiar surroundings. By offering care while keeping seniors integrated with their community, Tarwewijk could evolve into a more inclusive and supportive neighborhood for its elderly residents.

Figure 2. Locations in Rotterdam-South. Made by author.

Figure 3. Entrance steps in Tarwewijk. Made by author.

1.3 THEORETICAL FRAMEWORK

The living environment of people with dementia has a significant impact on their well-being, behavior, and the progression of their illness (Golembiewski, 2022). Dutch nurse and author Teun Toebes, in his books *'VerpleegThuis'* and *'Een wereld te winnen'*, advocates for a radical change in the design of nursing homes, urging that they focus not only on control and safety, but primarily on promoting social interaction autonomy, and personal dignity (Toebes, 2021, p. 183).

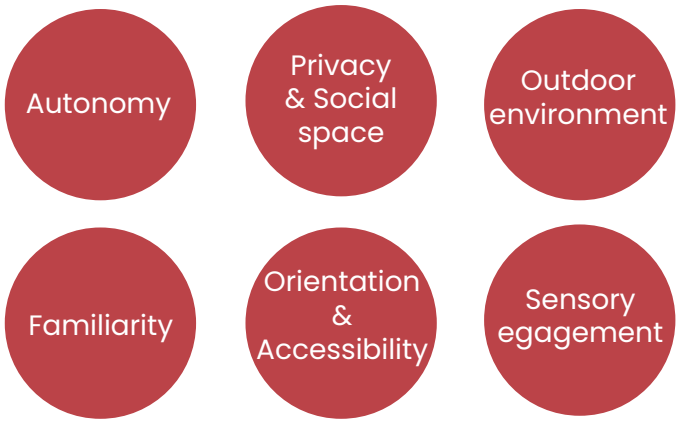
Autonomy is frequently restricted in the environments where elderly with dementia live. Architect Eckhard Feddersen, in his article, *'Learning, Remembering and Feeling Space',* emphasizes that nursing homes should not be controlling but should offer space for personal choice. For people with dementia, the ability to choose where they are and what spaces to use is essential to maintaining a sense of autonomy. Restricting these freedoms can lead to feelings of confinement and frustration, making it crucial for architecture to support freedom of movement and choice (Feddersen, 2014, p. 20).

In *'Autonomy-Supportive Environments for People with Dementia'*, professor Jianji Li highlights the importance of autonomy in dementia care. She notes that regardless of their condition, people always expect privacy and the ability to make decisions about their lives. According to the World Alzheimer Report, 85 percent of people with dementia feel their preferences are ignored (Alzheimer's Disease International, 2019). This aligns with Toebes' observations in '*VerpleegThuis*', where residents often feel they are not taken seriously, underscoring the need to respect autonomy and personal preferences.

Dementia expert Michael Schmieder, in his article *'Dementia – An Illness with Many Different Repercussions'*, explains how architecture can contribute to a more humane environment by focusing on autonomy, quality of life, and social integration. Both indoor and outdoor environments are crucial for creating such spaces. Annette Pollock, in '*Meaningful Outdoor Spaces for People with Dementia',* also emphasizes the importance of outdoor areas that are safe, meaningful, and promote social interaction, beyond just sensory stimulation.

The *'Toolkit dementievriendelijk Woongebouw'* by Alzheimer Nederland outlines essential design principles for dementia-friendly spaces, including a balance between privacy and social areas, sensory engagement, safety, familiarity and clear orientation (Alzheimer Nederland, KAW & Woonzorg Nederland, 2024).

This theoretical framework emphasizes the critical role of a well-designed living environment in dementia care, with a focus on autonomy, social integration, and freedom of choice. Integrating these principles into a care facility, architecture can significantly improve the quality of life for residents. This study will adopt the principles from the *'Toolkit Dementievriendelijk Woongebouw'* to develop key design guidelines aimed at enhancing the autonomy and quality of life of residents in dementia care facilities. These principles include:



1.4 HYPOTHESIS

Given the increasing aging population and the rising number of people with dementia in the Netherlands, there is an urgent need for innovative care facilities that not only meet basic needs for safety and functionality but also address the needs for autonomy and quality of life. This study hypothesizes that care facilities designed with a focus on autonomy will enhance the quality of life for residents. By prioritizing these elements, the design is expected to enhance independence, reduce feelings of isolation, and increase a sense of purpose and well-being, ultimately improving the resident's overall quality of life.

1.5 RESEARCH GOAL

The aim of this research is to explore how care facilities for people with dementia can be designed to create a humane and inclusive environment, with a focus on promoting autonomy and quality of life.

Additionally, the research aims to develop a list of design guidelines that can be applied to design a care facility that addresses these challenges. This list of design principles will be based on the, earlier mentioned, six key principles: autonomy, privacy & social space, outdoor environment, familiarity, orientation & accessibility and sensory engagement, see *'Figure 5. The six principles that will lead this research'.*

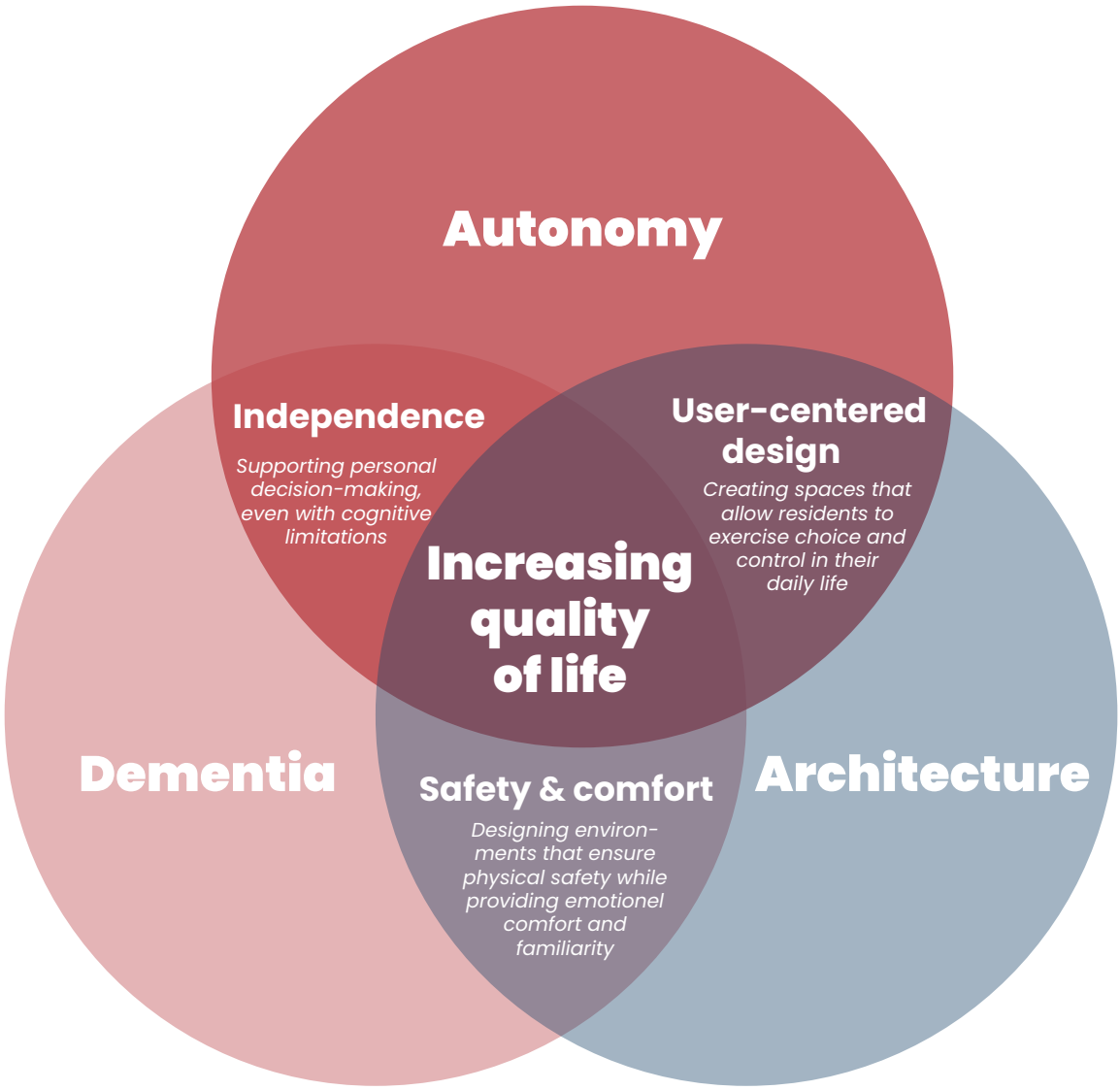


Figure 4. The relationship between Dementia, Autonomy, and Architecture. Made by author.

1.5 RESEARCH GOAL

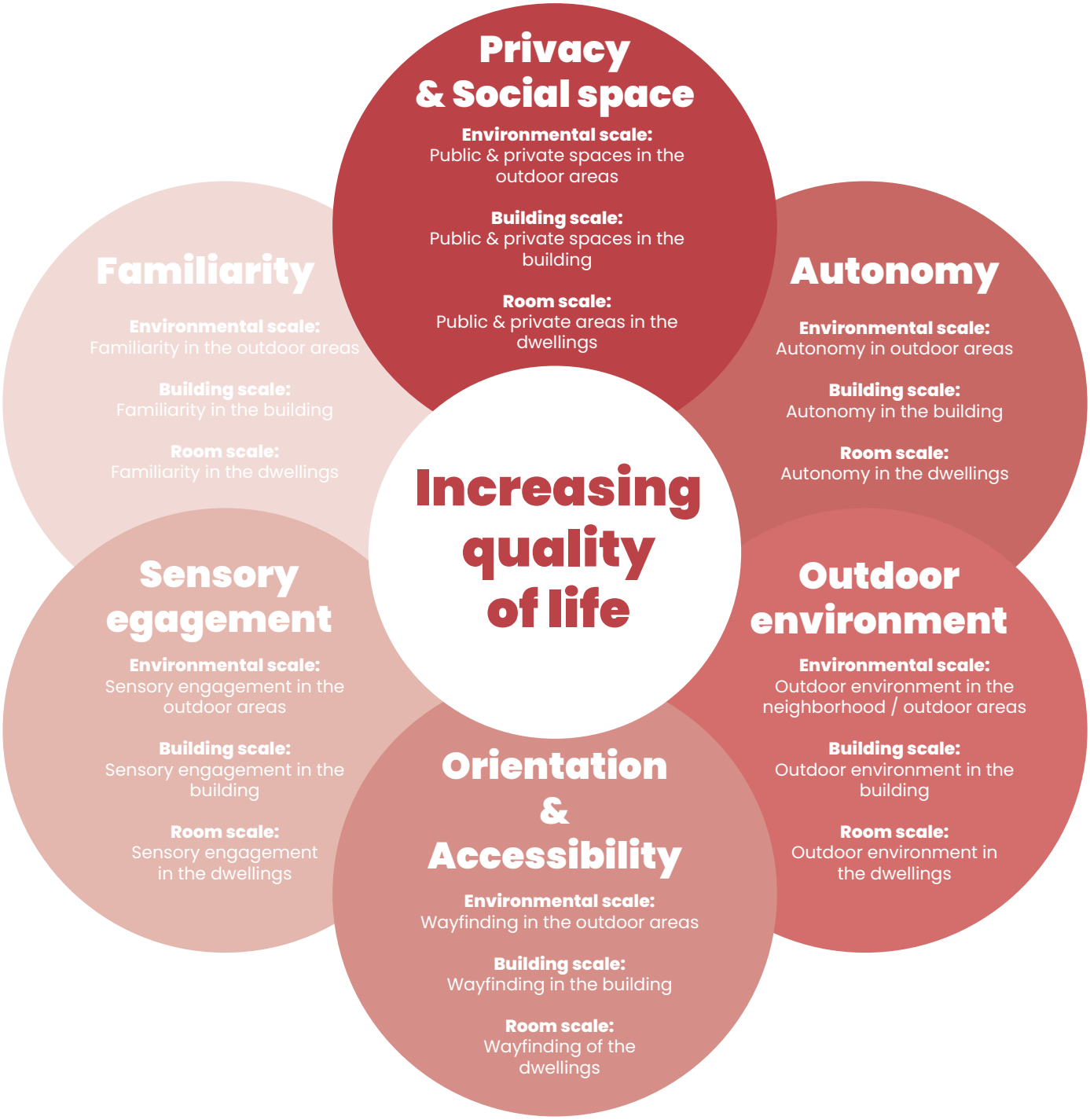


Figure 5. The six principles that will lead this research. Made by author.

1.6 SCOPE

This research has several limitations that may impact the scope and applicability of the findings. Firstly, it focuses exclusively on dementia care in the Netherlands, with insights that may not apply to other countries or cultural context. Secondly, it primarily examines the four most common types of dementia: Alzheimer's disease, vascular dementia, Lewy body dementia, and frontotemporal dementia, leaving rarer forms unaddressed. Additionally, the study targets elderly individuals with dementia that need 24/7 care from Rotterdam Zuid, specifically the neighborhoods of Tarwewijk and Katendrecht, ensuring that residents are familiar with their surroundings. Lastly, time constraints may limit the number of interviews and perspectives gathered.

Recognizing these limitations helps to understand the context of the findings and provides opportunities for future research.

1.7 RESEARCH QUESTIONS

The main research question of this thesis is:

''How can a care facility for people with dementia be designed to foster a humane and inclusive environment, with a focus on promoting autonomy and quality of life, for example in a neighborhood like Tarwewijk?''

To answer this main research question, the following sub-questions will be answered:

1. What are the challanges faced by people with dementia in traditional care facilities, and how do these challanges impact their quality of life?

*2. How can the **surroundings** of a care facility contribute to fostering a humane and inclusive environment, with a focus on promoting autonomy and quality of life?*

*3. How can the **layout of a care facility building** contribute to fostering a humane and inclusive environment, with a focus on promoting autonomy and quality of life?*

*4. How can a **residents room** in a care facility contribute to fostering a humane and inclusive environment, with a focus on promoting autonomy and quality of life?*

5. What specific needs does the Tarwewijk neighborhood have concerning care and housing for people with dementia, and how can these needs guide the design and integration of such facilities?

1.7 RESEARCH QUESTIONS

Sub-questions 2, 3 and 4 focus on three different scales: the environmental, building and room scale. At each scale, the same six principles outlined in *'Figure 5. The six principles that will guide this research'* will be analyzed. This allows key principles such as autonomy, to be examined across different scales. *'Figure 6. The different scales of the research'* illustrates these scales, along with the principles to be analyzed at each level.

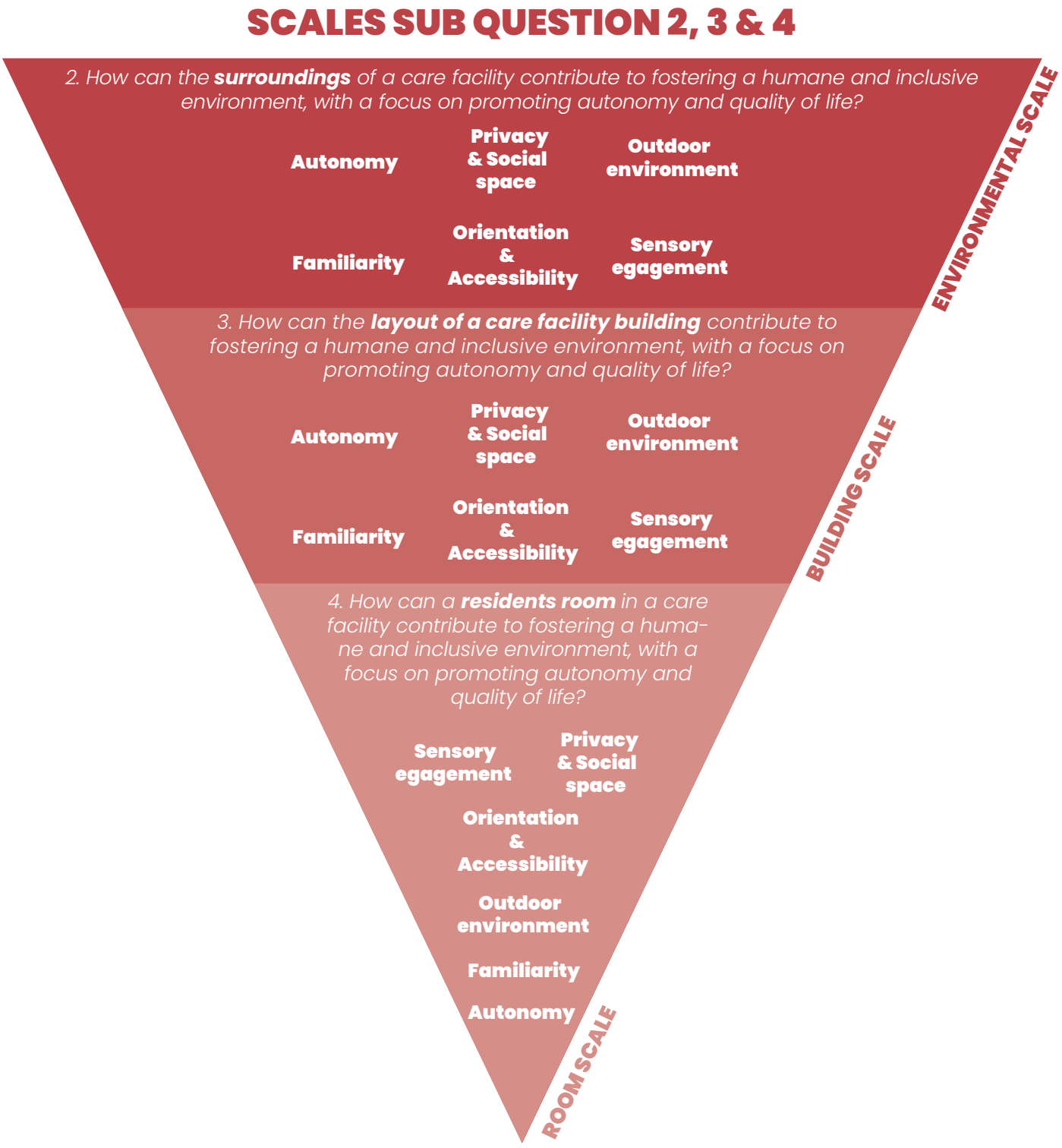


Figure 6. The different scales of the research. Made by author.

1.8 DEFINITIONS

AGING POPULATION (VERGRIJZING)
The aging population in the Netherlands is growing rapidly, with individuals aged 65 and older constituting approximately 20 percent of the population as of 2023 (VZinfo, 2023). By 2050, this is expected to rise to 25 percent, with the over-80s group doubling from 800.000 in 2020 to 1.5 million (Nidi & CBS, 2020). This shift presents challenges, especially as a smaller workforce will need to support the increasing demand for pensions and healthcare. Consequently, the pressure on the healthcare system is expected to escalate, with a rising demand for care related to age-associated conditions.

DEMENTIA
Dementia refers to a large group of brain disorders that impair cognitive functions, such as memory, language, and decision making. It results from the progressive deterioration of nerve cells in the brain, leading to memory loss, confusion, and difficulty performing daily tasks (Alzheimer Nederland, 2021).

The four most common types of dementia are:

1. *Alzheimer's Disease*: The most common form. Affecting around 70 percent of dementia patients, where brain cells progressively deteriorate. Memory loss is often the first noticeable symptom, and the condition develops gradually.
2. *Vascular Dementia*: caused by reduced blood flow to the brain, often after strokes. It can develop suddenly, with physical symptoms like paralysis. Life expectancy for those with vascular dementia is typically around five years.
3. *Frontotemporal Dementia (FTD)*: a less common type that typically affects younger people around the ages 40 to 60. FTD leads to changes in behavior and language difficulties due to damage to the frontal and temporal lopes.
4. *Lewy Body dementia*: This type shares similarities with Alzheimer's disease but includes additional physical symptoms, such as tremors, muscle stiffness, and a unusual manner of walking (Lentis, 2023).

Currently, there are no cures for dementia. The aging population is a key factor in the rising occurrence of dementia.

AUTONOMY
Autonomy refers to an individual's capacity to make their own choices without being restricted or influenced by others. Philosopher John Stuart Mill defines autonomy as acting according to one's own desires (Filosofie Magazine, 2023).

QUALITY OF LIFE
The Worl Health Organization defines quality of life as follows: '*An individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standard, and concerns*' (World Health Organisation, 2012).

INCLUSIVITY
The fact of including all types of people, things or ideas and treating them all fairly and equally (Cambridge dictionary, 2024).

FAMILIARITY
A good knowledge of something, or the fact that you know it so well. The quality or state of being familiar (Cambridge dictionary, 2024).

SENSORY ENGAGEMENT
Sensory engagement is the use of everyday objects to stimulate the senses. This involves sounds, sights, smells, tastes, and touch of textures to create experiences. These senses help evoke pleasant memories, facilitate non-verbal communication, and foster a sense of meaning and connection. This experience can offer great benefits to people with memory changes or dementia (Connectedhorse, 2023).

1.9 RESEARCH METHODS

This research will employ a combination of literature study, fieldwork, interviews, workshops, case studies, and mapping to explore how care facilities for people with dementia can be designed to promote autonomy and quality of life.

LITERATURE STUDY

A literature study will provide valuable insights into dementia, care facilities, and their architectural designs. Specific search terms such as *'design for dementia'* are used to search for relevant studies, articles, and books via Google Scholar. The search will be limited to sources published from 2000 onward to ensure that the information is current and relevant to the rapidly evolving care concepts in the Netherlands. The selected literature will be analyzed based on the six key principles: autonomy, privacy & social space, outdoor environment, familiarity, orientation & accessibility, and sensory engagement. Additionally, books will be sought in online bookstores using the same search terms. The search terms used can be found in *'Figure 7. Search terms'.*

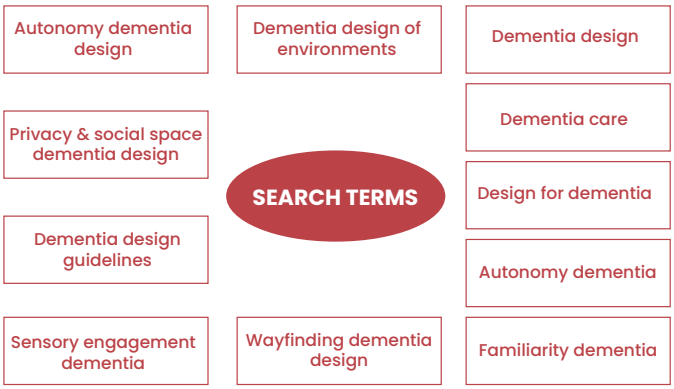


Figure 7. Search terms. Made by author.

FIELD WORK

Fieldwork will be conducted over eight days at three dementia care facilities. These facilities are: Randerode in Apeldoorn, Boswijk in Vught and Reigershoeve in Heemskerk. Observations and interviews with residents, nurses, and family member will provide insight into the care environment.

Observations will be structured across several levels:

General

Focus on the facility's layout, resident's daily movement, autonomy in daily choices, and participation in offered activities.

Environmental level

Examining outdoor space accessibility, residents movement and layout.

Building level

Analyzing common areas, circulation spaces and usage frequency of spaces.

Room level

Observing residents movement within personal rooms and their control over the space.

These observations will be documented through drawings and sketches, offering a comprehensive view of the care environment and its impact on daily life.

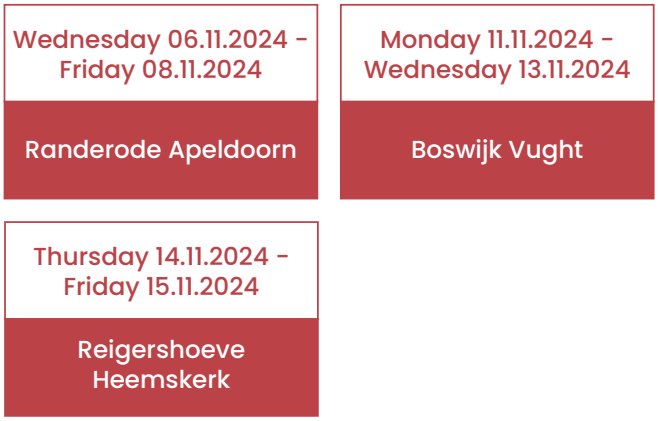


Figure 8. Planning fieldwork. Made by author.

INTERVIEWS

Interviews will be conducted with residents, family members and staff during the fieldwork to gain deeper insights into their experiences. For the questions, see *'Appendix A. Interview questions fieldwork'.*

Interviews are also conducted with the residents of Tarwewijk to understand how they would like to age in their own neighborhood and how they would integrate a care home for people with dementia into the district. For the questions, see *'Appendix B. Interview questions Tarwewijk'.*

Finally, interviews will be conducted with architectural firms specializing in designing for elderly with dementia. For the questions, see *'Appendix C. Interview questions architects'*

1.9 RESEARCH METHODS

WORKSHOPS

During the fieldwork, workshops will be organized with residents. In these workshops, participants will view various images and create a mood board of their 'ideal' living environment based on their preferences for design. *'Appendix D. Workshop images'* shows the selection of images available for residents during the workshop.

CASE STUDIES

The three visited care facilities will serve as case studies for this research. By examining the six key principles in each facility, it will be possible to compare and contrast various aspects of their environments and approaches to care. This comparison will highlight both the differences and similarities between the facilities, showing how each one addresses the needs of residents with dementia.

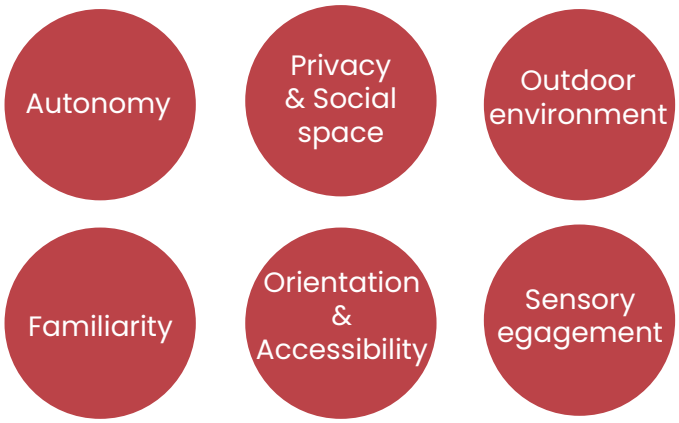
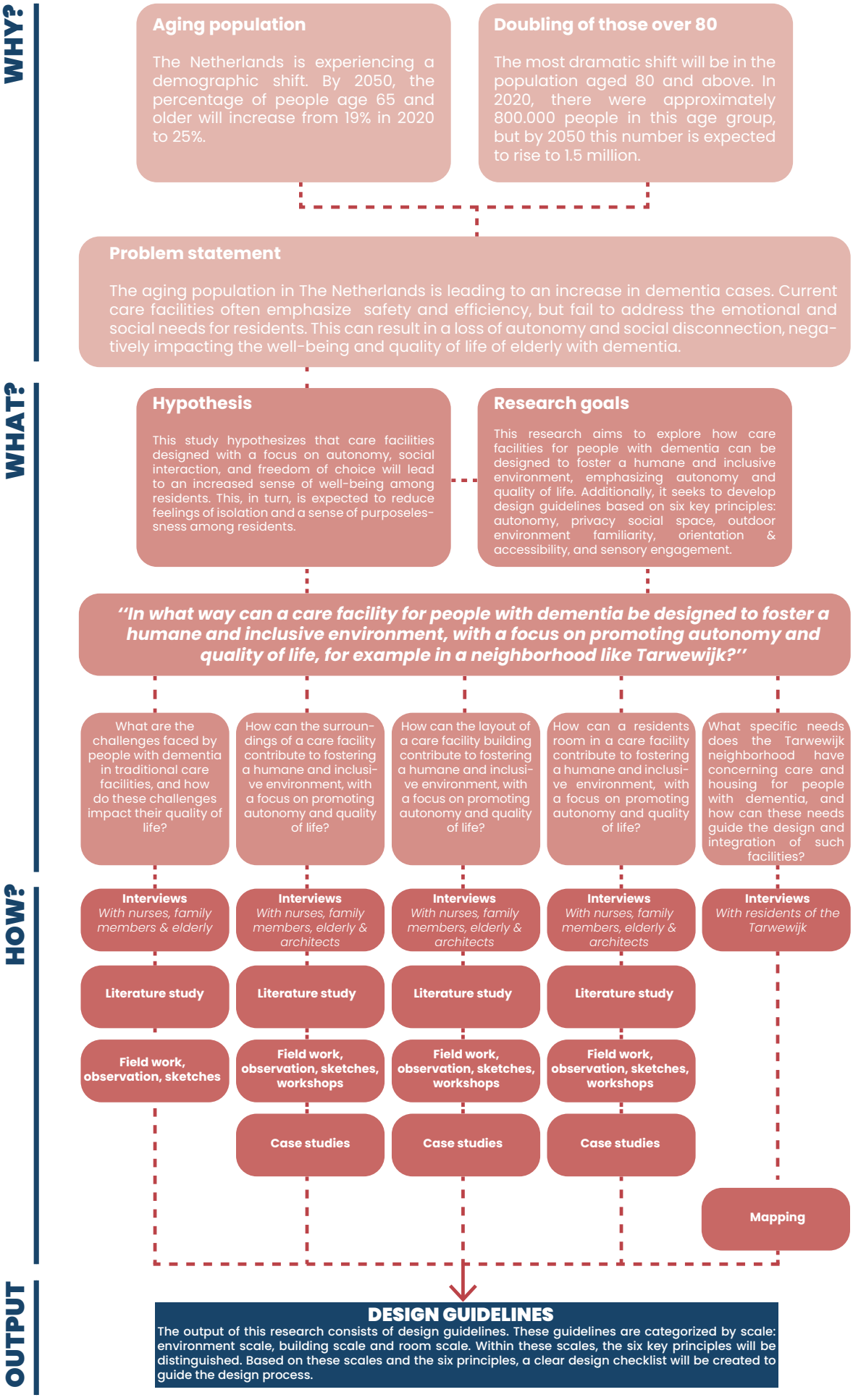


Figure 9. The six key principles. Made by author.

MAPPING

As part of this research, mapping will be used to identify and visualize key points related to dementia care within the Tarwewijk. For this method, the group analysis conducted during the first 10 weeks for the area will be utilized. Additionally, certain topics will need to be mapped independently, such as wayfinding and resting spots in the neighborhood.

1.10 RESEARCH PLAN DIAGRAM



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1.12 APPENDIX

APPENDIX A. Interview questions fieldwork

VRAGEN VOOR OUDEREN MET DEMENTIE

Algemeen
• Hoe vindt u het om hier te wonen?
• Voelt u zich hier thuis?
• Wat maakt u gelukkig?

Omgevingsniveau
• Bent u graag buiten? En wat doet u als u buiten bent? *(outdoor environment)*
• Heeft u een favoriete plek in de tuin/buitenruimte? *(privacy & social spaces)*
• Welke aspecten mist u momenteel in de omgeving? (Bijv. dieren, groentetuinen, een vijver of een jeu de boules baan) *(outdoor environment)*

Gebouwniveau
• Wat is uw favoriete plek in het gebouw? *(privacy & social spaces)*
• Wat is uw minst favoriete plek in het gebouw? *(privacy & social spaces)*
• Welke activiteiten vindt u het leukste om aan te deelnemen? *(privacy & social spaces)*
• Maakt u vaak gebruik van gemeenschappelijke ruimtes? *(privacy & social spaces)*
• Zou u de woonkamer zelf ook op deze manier inrichten? *(familiarity)*
• Wat vindt u van de kleuren in het gebouw? (sensory engagement)
• Vind u het makkelijk om de weg te vinden? *(orientation & accessibility)*

Kamerniveau
• Voelt deze kamer als thuis? *(familiarity)*
• Is er iets wat u zou willen toevoegen/veranderen aan uw kamer? (*familiarity)*
• Wilt u graag vanuit uw kamer naar buiten kunnen? *(outdoor environment)*
• Heeft u graag een eigen badkamer? *(privacy & social spaces)*

VRAGEN VOOR FAMILIELEDEN

Algemeen
• Waarom heeft u ervoor gekozen om uw familielid naar deze zorginstelling te laten verhuizen?
• Is er overleg geweest met uw familielid voor de keuze van dit verzorgingshuis?
• Wat vindt u van de zorg voor uw familielid?
• Zijn er voorzieningen om familie goed op te vangen tijdens bezoek?
• Vind u dat uw familielid voldoende vrijheid krijgt? *(autonomy)*
• Zijn er dingen die u heeft opgemerkt bij andere zorginstellingen die u graag hier zou willen zien?
• Hoe zou u graag oud willen worden?

Omgevingsniveau
• Hoe ervaart u de locatie van het verzorgingstehuis? *(outdoor environment)*
•Voelt uw familielid zich thuis in deze omgeving en wat maakt dat deze persoon zich thuis voelt? *(familiarity)*
• Hoe belangrijk vindt u het dat er buitenruimtes of binnentuinen aanwezig zijn voor uw familielid? Welke specifieke elementen zijn daarbij van belang? *(outdoor environment)*
• Vindt u dat er voldoende mogelijkheden zijn in de omgeving om wat te ondernemen met uw familielid? *(outdoor environment)*

APPENDIX A. Interview questions fieldwork

Gebouwniveau
• Wat vindt u van de inrichting en lay-out van het gebouw? *(privacy & social spaces)*
• Wat vindt u van de gemeenschappelijke ruimtes? *(privacy & social spaces)*
• Is het makkelijk voor uw familielid om de weg te vinden binnen het gebouw? *(orientation & accessibility)*

Kamerniveau
• Is er een keuze in welke kamer je krijgt? *(autonomy)*
• In hoeverre heb je inspraak over de inrichting van de kamer? *(autonomy)*
• Wat vindt u van de kamer en voelt als thuis? *(familiarity)*

Toekomstperspectief
• Wat zou u veranderen als u hier zelf zou wonen?

VRAGEN VOOR ZORGPERSONEEL

Algemeen
• Hoe zou u de sfeer beschrijven in deze zorginstelling?
• Hoe worden mensen ingedeeld in de verschillende woninggroepen? (Bijv. aan de hand van achtergrond of zwaarte van dementie)
• Is het mogelijk dat de partner van de bewoner meeverhuist?
• Vind u dat de bewoners van deze zorginstelling voldoende vrijheid van keuze hebben in hun dagelijks leven? *(autonomy)*

Omgevingsniveau
• Hoe intensief worden de buitenruimtes gebruikt? *(outdoor environment)*
• Zijn er elementen geïntegreerd die bewoners aanmoedigen om naar buiten te gaan en draagt dit bij aan hun welzijn? (Bijv. dieren, moestuin, Jeu de Boules, bloementuin) *(outdoor environment)*

Gebouwniveau
• Wat vindt u van de lay-out van het gebouw? Draagt dit bij aan de oriëntatie of is het juist verwarrend? *(orientation & accessibility)*
• Kunnen de bewoners zelf kiezen in welke ruimte ze willen zijn gedurende de dag? *(autonomy)*
• Zijn er elementen van de fysieke ruimte die de werklast verminderen of juist verhogen? *(privacy & social spaces)*
• Zijn er zintuigelijke prikkels verwerkt in dit verzorgingstehuis? *(sensory engagement)*
• Heeft u de voorkeur voor gedeeld sanitair of privé sanitair, en waarom? *(privacy & social spaces)*
• Tegen welke praktische problemen lopen jullie aan?

Kamerniveau
• Blijven bewoners die in een kamer wonen die meer als thuis aanvoelt, ook langer op hun kamer? *(familiarity)*
• Welke praktische aspecten moeten in overweging worden genomen?
• Welke onderdelen zorgen ervoor dat de kamer herkenbaar is voor de bewoners? *(orientation & accessibility)*

Toekomstperspectief
• Wat zou u veranderen als u hier zelf zou wonen?

APPENDIX B. Interview questions Tarwewijk

HOOFDVRAAG

Wat zou volgens u een ideale woonomgeving zijn als u op oudere leeftijd bent? Zou deze ideale omgeving veranderen indien u dementie zou krijgen?

OMGEVINGSNIVEAU

• Hoe ziet u het voor u om in deze wijk oud te worden?
• Hoe belangrijk vindt u het om in uw vertrouwde buurt te blijven wonen naarmate u ouder wordt, en waarom?
• Vindt u dat de huidige wijk geschikt is voor ouderen met dementie? Waarom wel of niet?
• Vindt u dat de huidige voorzieningen, zoals zorg en supermarkten, op een geschikte afstand liggen voor ouderen (met dementie)?
• Hoe belangrijk vindt u sociale ontmoetingsplekken, zoals buurthuizen of gemeenschappelijke tuinen, in de wijk? Beschouwt u dit als een essentiële voorziening om in contact te blijven met andere bewoners?
• Hoe belangrijk is het voor u om toegang te hebben tot natuur of openbare buitenruimtes in de nabijheid van uw woning?

GEBOUWNIVEAU

• Hoe zou een ideaal zorggebouw voor mensen met dementie er volgens u uitzien? Welke functies zijn daarbij belangrijk?
• Welke voorzieningen zouden een zorgcomplex aantrekkelijker maken voor zowel bewoners als bezoekers in de wijk?

KAMERNIVEAU

• Wat vindt u belangrijk om in uw kamer te hebben
• Stel u moet verhuizen naar 24-uurszorggebouw en u mag 5 spullen meenemen, wat neemt u mee?
• Vindt u het belangrijk om een eigen badkamer te hebben, of vindt u een gedeelde voorziening acceptabel?
• Wat voor uitzicht zou wenselijk zijn voor u? (Groen of stedelijke context, water)
• Zou u graag een directe verbinding met buiten willen, zoals een balkon of een kleine tuin?

APPENDIX C. Interview questions Architects

ALGEMEEN

• Waar staat jullie bureau voor? Wat voor projecten doen jullie?
• Hoe zijn jullie begonnen met het ontwerpen voor de doelgroep: mensen met dementie?
• Wat zijn de belangrijkste uitdagingen die jullie tegenkomen bij het ontwerpen voor deze doelgroep?
• Hoe betrekken jullie bewoners en zorgverleners in het ontwerpproces?

OMGEVINGSNIVEAU

• Hoe zorgt u ervoor dat de buitenruimtes veilig en toegankelijk zijn voor ouderen met dementie? *(outdoor environment)*
• Hoe zorgen jullie ervoor dat de buitenruimte eenvoudige te navigeren is voor ouderen met dementie? *(orientation & accessibility)*
• Integreren jullie ook zintuigelijke elementen (ruiken, voelen, horen, proeven) in de buitenruimte om een stimulerende omgeving te creëren? *(sensory engagement)*
• Hoe gebruikt u vertrouwde materialen en elementen in de buitenomgeving om een gevoel van herkenning voor de bewoners te creëren? *(familiarity)*
• Hoe creeërt u buitenruimtes die zowel sociale interactie als privacy voor bewoners mogelijk maken? *(privacy & social spaces)*
• Speelt autonomie een rol in het ontwerpen van de buitenruimte? bijvoorbeeld dat de bewoners zelf kunnen beslissen waar ze naartoe willen gaan? *(autonomy)*

GEBOUWNIVEAU

• Op welke manieren ontwerpen jullie voor de orientatie van bewoners binnen het gebouw? (bijvoorbeeld kleuren of iconen) *(orientaton & accessibility)*
• Hoe houden jullie rekening met de looproutes binnen het gebouw om verwarring te minimaliseren? *(orientaton & accessibility)*
• Wat is volgens jullie de duidelijkste plattegrond vorm voor ouderen met dementie om te begrijpen? *(orientaton & accessibility)*
• Wat is belangrijk bij het ontwerpen van de sociale ruimtes in een verzorgingstehuis voor ouderen met dementie? en wat is belangrijk bij het ontwerpen van plekjes die iets meer privé zijn? *(privacy & social spaces)*
• Hoe ontwerpen jullie de connectie tussen het gebouw en de buitenruimtes? *(outdoor environment)*
• Integreren jullie ook zintuigelijke elementen (ruiken, voelen, horen, proeven) in het gebouw om een stimulerende omgeving te creëren? *(sensory engagement)*
• Houden jullie ook rekening met dat het gebouw elementen bevat die herkenning en vertrouwdheid oproepen bij de bewoners? *(familiarity)*
• Welke ontwerpkenmerken moedigen bewoners aan om zelfstandig beslissingen te nemen binnen het gebouw? *(autonomy)*

KAMERNIVEAU

• Hoe ontwerpen jullie de indeling van de kamer zodat deze logisch is voor de bewoner? *(orientation & accessibility)*
• Hoe zorgt u voor voldoende privacy in de kamer? *(privacy & social spaces)*
• Op welke manieren zorgen jullie ervoor dat bewoners zich verbonden blijven voelen met de buitenruimte vanuit hun kamer? *(outdoor environment)*
• Hoe orienteren jullie de kamers in het gebouw? is dit bijvoorbeeld aan de hand van de zon? *(sensory engagement)*
• Hoe bevordert u de mogelijkheid voor bewoners om de indeling van hun kamer aan te passn aan hun voorkeuren? *(autonomy)*

APPENDIX D. Workshop images

Architectuur

Welk gebouw vind u het mooiste en waarom?

APPENDIX D. Workshop images

Binnentuin

Welke binnentuin vind u het mooiste en waarom?
Welke activiteiten lijken u leuk om toegang tot te hebben?

APPENDIX D. Workshop images

Vorm gangen

Welke gang spreekt u het meeste aan en waarom?

APPENDIX D. Workshop images

Voordeur

Welke voordeur spreekt u het meeste aan en waarom?

APPENDIX D. Workshop images

Keuken

Welke woonkamer spreekt u het meeste aan en waarom?

APPENDIX D. Workshop images

Zitkamer

Welke zitkamer spreekt u het meeste aan en waarom?

APPENDIX D. Workshop images

Slaapkamer

Welke slaapkamer spreekt u het meeste aan en waarom?

APPENDIX D. Workshop images

Woonkamer

Welke kleuren spreken u het meeste aan?
Welke kleuren zou u graag u uw woning willen hebben? En welke niet?