## A G I N G I N C O M M U N I T Y

The world's population is experiencing a demographic shift, with a steadily rising number of people being diagnosed with dementia each year. As a result, dementia will play an increasingly important role in society and social policymaking.

The project "Aging in Community" addresses the needs and desires of people with dementia architecturally, considering their symptoms. Due to the increase in diagnoses of dementia and the decreasing availability of care, the objective is to create a new care system and facilities that can cope with this development.

## The area comprises mixed-use complexes, allowing residents to age within their community.

The design was developed simultaneously with a research paper, "Architektur als Mittel zur Förderung sozialer Interaktion bei Demenzerkrankten" in the Wahlseminar Gebäudelehre - Healthcare Architecture Research supervised by Assistant Prof. Maja Kevdzija, which investigated the importance of social interactions in the lives of people with dementia and how architectural solutions can respond to the social behavior of residents.



excerpt of the jury statement for the first prize of the Student Healthcare Environment Award 2023.



\*\*Student competition by Anna Kubiak and Helen Herget - developed simultaneously with a research paper, "Architektur als Mittel zur Förderung sozialer Interaktion bei Demenzerkrankten" in the Wahlseminar Gebäudelehre - Healthcare Architecture Research supervised by Assistant Prof. Maja Kevdzija.\*\*

Project handed in July 2023.

## **Research Question:**

What role do social interactions play in the life of a person with dementia, and how can architectural measures be taken in the context of a nursing home to respond to the social behavior of residents?

The research included literature reviews on dementia, covering symptoms, disease progression, and spatial needs in residential care facilities. However, the five interviews and three visits to dementia institutes were the most influential and provided valuable insights that significantly impacted the design decisions. First-hand experience of how people with dementia perceive their living space and the challenges that residents and their care partners face in their everyday lives served as the primary inspiration for the design. The main results showed that social connections

help to prevent dementia and improve the quality of life of individuals who already have symptoms. Effective communication can significantly boost the self-esteem and social confidence of dementia patients. Moreover, interpersonal relationships may alleviate depressive symptoms. It is worth noting that both close and long-term friendships/family relationships, as well as spontaneous and brief social interactions can improve overall health of the patient. As a patient's symptoms worsen, it can become difficult for family members to maintain the same level of visitation.

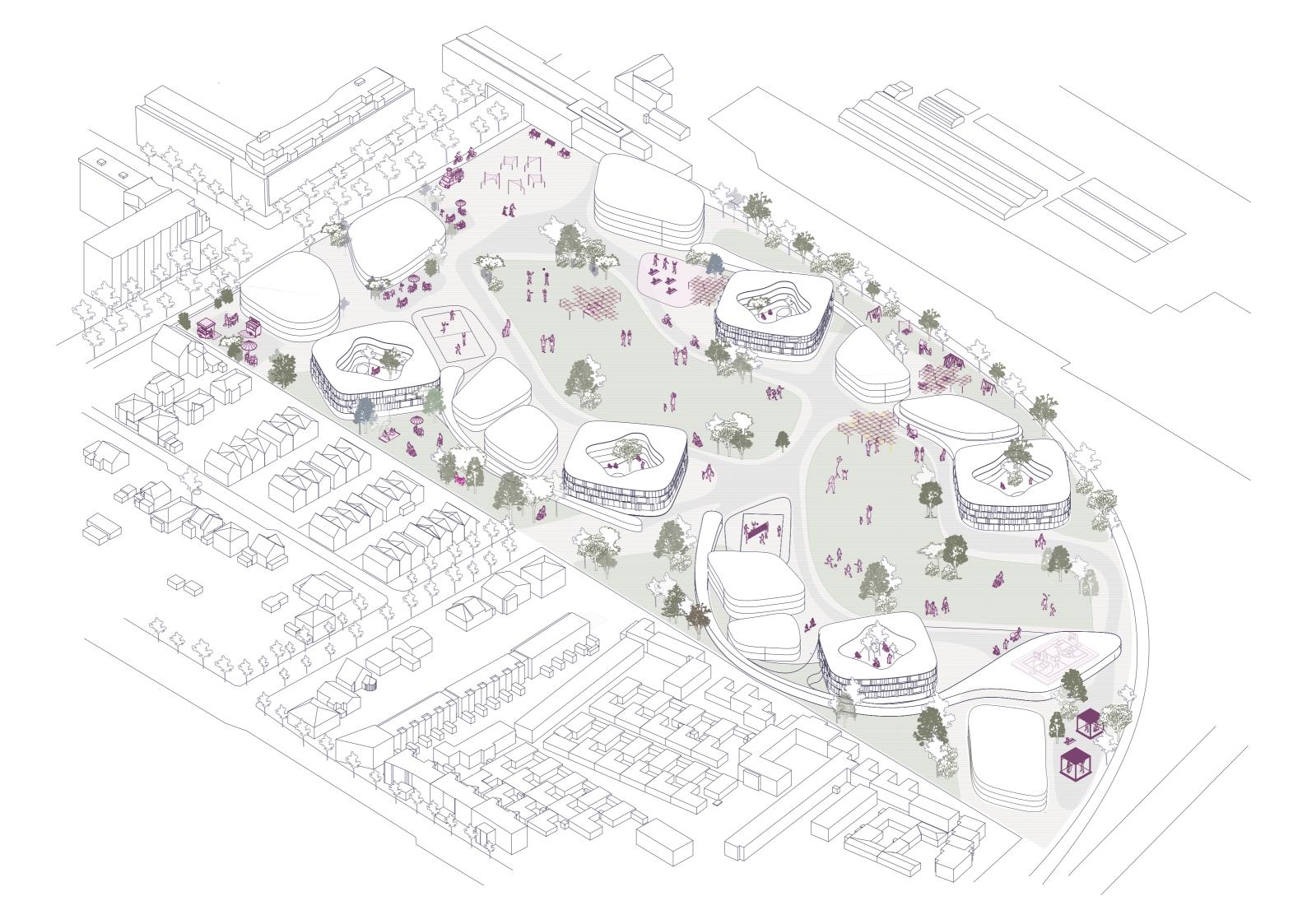
To encourage social interactions, it is crucial to provide spaces where individuals can connect with one another.

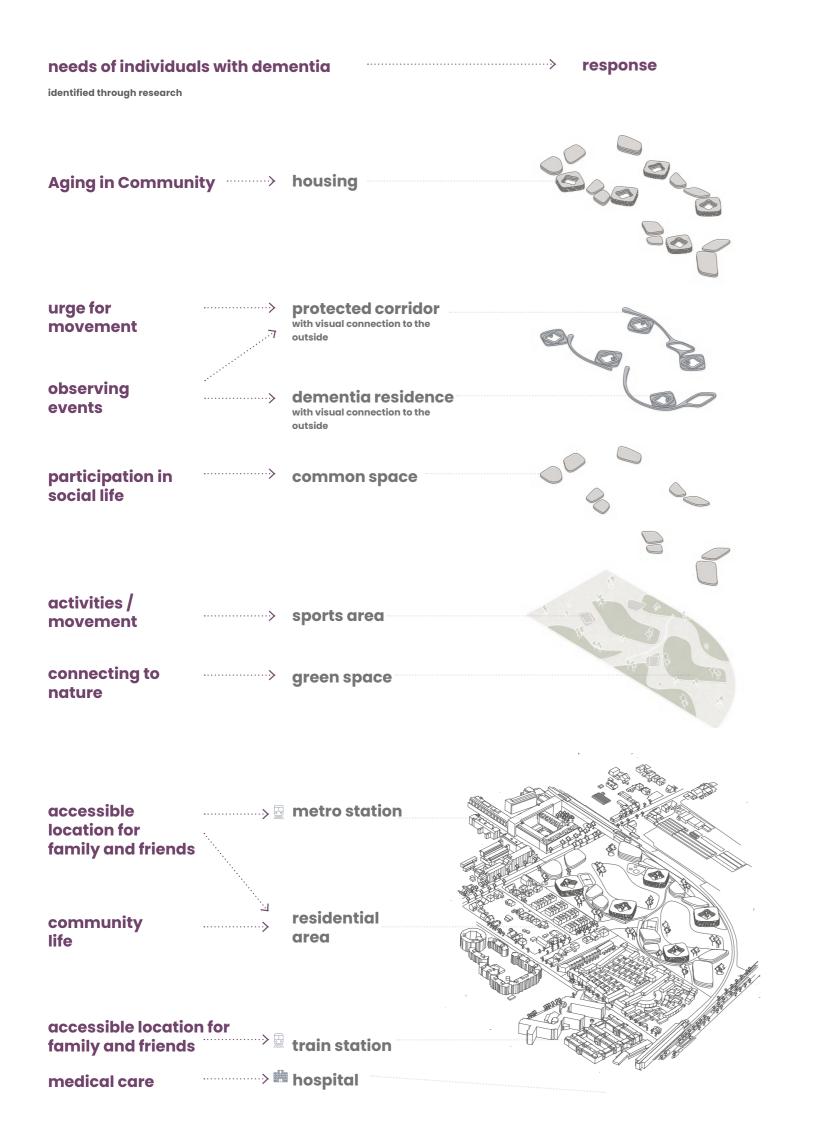
"There was a main entrance, rooms, and corridors with glass fronts. These glass fronts were a popular spot for residents, as they faced the main entrance, where a lot of activity occurred. Visitors, doctors, and other people came and went throughout the day." Quote from caregiver - (The interviewee illustrated the thesis using a floor plan to show areas where residents often stay.)

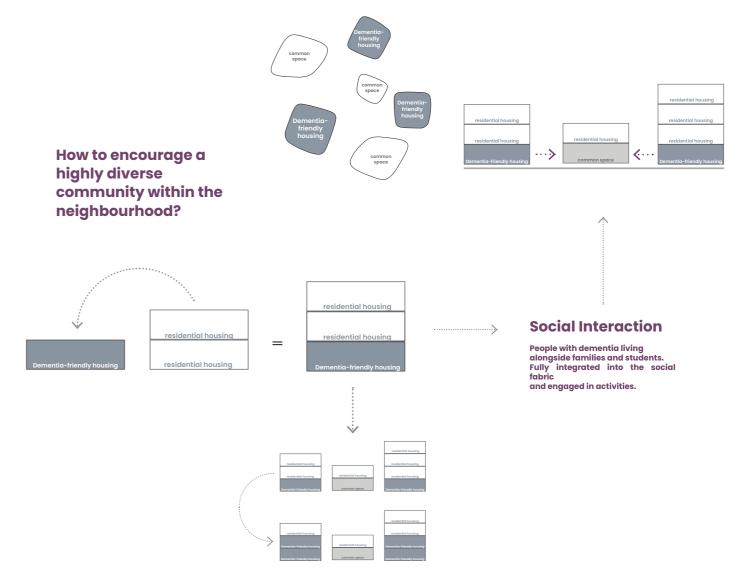
"Of course, having social contacts can have a calming and stabilizing effect. Behavioral abnormalities in people with dementia are often caused by anxiety, and having close social contacts can be very important in mitigating these effects." Quote from caregiver

"While serving as a director at a nursing home, I noticed a bird's nest that had formed outside a window. It was visible from a portion of the hallway, and a group of five or six elderly individuals would often gather there to watch the nest and its inhabitants." Quote from caregiver

"Relatives may not always know how to spend time with their loved ones during visits, leading to frustrating experiences. As a result, visits become less frequent over time. To encourage more visits, it is important to have well-trained staff who can facilitate positive interactions. Additionally, architectural improvements may also help create a more inviting environment." Quote from caregiver



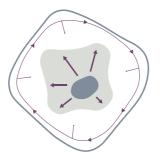


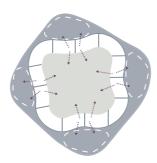


In addition, the chosen site enables the **residents to be close to healthcare facilities** while being **well connected to their loved ones** who may live in the area
or can easily reach it by public transport.

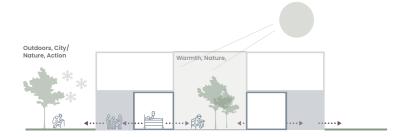
On the ground floor, the dementia units and **common** areas create a well-connected environment, with housing units on the upper floors. Being further expandable to the upper floors, the structure of the facilities is adaptable to future development. People with mild symptoms can benefit from the dementia infrastructure by being close to and receiving support from the care environment, while those with advanced symptoms can live in the dementia facility.



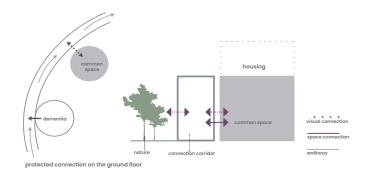




The diagrams illustrate the relationship between the central location of the care unit and the patient rooms. Shorter corridors provide caregivers with quick access to all patient rooms. In addition, a second walkway that follows the facade on the neighborhood side is provided for communal interaction among residents



To enhance **the sensory experience** for patients, the building was designed to provide access to the public outdoor space as well as an indoor conservatory. This allows residents to comfortably enjoy the sun even during the winter months.

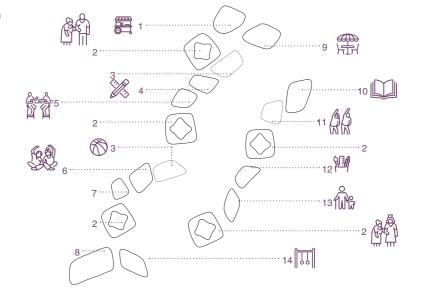


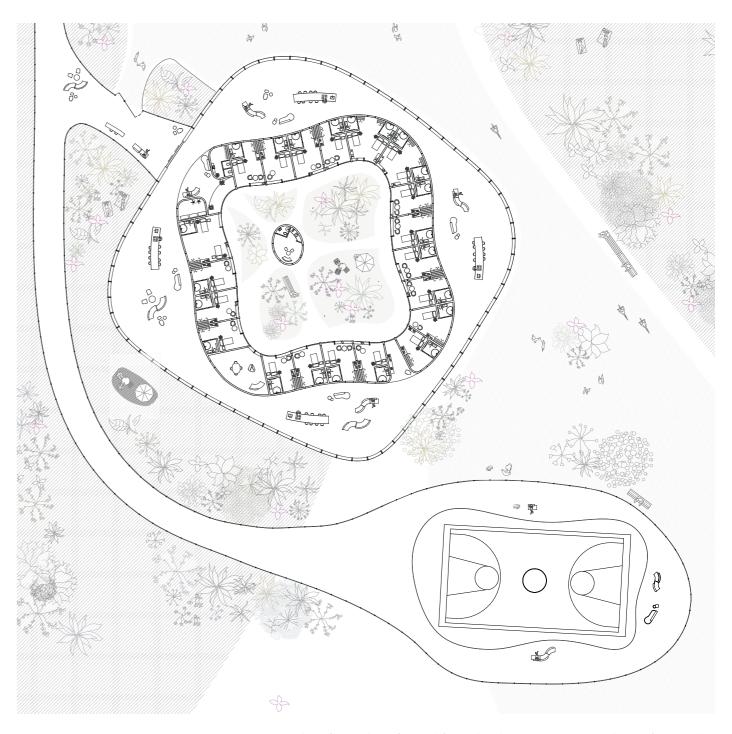
The corridor was designed to **encourage patient** movement and provide a sense of self-determination.

It also provides a view of the outdoors for residents to experience the social activities of the neighborhood in a protected environment.

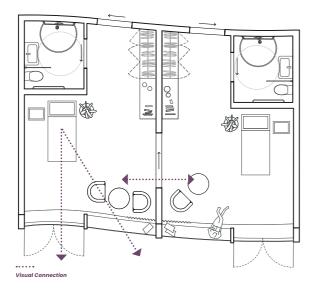
- 1. Market
- 2.Dementia-friendly housing
- 3. Sports area
- 4. Workshop
- 5. Co-working cafe
- 6. Fitness/Rehabilitation 7. Multifunctional Space
- 8. School
- 9. Cafe

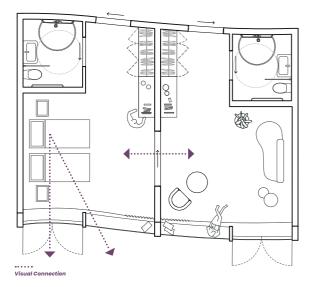
- 10. Library, Cultural Institution
- 11. Outdoor-fitness
  12. Therapy Workshop
- 13. Kindergarden
- 14. Sports Hall

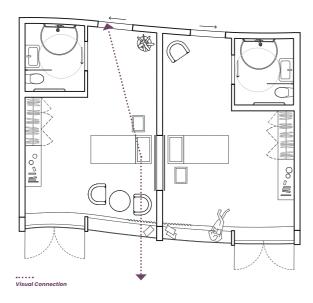




Exemplary floor plan of a unit for patients in an advanced stage of dementia







## The resident's room is designed to be flexible, allowing either privacy or social interaction as desired.

Adjacent rooms can be connected through a sliding door. Therefore, the residents can adapt the room to their needs as a double room or two connected single rooms. Additionally, they have the option to choose the orientation of their bed, allowing them to connect either to the surrounding community or nature. The spacious roofed garden provides patients with the chance to enjoy a green environment all year.

"We had two patients who had a very strong sense of physical closeness. So, we put their beds together and they held hands while sleeping."

A quote shared by one of the caregivers had a significant impact on our decision-making process.

"Whether it's winter or summer, every walk down the corridor is a pleasure and there's always something new to discover."

- Quote from future resident

