

Forget Me Not: Defending the Right to Place

For people experiencing dementia and ageing in the
Newtonbrook West neighbourhood in Toronto

by

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Abstract

How can we confront the ableist and ageist-built environment through the lens of dementia? Dementia is an umbrella term for the cognitive condition that affects memory, behavioral reactions, and daily tasks that can lead a person to feel isolated from the rest of the world. It is a condition that progressively worsens over time with no cure. For those with dementia and aging, it is the norm to send them to institutions, removing them from their familiar environment. What if the neighborhood could adapt so those with dementia did not have to be displaced? This thesis is grounded in my personal experience of a loved one, intergenerational memory, and examining the built world as barriers. Through speculative neighborhood interventions, a more inclusive neighborhood can be explored that embraces interdependent living while also protecting people's rights to their community and home.

Acknowledgements

This thesis is dedicated to my family and anyone who has experienced dementia in some capacity in their life.

I would like to express my sincere gratitude to all my mentors, peers, family, and friends throughout my journey here at Carleton. Your support and encouragement have been instrumental in the completion of this thesis.

To my grandparents – NginNgin & Yeye, PauPau & GungGung – thank you. You all have supported and taken care of me in all stages of my life. I am passionate about my thesis because of you.

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*“Personal
experience
and
storytelling
drives the
research”*

Methodology

My main research method is ethnography. It is a qualitative research method studying the everyday life of people in space and place.¹ Within this method I looked at my family's personal lived experiences through storytelling. This thesis document will have personal stories and experiences woven alongside the literature review to have the lived experience be supported by research. Stories provides contextual awareness, unpacking narratives of unheard voices.² There is power and vulnerability in sharing experiences and talking about those lived experiences. It is in a way proof that it did happen because it happened to you. Storytelling is not only for me as a researcher but to understand that those who have dementia still have stories to tell, and we should honor that. Additionally, I will explore speculative and fictional drawings to imagine alternative urban futures. Through the illustration of alternative futures, marginalized individuals are placed at the center of the design process.³ Fictional drawings help to make new ideas seem plausible in an already established world. Stories is a method of conveying information that can bring the reader along the journey, to experience it as if it was happening to us.⁴ The proposed design intervention drawings will be represented in fictional drawings, explored through the act of storytelling.

1 Setha M. Low, *Spatializing Culture the Ethnography of Space and Place*, (New York, NY: Routledge, 2016), 1.

2 bell hooks, *Conversation, Telling the Story, Sharing the Story*, in *Teaching Critical Thinking: Practical Wisdom*, (New York: Routledge, 2010)

3 Aimi Hamraie, "Alterlivability." *Environmental humanities* 12. No.2 (2020).

4 Chinua Achebe, *Hopes and Impediments: Selected Essays, 1965-1987*, (Heinemann, 1988), 144.

*“Is this it?
Is long-term
care the only
solution?”*

Ageing ≠ Institutional Care

The day has come. We have prepared for this moment. After five years on the waitlist, we got the call that a spot at a long-term care home finally became available for my grandmother. We were able to move her in as soon as possible to get the care she needed that we were not equipped to provide her with. My grandmother was initially assessed by a social worker to qualify for long-term care, and she was added to the waiting list based on the assessment. In the meantime, the social worker suggested things to make the home more age friendly such as adding railings in the hallway and stair tread grip tape to help prevent falls. The environment she called home slowly became a barrier for my grandmother.

Long-term care in Canada typically refers to a range of services that straddle healthcare and social services, combining medical needs with housing and assistance with daily living.⁵ Long-term care residents cope

⁵ Albert Banerjee, "An Overview of Long-Term Care in Canada and Selected Provinces and Territories", *Women and Healthcare Reform*, 2007, 6.

with complex care needs that are a mix of age-related physical diseases and cognitive challenges.⁶ Individuals are assessed to see if they are at risk in their living situation in relation to their health condition. If they cannot sustain themselves independently then they are appropriately placed within the continuum of care and these assessments are done by local health authorities.⁷

My grandmother has been living in a long-term care home for the last two years now and it has been a challenging transition for her and my family. She was relocated to Stouffville, Ontario – a thirty-minute drive from her neighborhood to an unfamiliar context she had never been to before. Her home and the local environment became unsuitable for her to live there anymore. She has been displaced and the built environment has been complicit in this act. Placing people in a new environment could be very disorienting and does not assist in easing one's mind with dementia. Her view from her room at the long-term care home is an empty field with no mental stimulation, whereas, at her old house she was able to people watch and participate from afar. The context of our lives impacts our memory and helps us to place ourselves in the world. The first night of being there she tried to escape, wanting to go back home. Prior to looking at long-term care, my family tried to hire a Personal Support Worker (PSW) instead so that my grandmother could stay at home but there were not enough PSWs to meet the demand removing this as an option.

Currently in Ontario, there are almost 43,000 people waiting for a bed in a long-term care home and this number doubled in the last 10 years with the waitlist estimated to grow by 1,000 people annually.⁸ The size and complex care needs of Ontario's ageing population is rapidly growing where 1 in 5 seniors over the age of 80+ have complex care needs that require long-term care resources.⁹ However, the current system was not built to meet and sustain future needs in addition to the healthcare staffing crisis where there are not enough staff to meet demands.¹⁰

6 Banerjee, "An Overview of Long-Term Care in Canada and Selected Provinces and Territories", 21.

7 Ibid., 12.

8 OTLCA, "The Data: Long-Term Care in Ontario: The evidence behind why we need a more modern, high-quality and responsive long-term care system," accessed March, 2024, <https://www.oltca.com/about-long-term-care/the-data/#:~:text=The%20size%20and%20complex%20care,waiting%20for%20long%2Dterm%20care.>

9 OTLCA, "The Data: Long-Term Care in Ontario."

10 Ibid.

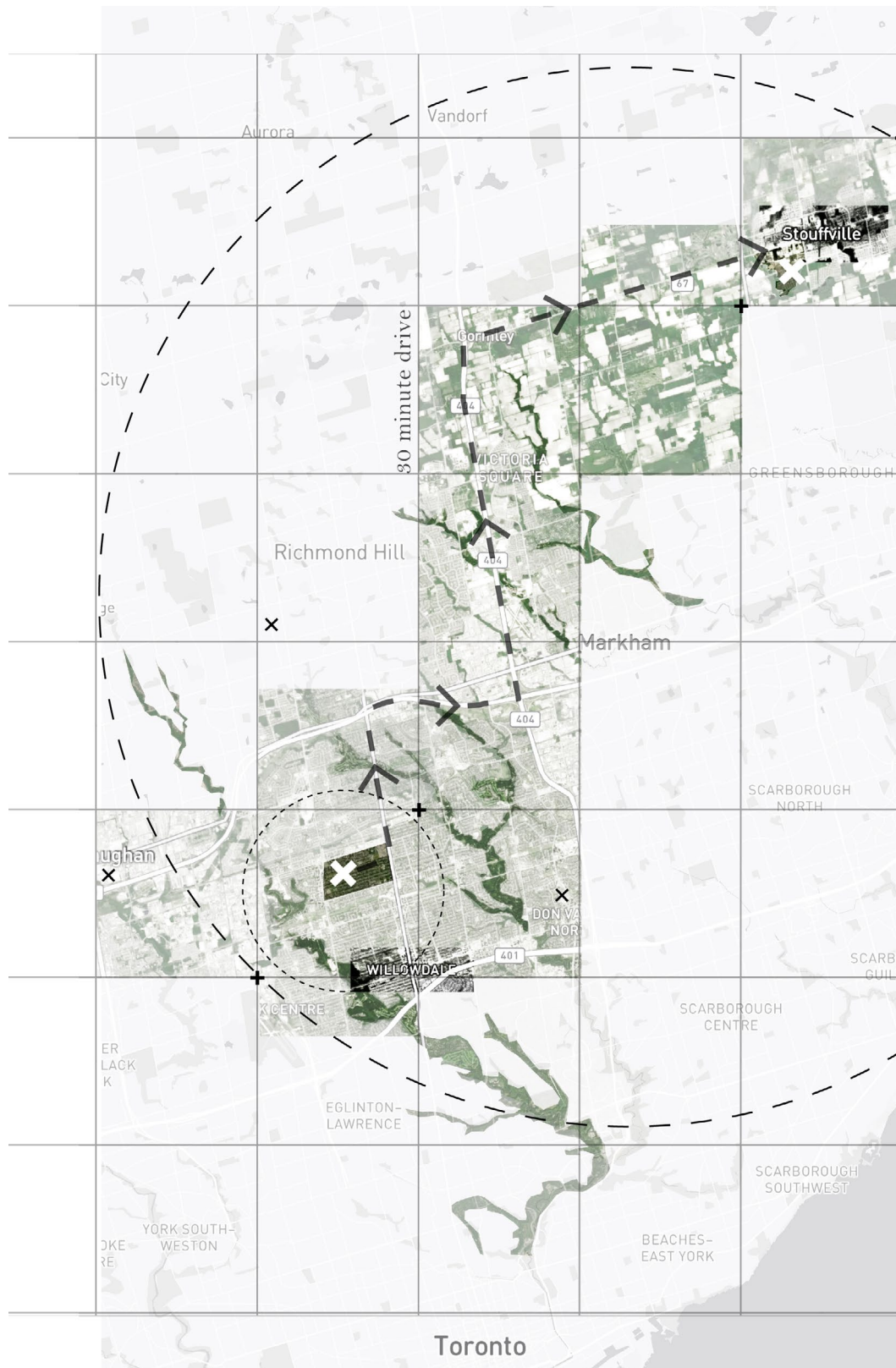


fig.01 displacement map. the map captures the journey from my grandmothers neighborhood to where the long-term care home is located. illustrated by author.

There were incidences at the long-term care home where some of the male residents would wander into some of the female resident's rooms. This experience can be scary and alarming. This happened to my grandmother in the first few weeks of her living there and this made her even more anxious. These buildings were not designed with women in mind. The doors for the individual residents' rooms do not lock for safety reasons and most of the time, the doors remain open for surveillance purposes. The solution to stop trespassing was to put up a stop sign banner across the doorframe of rooms that people kept wandering into. My grandmother's room still has one up across her door.

In 2004, the average age of long-term care residents in Ontario were 82.1 years of age and majority were female residents at 76.6%.¹¹ This makes long-term care not just a healthcare issue but also a women's issue. The majority of long-term care residents are female, and this speaks to the long-life span of females but also brings awareness that there is not enough variety of formal and informal care options for aging females. It can mean living beyond their partners' support and not having sufficient formal services or social support in their neighborhoods to care for them. In 2002, long-term care homes in Canada had the population of 65 to 75 years olds split between male and female, while the next age range of 75-85 years old, the female population superseded the male population.¹² At the 85 years old and up age range, the female population doubled the male population.¹³ Additionally, women are more likely to fall than men, as women's sense of balance could be less stable as they age.¹⁴ Falls are a huge safety threat and the biggest fear of ageing. The Centers for Disease Control state that the rate of falls in healthcare institutions exceeds the rate of falls for elderly people who live in their own homes.¹⁵ Ironically, because they fear falling, many move into institutional care to help prevent falls.¹⁶

¹¹ Banerjee, "An Overview of Long-Term Care in Canada and Selected Provinces and Territories", 18.

¹² Ibid., 9.

¹³ Ibid., 9.

¹⁴ Kathryn H. Anthony, *Defined by Design: The Surprising Power of Hidden Gender, Age, and Body Bias in Everyday Products and Places*, (New York: Prometheus Books, 2017), 168.

¹⁵ Anthony, *Defined by Design: The Surprising Power of Hidden Gender, Age, and Body Bias in Everyday Products and Places*, 242.

¹⁶ Ibid., 168.

I remember my grandmother experiencing a bad fall once before she moved to the long-term care home. It happened when she was taking out the garbage bins from the garage to the side of the road for garbage day. The severity of the fall required her to go to the hospital for treatment of her wounds. We believed that by moving her to the long-term care home, tasks with a higher risk of falling would be eliminated. However, she experienced more falls at the long-term care home than she did at her original residence. Some of these falls were due to a momentary loss of balance, while others resulted from her attempting to rush due to anxiety in an unfamiliar environment.

The system is already overwhelmed and failing to meet all the varying needs of the residents. We cannot admit everyone who needs some additional care, there needs to be a way to allow people to stay within their local environments and homes. We cannot continue to put everyone into institutional care thinking it is the only solution.

Institutionalization

When I went to visit my grandmother at the long-term care home, my expectations were high. This location is a new facility that opened in Stouffville, Ontario. Even though everything was new, it was bleak. Once I got to her floor, I passed the activity room and dining room. The activity room is usually barren unless a scheduled activity occurs. The space is ubiquitous, devoid of character or influence of the people who live there. Instead of spending free time in the activity room, most residents are parked around the nurse's station to be supervised. Stepping into my grandmother's room was not what I was expecting. It is spacious in some areas while inconveniently tight and narrow in others. There was a lack of space that prevented us from bringing bigger personal items to add some comfort and familiarity for my grandmother. Even though her bedroom was small, it was a double height space with an exposed concrete ceiling that creates an echo

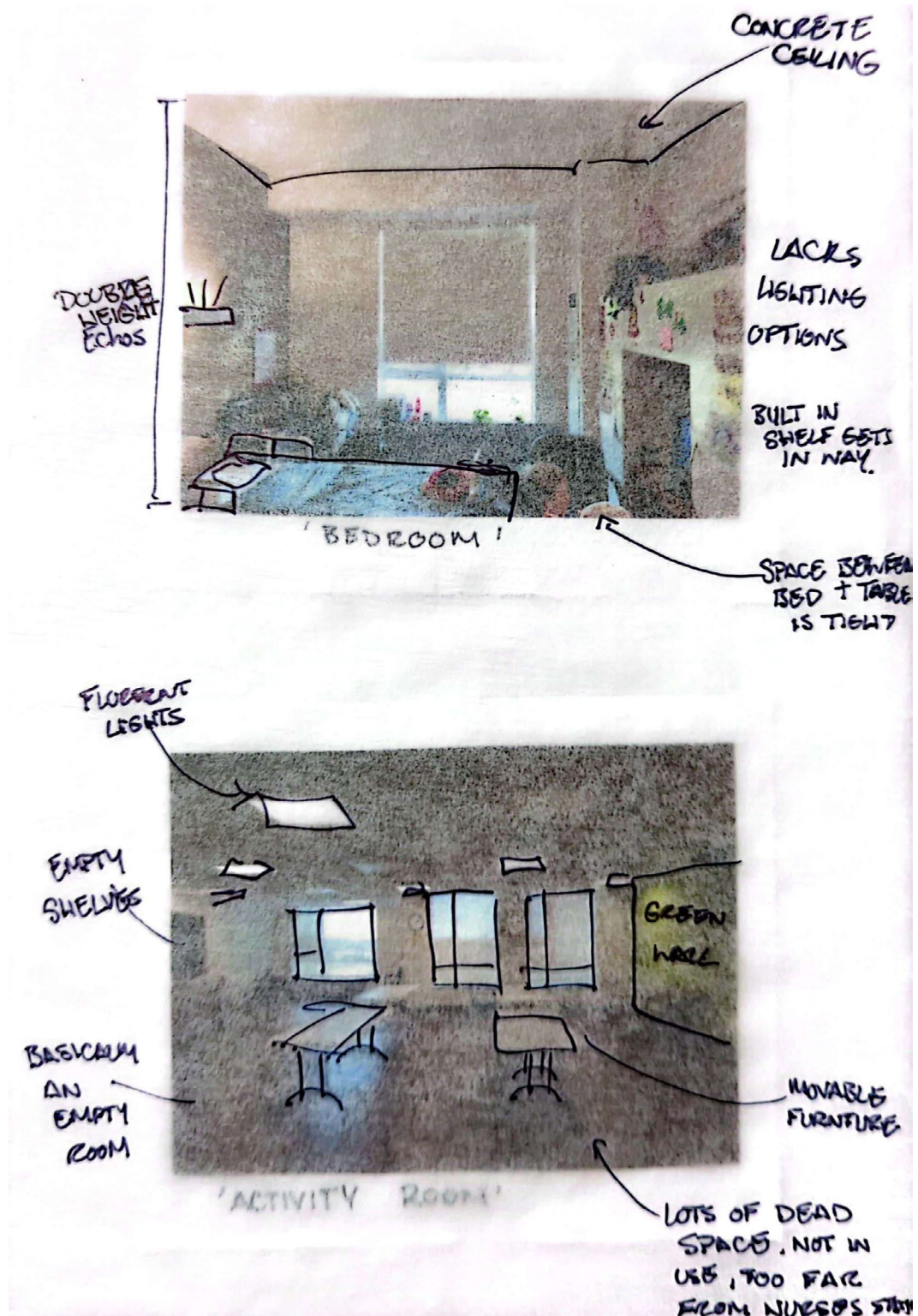


fig.02 observations of the long-term care home. illustrated by author.

that scares her. When a family member visits, we can take her outside. Going outside can positively improve overall health, quality of life, mood, and improve quality of sleep for residents with dementia.¹⁷ However their outdoor space is a small concrete patio that faces the parking lot with little to no seating. The width of the outdoor space does not even allow two people in wheelchairs to pass. By centralizing the same aged people together, the institution is trying to standardize what qualifies as a “good life.”

Institutional care for ageing is not universal. Not all countries and cultures have it, but Western culture has integrated it into the life cycle of its people. With industrialization, productivity became a marker for valuing someone’s life over another. A person holds more value to society if they are seen as productive. Michel Foucault, French philosopher that theorised social control through societal institutions, proposed that when a person was placed in institutional care and confinement that it was connected to idleness.¹⁸ The retirement age implemented in the late nineteenth century enforced that there is no point working past retirement age as your productivity will decline.¹⁹ However, there are not enough services or activities to participate in after retirement to assist with keeping up social interactions to sublimate the very regimented work schedule that people typically leave for retirement.

¹⁷ Habib Chaudhury et al., “The Influence of the Physical Environment on Residents With Dementia in Long-Term Care Settings: A Review of Empirical Literature,” *The Gerontologist*, Vol 58, no. 5 (2018): 329.

¹⁸ Michel Foucault, *Madness and Civilization: History of Insanity in the Age of Reason*, ed. Paul Pabinow, (New York: Random House, 1965), 46.

¹⁹ Dominique Hauderowicz, *Age Inclusive Public Space*, ed. Kristian Serena. (Hatje Cantz, 2020), 24.

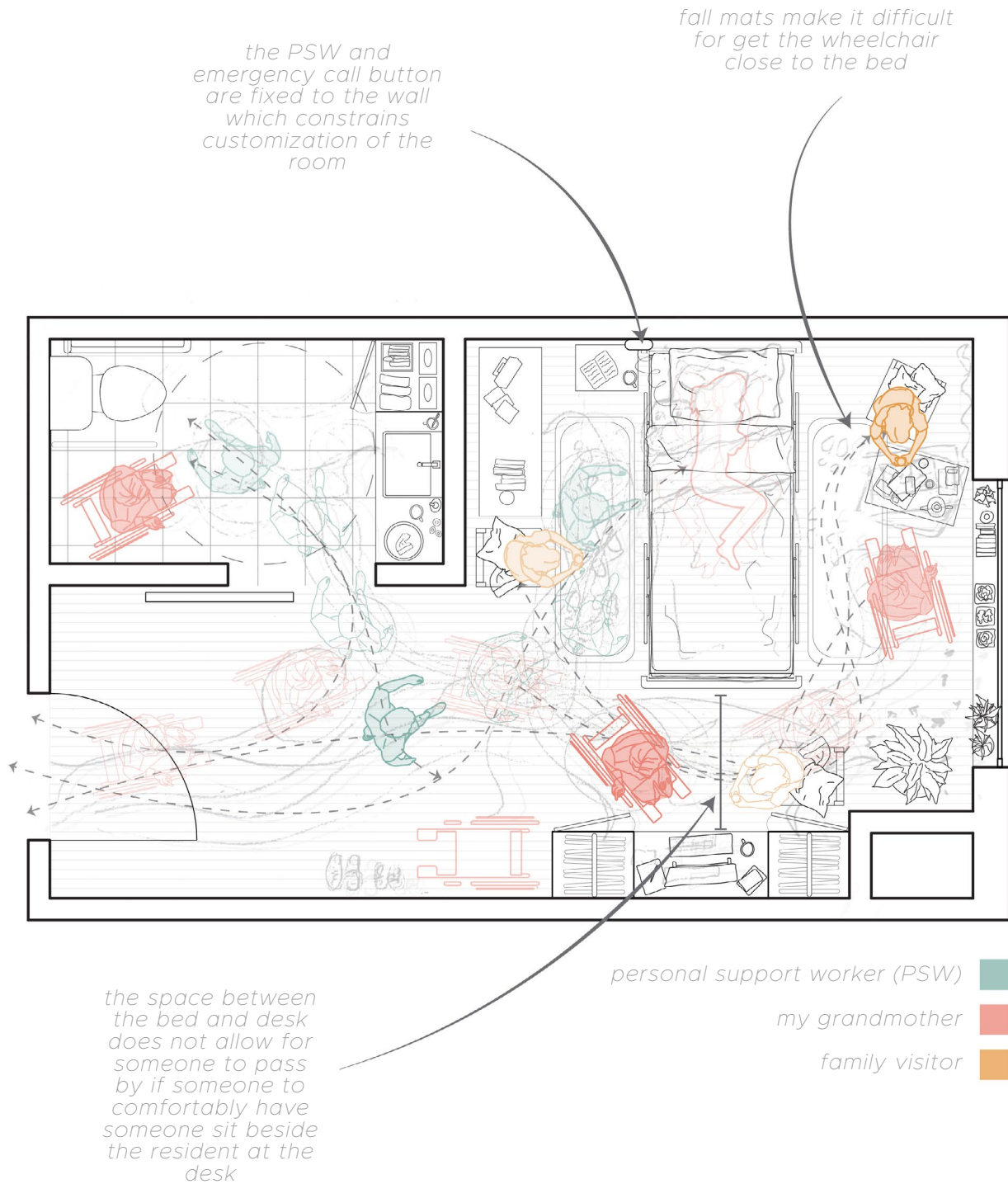


fig.03 daily typical movement of my grandmother in her room at the long-term care home. illustrated by author.

What is age?

I grew up in a culture where there is a great respect for our elders. Growing up there was a greater emphasis on generations rather than people's specific age. I am very fortunate to have known and grown up with both my maternal and paternal grandparents, learning family traditions from them and having them pass down life skills.

Long-term care is age related, but what is age? Architect Dominique Hauderowicz specializes in age-inclusive places, and she comments that as a society, age is defined by the chronological years a person has lived, usually identifying old age starting at 65 years old.²⁰ The chronological definition of age was introduced as a convenient bureaucratic tool by private and public Canadian pension plans in the late nineteenth century, whereas previously, age was more loosely defined.²¹ The definition of "old age" follows the government retirement age to conveniently distinguish between the categorization of a mature adult and old age.²² Prior to this official definition was established, ageing and counting years were not a concern as societies were not entirely structured by age.²³ People live such different lives that shape and form who they are that reducing someone to be defined based on chronological age is a disservice to them. A person still has interests and has value after they pass the standardized age that deems someone as old.

20 Hauderowicz, *Age Inclusive Public Space*, 17.
21 Ibid.
22 Ibid.
23 Ibid., 24.

Fear of Ageing

Even though my grandparents were told by their doctor that they needed a walker, they refused to use it. They saw the walker as a symbol of ageing.

Foucault expressed that “up to the end of the eighteenth-century medicine related much more to health than to normality.”²⁴ On the other hand, in the nineteenth-century, medicine was regulated more in accordance with normality than with health.²⁵ The societal fixation of extending one’s life span has been underway for the last 200 years. The increasing influential medical and psychological science began to study the ageing process in the nineteenth century.²⁶ Currently, Western civilization has spent vast amounts on medical research to keep people alive, to extend the physical life of its people. However, ageing is still feared, and is encouraged to stay young for as long as possible as ageing is seen as a step closer to death.²⁷ When someone is moved into institutional care, a person can lose 2-6 years of their life expectancy.²⁸ The “performance of ageing” should be celebrated, not feared. During the first period of modern medicine, old age was regarded as an illness and became a medical diagnosis.²⁹ Whereas, in psychology, ageing was measured by cognitive decline based off of a “norm” and introduced ageism.³⁰ Ageism can be defined as an “assumption that a person’s age can tell you almost everything about his or her function, faculties, health, and appearance.”³¹ Ageist attitudes and prevailing chronological definition of age has permeated into the overall structure of society, causing stigma and influencing spatial practice and institutional systems.³²

24 Michel Foucault, *The Birth of the Clinic*, translated. A.M. Sheridan, (Great Britain: Routledge, 2003),

40.

25 Foucault, *The Birth of the Clinic*, 40.

26 Hauderowicz, *Age Inclusive Public Space*, 24.

27 Ibid., 28.

28 *Live to 100: Secrets of the Blue Zones*, season 1, episode 2, “An Unexpected Discovery,” hosted by Dan Buettner, aired, August 23, 2020, <https://www.netflix.com/watch/81474959?trackId=255824129>, 18:20-19:00.

29 Hauderowicz, *Age Inclusive Public Space*, 24.

30 Ibid.

31 Ibid.

32 Ibid., 15.

Institutionalization is seen as a solution for those facing complex health conditions in their old age. Foucault theorized that institutional care came from economic and social precautions where the moment a person was perceived to be idle, incapable to work, on the verge of poverty or unable to integrate with society, they were placed into confinement.³³ Foucault also introduced the idea that medical facilities are institutions that were born from techniques of disciplinary power.³⁴ Foucault states that the government can exercise their power over communal life and public space.³⁵ This shows that cities, neighborhoods, institutions are just assemblages of government interventions that try to organize and bring order to people.

“Generational disconnect leads to distrust, prejudice, and disrespect between the generations, resulting in age discrimination, age-based conflict, and consequently perceived unsafe public space. The lack of intergenerational support and care increase vulnerabilities and social isolation of both the old and young.”³⁶

- Leng Leng Thang (*Co-director of the Next Age Institute*)

Once segregated from the rest of society and observed from afar, it breeds prejudice.³⁷ Leslie Kanes Weisman, an American architecture educator, activist, and official in the community planning department, argues that public buildings that spatially segregate “subordinate” demographics are a direct result of social oppression. Weisman strongly believes that, “our collective failure to notice and acknowledge the built world can be a tool to maintain social inequality – guarantees that the likelihood of changing discriminatory design is low.”³⁸

33 Foucault, *Madness and Civilization: History of Insanity in the Age of Reason*, 64.

34 Stuart Elden, *Space, Knowledge and Power : Foucault and Geography*. (Abingdon: Taylor & Francis Group, 2016), 149.

35 Elden, *Space, Knowledge and Power : Foucault and Geography*, 190.

36 Hauderowicz, *Age Inclusive Public Space*, 19.

37 Foucault, *Madness and Civilization: History of Insanity in the Age of Reason*, 67.

38 Leslie Kanes Weisman, *Discrimination by Design: A Feminist Critique of the Man-made Environment*, (Chicago: University of Illinois Press, 1994), 35.

Overall, my grandmother experienced a sense of unease and anxiety after moving to this new environment. Leaving behind familiar surroundings also meant losing social networks, cultural ties, and traditions, which can contribute to feelings of isolation in a homogeneous space. Everyone deserves a sense of place, nostalgia, and community. How can we reimagine care beyond the default institutional systems?

Different Ways to Care

This thesis started as an exercise to improve long-term care homes from observations of lived experiences. As I was working through how to improve and re-design long-term care facilities it did not feel right. I had my grandmother's request to go home running through my mind. As much as we believed she is getting the care she needs, could she somehow have stayed at home longer? I completed an elective called Critical Disability Studies under the sociology department taught by Kelly Fritsch. This course has truly opened my eyes to a different perspective on addressing health, redefining disability, and understanding how the built environment can create barriers for those facing both visible and invisible disabilities. One week delved into topics such as eugenics, institutionalization, and abolition. We discussed how long-term care homes are a form of institutionalization rooted in a history of eugenic thinking. This revelation prompted me to rethink institutional care and consider ways to avoid perpetuating the segregation of the aging population.

The medical model aims to address the root cause of a problem by following the steps of diagnosis, identifying the cause, and seeking a cure.³⁹ Within the medical industrial complex, the design of healthcare facilities started to be seen as a source of cure. The medical model of dementia leads to professionals ignoring the perspective of people with dementia and reinforces social exclusion.⁴⁰ This traditional idea of care

³⁹ Foucault, *The Birth of the Clinic*, 234.

⁴⁰ Sandra Duggan et al., "The impact of early dementia on outdoor life," *Dementia*, Vol 7 (2009): 192.

and institutionalization is challenged by contemporary ideas from Liat Ben-Moshe – activist, scholar, educator, and researcher. She continues the conversation of power and surveillance and how the logic of incarceration is not only found in prisons, but also is seen in hospitals, nursing homes and in long-term care. Incarceration is a means for the segregation of differences. These “alternatives” to institutionalization tend to widen the net of surveillance which creates social isolation and segregation in communities.⁴¹ Ben-Moshe states that to truly have an alternative to institutionalization, we must treat “people in a humane fashion, creating meaningful integration into the totality of the community, rejecting stigma and labels, and incorporating non-violent ways of resolving problems.”⁴²

Shifting away from the medical model that seeks cure, we can transition towards the social model of care. The social model looks at the barriers in the environment as the problem and not the individual.⁴³ This entails prioritizing the care of everyday living, ensuring individuals receive the support they need while respecting their unique way of being. Much of modern society is based around hyper-independence and so the medical model of dealing with dementia is centered around preserving patient independence.⁴⁴ This proves to be a difficult model to follow as dementia is a gradual process of memory loss in addition to other barriers that come along with ageing. Two thirds of the female population diagnosed with Alzheimer’s will be caught between looking after their young and old kin as their critical caregiver.⁴⁵ Someone with dementia then becomes dependent on others, such as family or a support network. However, some people do not have family or these networks to rely on. Interdependency in society beyond kin needs to be acknowledged and encouraged or else the same broken systems will be perpetuated.⁴⁶

41 Liat Ben-Moshe, *Refuting carceral logics and their alternatives: Toward noncarceral (disability) futures*, in *Disability Injustice: Confronting Criminalization in Canada*, edited by Kelly Fritsch, Jeffrey Monaghan and Emily van der Meulen, (Vancouver: UBC Press, 2022), 318.

42 Ben-Moshe, *Refuting carceral logics and their alternatives: Toward noncarceral (disability) futures*, in *Disability Injustice: Confronting Criminalization in Canada*, 318.

43 Steve Maslin, *Designing Mind-Friendly Environments*, (Great Britain: Kingsley Publishers, 2022), 42.

44 Amy Y. Tsou & Jason Karlawish, “Ethical, Legal, and Social Issues in Dementia,” in *Dementia*, ed. Joseph F. Quinn (John Wiley & Sons Ltd, 2014), 137-149.

45 Eckhard Feddersen and Insa Ludtke, eds, *Lost in Space: Architecture and Dementia*, (Boston: Birkhauser, 2014), 102.

46 Andreas Chatzidakis et al., *The Care Manifesto: The Politics of Interdependence*, (London: The Care Collective, 2020), 30.

Interdependence means that two or more people are reliant on one another, and it can be messy, imperfect, and a work-in-progress.⁴⁷ When those who do not currently rely on someone else for daily tasks like going to the bathroom or changing clothes, get overwhelmed by the loss of independence, and become terrified of losing privacy and dignity. Fear prevents us from imagining how to care in different ways.⁴⁸ As a society, we must understand that we exist with others – life is connected to life.⁴⁹ In all stages of life, no matter how independent you feel, we all rely on one another. Redistribution of power between the state and local communities will help to deepen collaborative decision-making for creating communities with the capacity to care.⁵⁰ For care to be sustained in the urban context, communities need to have a greater role in planning their local infrastructure and services to meet their needs.

Ageing does not necessarily have to mean institutional care. There can be a way for people with dementia to live interdependently so they do not have to be displaced. The possibilities of the built world to adapt as we change and age must be explored.

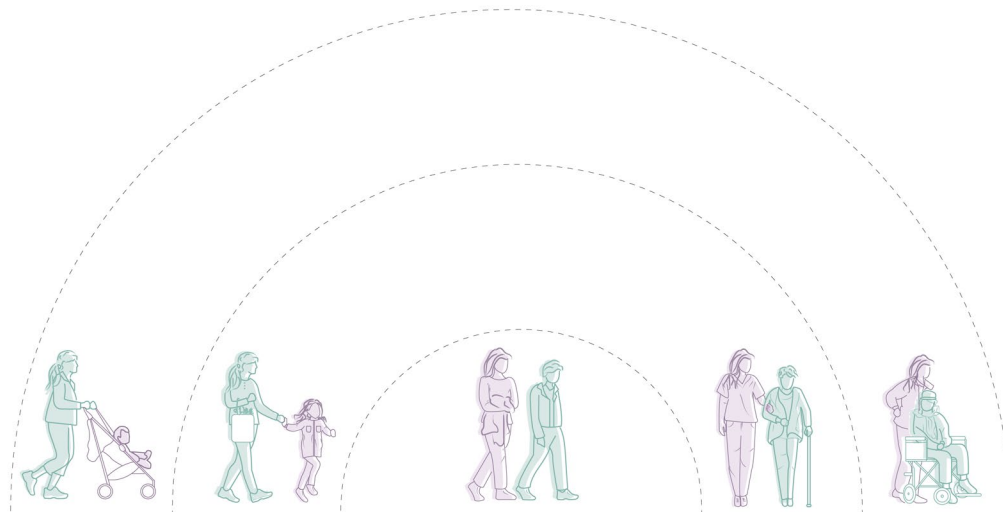


fig.04 different capacities of care at different stages in life. illustrated by author.

47 Eli Clare, *Brilliant Imperfection: Grappling with Cure*, (Durham: Duke University Press, 2017), 136.

48 Clare, *Brilliant Imperfection: Grappling with Cure*, 136.

49 Chatzidakis et al., *The Care Manifesto: The Politics of Interdependence*, 94.

50 *Ibid.*, 57.

*“Memories are a
series of
non-linear,
fragmented
episodes
and someday it
is just one episode
that plays on
repeat”*

Dementia & Space

My grandmother has Alzheimer's disease which falls under the umbrella as a type of dementia. This means that everyday tasks become harder to do, short-term memory loss and behavioral reactions impact her day-to-day life. Daily tasks such as cooking and running errands become more difficult due to lack of balance and disorientation making it harder to move around. This is the same person who used to take care of me growing up. I felt a sense of helplessness that I could not help care for her like she did for me when I was younger.

Dementia is a condition of a multiplicity of cognitive impairments. The condition affects cognitive activity such as memory, behavioral reactions, and daily tasks. It is also a condition that the person experiencing it might not even notice it occurring.⁵¹ In 2010, dementia was estimated to affect the global population of people 65 years of age and up, collectively accounting for 35.7 million people, 0.5% of the world population and these numbers are predicted to increase in the future. However, about

⁵¹ Richard Camicioli, "Diagnosis and Differential Diagnosis of Dementia," in *Dementia*, ed. Joseph F. Quinn (John Wiley & Sons Ltd, 2014), 1-13.

3.4 million (10%) of those people reside in North America.⁵² Dementia occurs as people age or as a symptom of another illnesses. According to the Centers for Disease Control and Prevention (CDC),

“Dementia is not a specific disease but is rather a general term for the impaired ability to remember, think, or make decisions that interferes with doing everyday activities. Alzheimer’s disease is the most common type of dementia. Though dementia mostly affects older adults, it is not a part of normal aging.”⁵³

Despite the vast number of individuals diagnosed and living with dementia, it remains heavily stigmatized culturally and socially. This stigma has led to a significant portion of people with dementia being placed in institutional care homes, many of which are understaffed and have poor living conditions

Even though we were not equipped to care for her in the later stages of dementia, as a family we still wanted her to participate in life. I thought there would be more activities and community building at the long-term care home, but it was not much better than at her old home where she was at least more comfortable in. If there is a better understanding about how people with dementia perceive space, we can design the built environment to be more dementia friendly.

Scientifically what occurs in the brain is an abnormal amount of plaque that blocks signals between nerve cells in the brain. The first stage of dementia can go undiagnosed and untreated for up to twenty years prior to it even being detected. Within the initial stage of dementia, the hippocampus is affected first. How the brain perceives the built world and remembers spatial environments is strongest in the hippocampus. It is activated when a person tries to remember spatial and temporal context and generates new spatial memories that help with navigation. When the hippocampus is affected first, it results in short-term memory loss.⁵⁴ Being in a familiar environment is crucial at this point because, in the absence of new short-term memories, long-term memories can still

⁵² Liz Llyod, *Health and Care in Ageing Societies: A new international approach*, (Great Britain: The Policy Press, 2012), 104.

⁵³ CDC, “What Is Dementia?”, (Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 2019), [cdc.gov/aging/dementia/index.html](https://www.cdc.gov/aging/dementia/index.html).

⁵⁴ Howard Eichenbaum, “On the Integration of Space, Time, and Memory,” *Neuron*, 95(5), (2017): 1007-1018. <https://doi.org/10.1016/j.neuron.2017.06.036>

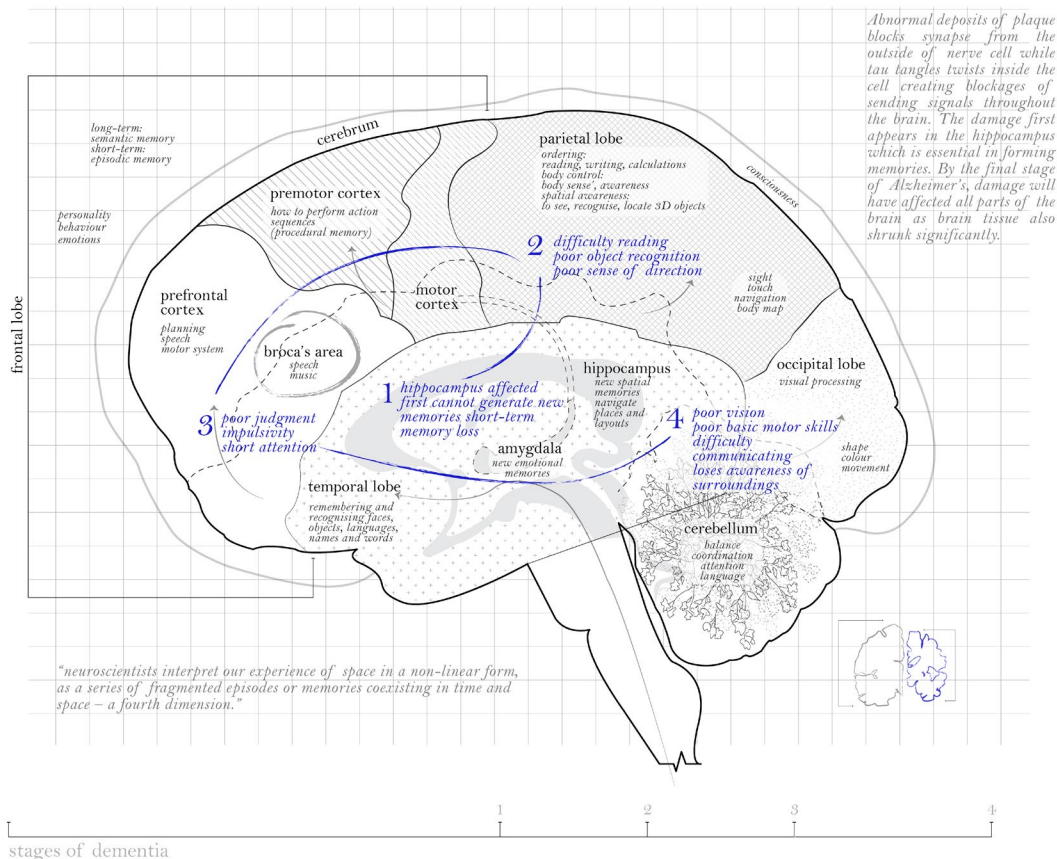


fig.05 mapping the stages of dementia. illustrated by author. information sourced from Dan, S et al., 2021 and from Mary Duggan, 2016.

provide a sense of orientation The next stage of dementia affects the parietal lobe which oversees sight, touch, navigation, and spatial awareness. With dementia, this causes difficulty reading, poor object recognition and sense of direction.⁵⁵

We noticed she increasingly became more anxious and nervous about leaving the house. It was around this time when she moved into the long-term care home. She started to show signs of moderate stages of dementia.

The third stage affects judgment, increases anxiety, and shortens attention. The frontal lobe holds long and short-term memories and regulates one's personality, behavior, and emotions. These two stages means that the person is at risk of getting lost or in harm's way in our

55 CDC, "What Is Dementia?"

current ableist cities. The severe, final stage of dementia typically lasts for about three years. The cerebellum and occipital lobe are affected by dementia leading to poor vision, basic motor skills and loss of awareness of surroundings.⁵⁶ The medical model of dementia remains the dominant way of thinking that there needs to be a cure instead of focusing on figuring out different ways to care for them.⁵⁷ At this stage, individuals with dementia rely fully on others to navigate our current ableist cities. Embracing the social model involves adapting environments to suit the needs of individuals with varying abilities, rather than attempting to change the person to fit into the existing world.

Perception of Space

There were days when I went to visit her, and she would not be able to recognize me at first. She would sometimes not recognize me right away because her mental image of me does not match who she sees in front of her. Her reaction was always “Oh, you’re so tall now!” and that is because she has me frozen in time as a 13 years old girl. If she perceived me this way, I wonder how dementia can change the way a person can perceive space.

Every individual has lived experiences and feelings that can influence how they perceive space. Having dementia reduces the ability to navigate and recognize where they are or where they are going because of disorientation and short-term memory loss. This is on top of experiencing frailty, sensory impairment, reduced mobility, strength, and stamina of ageing.⁵⁸ With all these changes happening, the sensory experiences become important as memory of event fades, but direct sensations remain.⁵⁹

⁵⁶ CDC, “What Is Dementia?”

⁵⁷ Llyod, *Health and Care in Ageing Societies: A new international approach*, 103

⁵⁸ Lynne Mitchell, Elizabeth Burton, and Shibu Raman, “Neighbourhoods for life: A checklist of recommendations for designing dementia friendly outdoor environments,” *OCSD, Oxford and Housing Corporation*, IGP Database Ref No G01-14255. Life-Checklist.pdf. (2004), 2.

⁵⁹ Feddersen, and Ludtke, eds, *Lost in Space: Architecture and Dementia*, 15.

Wayfinding

My dad recalls one of the first instances when we suspected my grandmother might have lost her way in the neighborhood. She went out for a walk without informing anyone, prompting my grandfather to call my dad, concerned that she had gotten lost. Fortunately, she returned home on her own, but she had stayed out longer than expected because she forgot where she wanted to go. Eventually, she remembered and sat in the park until she did.

Basic orientation system, usually visual, coupled with the sense of touch, is responsible for our 3D experience of space.⁶⁰ A study done in London, England showed that people with dementia try to visualize the place, described how it looks first in order to identify it when they arrive to their destination. Some visual cues to help with wayfinding include signage, district features, anchor points and clear boundaries of space. Research participants were found to have retained detailed knowledge of their old neighborhoods, including street name and how long it took to walk a certain route.⁶¹ Signage is helpful but instead of just typical street name signs, there should also be signs that utilize colour, shapes, and symbols to be quicker to identify. It is recommended that signs be colors such as red and orange, that contrasts with its background, and has a large font size, and symbols.⁶² Next, distinct features help to recognize and remember streets, places and buildings if seen regularly for a long period of time.⁶³ The creation of anchor points such as landmarks, places of activity, street furniture, trees, public art are some basic orientation tools that instills sense of stability.⁶⁴ Changing anchor points, significant landmarks of the neighborhood, can make it hard to place yourself if that is how you navigate space.⁶⁵ Research shows that changes to environments can lead to confusion, so displacing someone with dementia to an entirely new area is completely disorienting. Additionally, it is important to have clear boundaries that can help guide you. Implementing low barrier such

60 Feddersen, and Ludtke, eds, *Lost in Space: Architecture and Dementia*, 129.

61 Garuth Chalfont, *Design for Nature in Dementia Care*, (London: Jessica Kingsley Publishers, 2007), 107.

62 Mitchell, Burton, and Raman, "Neighbourhoods for life: A checklist of recommendations for designing dementia friendly outdoor environments," 6.

63 Ibid., 4.

64 Ibid., 5.

65 Anna Brorsson et al., "Accessibility in public space as perceived by people with Alzheimer's disease," *Dementia*, Vol 10, no. 4 (2011): 595.

as low fences, low walls, and low vegetation provides boundaries but also provides visibility, offering a sense of safety as building occupants can people-watch.⁶⁶ In addition to all the visual aspects in the neighborhood that can help with wayfinding, having multi-sensory strategies contributes to making spaces more memorable and identifiable.

Wandering

My grandmother used to walk everywhere in the neighborhood or take the bus for longer distances. However, as she grew older, her walking pace slowed down, and her balance became unsteady, eventually necessitating the use of a cane. Later on, she relied on a walker to support her balance before eventually moving to the long-term care home. While accompanying her on walks around the neighborhood, crossing the street became more difficult for her as well. She sometimes walked with a sense of urgency, pressured to move at the speed of the city. This rushing increases the risk of falling. There were other times where she would travel back in time, thinking she was still in her 40's and overestimated her physical abilities, which also can become a risk for falling. How can wandering be done safely at different levels of mobility?

People with dementia often walk with a slow, unsteady shuffling gait. They cannot always interpret the intentions of other pedestrians, having to anticipate other people's moves can be stressful and tiring. It is recommended that paths are wide to allow different paces of people to coexist.⁶⁷ With differing mobility and speeds, it makes it difficult to cross intersections. There is a term called "crip time" that resists the contemporary industrial concept of time and accepts that different people move at different speeds.⁶⁸ Cars and people are always rushing trying to complete a task as fast as possible or running late. Crip time can also allude to "time travel" - an example related to those with dementia as some can have their mind in one time while their physical body is in another.⁶⁹

⁶⁶ Mitchell, Burton, and Raman, "Neighbourhoods for life: A checklist of recommendations for designing dementia friendly outdoor environments," 5.

⁶⁷ Ibid., 7.

⁶⁸ Sara Hendren, *What Can a Body Do? How We Meet the Built World*, (New York: Riverhead Books, 2020), 166.

⁶⁹ Hendren, *What Can a Body Do? How We Meet the Built World*, 166.

The idea of wandering is also feared. It currently informs physical design and social management of care environments, with the common response to restrict physical movement both indoors and outdoors.⁷⁰ Wandering can also be interpreted as someone being in search for something, restlessness, or a lack of mental stimulation.⁷¹ In an ideal world, people living with dementia should be allowed to move freely and safely if they desire to do so. Some strategies for safe wandering include design of circulation as a loop with no dead ends.⁷² While wandering, a person should be able to have visual access and cueing.⁷³ Visual access refers to be able to have clear view lines both inside and outside for people to see where they want to go. Cueing means having elements that can help clue someone as to where they are. It can be done through physical means such as focal points, signs, railings, distinctive identifiers, or through multisensory cues such as sound, smell, and touch.⁷⁴

Sensory

When thinking back to my grandparents' house, there was always a particular scent. Whenever I smelt that scent anywhere else it would remind me of my childhood and their home. Growing up I never knew what or where the fragment scent was coming from, but I associated it with their yard of the house. I asked my dad whether he knew what was planted there and he told me it was a honeysuckle bush. He recalled my grandmother had planted it because it was one of the key ingredients for the herbal tea she made for us every week.

Smell is one of the senses that can trigger the strongest memory recall. Smells can evoke memories associated with events that occurred at a different time and place. Studies have also been conducted in Northumbria University that show different smells can affect certain brain functions.⁷⁵ Results show that rosemary can enhance memory, cypress increases alertness whereas lavender is a calming scent but hinders memory

70 Chalfont, *Design for Nature in Dementia Care*, 99.
 71 Ibid., 100.
 72 Ibid., 101.
 73 Ibid., 103.
 74 Ibid., 105.
 75 Maslin, *Designing Mind-Friendly Environments*, 202.

creation.⁷⁶ Haptic systems become increasingly important as dementia progresses. The power of touch, pressure and temperature rely on the haptic system as other senses fade over time.⁷⁷ Tactile stimulation has a positive affect on individuals with dementia as it can reduce anxiety, make someone more alert and improve spatial orientation awareness. Designers also must be aware of patterns for paved surfaces. People with dementia have been known to mistaken sharp colour contrasts or paving patterns for steps or holes. While busy patterns, repetitive lines, and shadows can cause dizziness leading to falls. Reflective surfaces should also be avoided as they can be interpreted as wet or slippery.⁷⁸ Regardless of increasing age and progressing dementia symptoms, everyone has the right to a safe, dignified, and healthy living environment where they are treated as equals.

⁷⁶ Feddersen, and Ludtke, eds, *Lost in Space: Architecture and Dementia*, 129.

⁷⁷ Ibid., 130.

⁷⁸ Mitchell, Burton, and Raman, "Neighbourhoods for life: A checklist of recommendations for designing dementia friendly outdoor environments," 7.

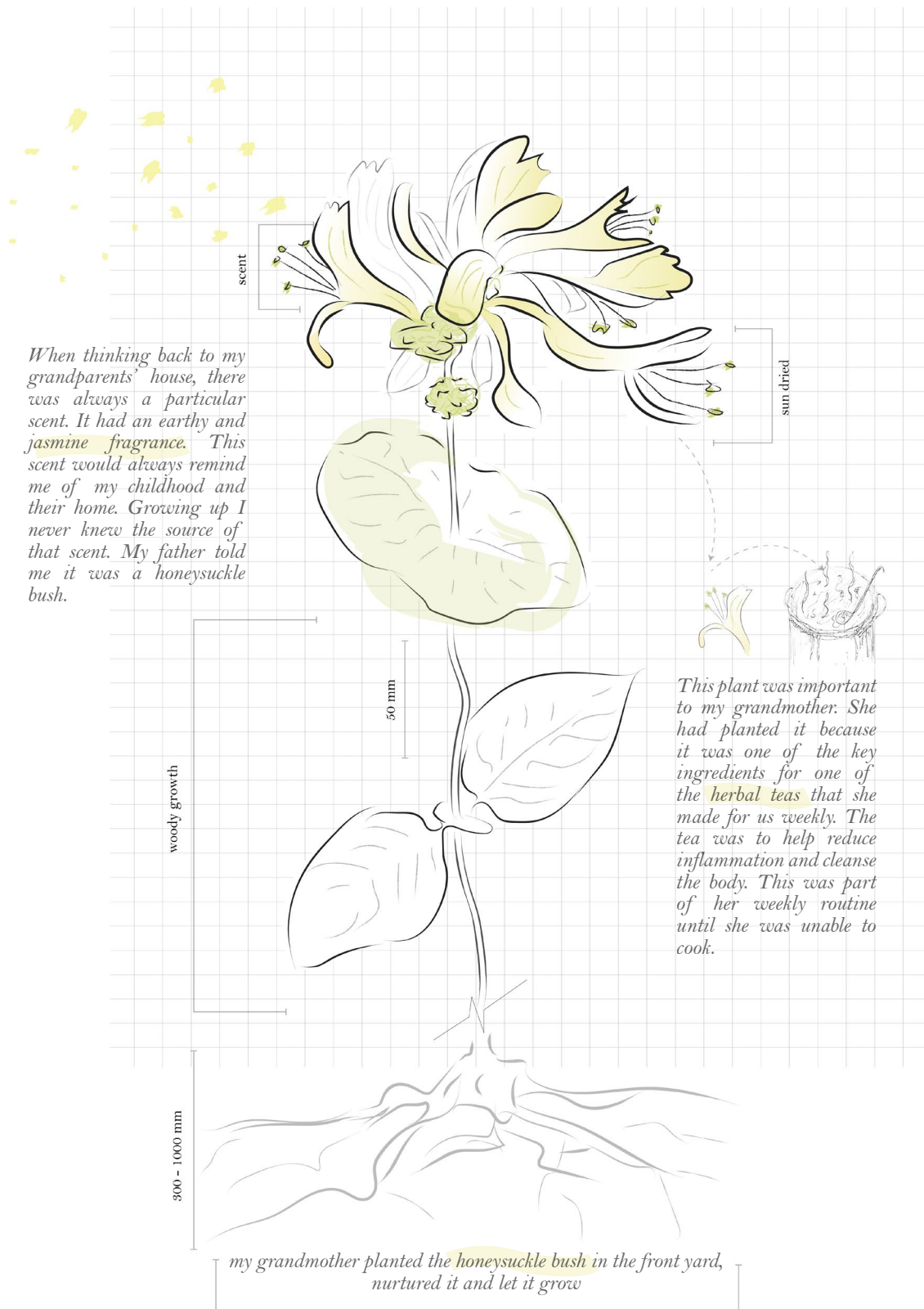


fig.06 intergenerational memory of placemaking of the scent of a honeysuckle. illustrated by author.

Case Study

Alzheimer's Respite Center

Niall McLaughlin architects designed the Alzheimer's Respite Center in 2009, located in Ireland. This short-term care center is a place for people with Alzheimer's and their families. Situated within an existing walled property, it offered the opportunity for "wandering loops". Wandering loops are varied circulation paths that loop back onto themselves, leading a person back inside.⁷⁹ This strategy will be interpreted and applied at the urban scale to aid with wayfinding in chapter four. However, the outdoor spaces are fortified by the perimeter walls that restricts them from moving freely. There is still a level of confinement that I want to break away from.

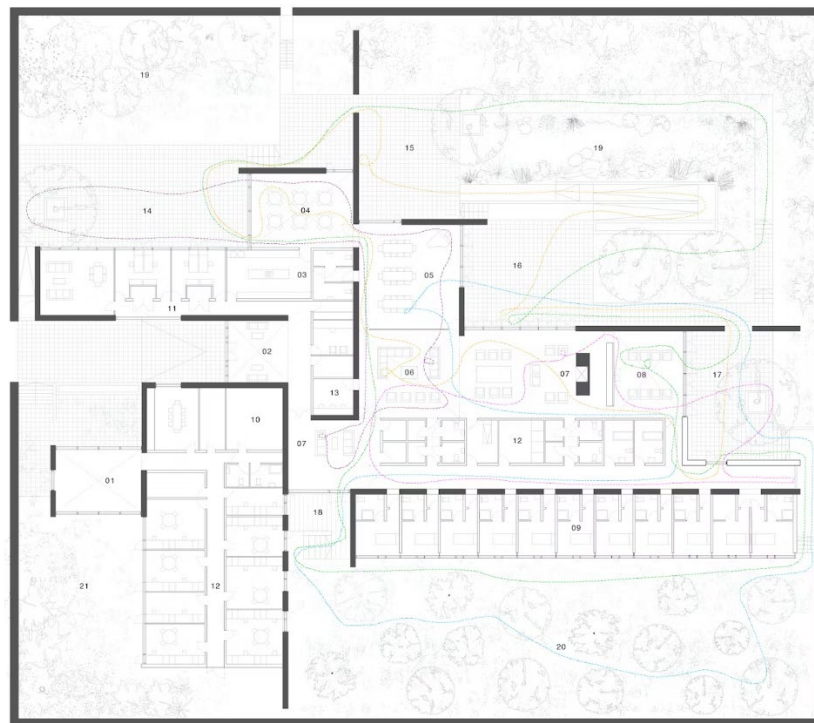


fig.07 alzheimer's respite centre floor plan. source Niall McLaughlin Architects.

⁷⁹ "Alzheimer's Respite Centre," Niall McLaughlin Architects, accessed September, 2023, <https://www.niallmclaughlin.com/projects/alzheimer-Respite-Centre/>.

Case Study

The Hogeweyk – Dementia Village

The Hogeweyk Dementia Village was the first of its kind. In 2009, Buro Kade Architects designed a nostalgic Dutch village that offered an alternative to institutional care for people with dementia. It offered safe independence to go anywhere within the boundaries of the property.⁸⁰ It follows the “village” trope of a caring environment. This still requires the removal of a person to a new environment. They try to replicate what these residents once had before being displaced. So instead of mimicking existing neighborhood traits in new, separated facility, how can the city become safer and more equitable?

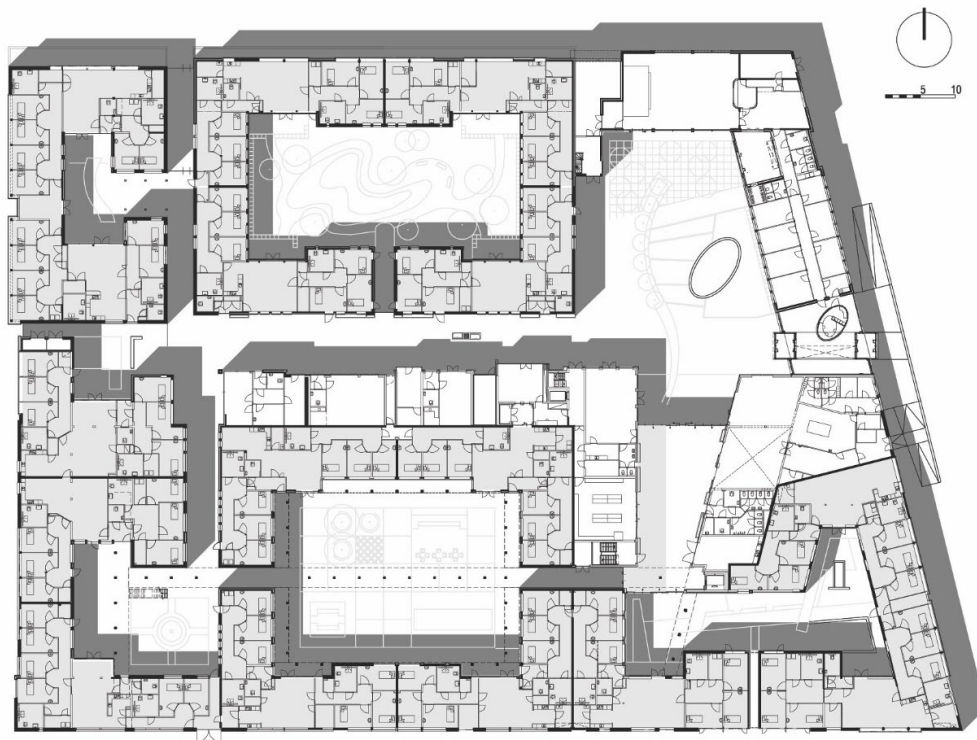


fig.08 the hogeweyk dementia village floor plan. source Dementia Village Association.

⁸⁰ “The Hogeweyk - normal life for people living with severe dementia,” Dementia Village Association, accessed September, 2023, <https://hogeweyk.dementiavillage.com/>.

*“People have a
right to place,
nostalgia and
community”*

Ageing & Dementia in the Neighborhood

The Newtonbrook West neighborhood is your standard North American suburb, even so, it was a good neighborhood to grow up in. My grandparents' house was within walking distance of the local elementary school, middle school, and high school. It also had a community center, and a mall where it was a one stop shop for all your needs. As much as I would have liked my grandmother to be able to stay there, the neighborhood did have some shortcomings.

Typical suburbs are homogeneous environments by design – full private homes, automotive reliant mode of transportation with limited social interactions. With ageing, suburban neighborhoods can become isolating, leading to loneliness.⁸¹ Isolation is an objective state measured by the absence of “social contact or contact with friends, family, community involvement or access to services.”⁸² While loneliness is a subjective

⁸¹ Feddersen, and Ludtke, eds, *Lost in Space: Architecture and Dementia*, 138.

⁸² Martina Kane and Laura Cook, “Dementia 2013: The Hidden Voice of Loneliness,” London: Alzheimer’s Society, (April 2013): 26.

state. Different people experience loneliness in varying degrees. One way is emotional loneliness that can describe the absence of significant others. On the other hand, social loneliness is the lack of social network of friends, neighbors or colleagues.⁸³ Suburban developments are not designed to teach people how to build relations as it is sold as a dream to be independent, “an icon of status, security, stability, and family life.”⁸⁴ The suburban systems become dysfunctional when physical mobility deteriorates, surrendering oneself to elderly care.⁸⁵ One of the suburban systems is having to rely on a car to get everywhere, making it difficult for those who no longer drive, such as the elderly.⁸⁶ It adds to the list of thing that seems limited by old age.

My grandfather knew how to drive but my grandmother never learned how as it was not common for women at the time to display signs of independence. When my grandfather was told he could no longer drive due to the decline of his vision, they relied on their sons to pick up groceries for them.

This looks at the idea that mobility and accessibility can be restricted outside of one’s own body’s ability. The suburban “autonomy myth” romanticizes the ideals of independence, however assistance, dependence, vulnerability are truly human experiences.⁸⁷ While close relationships with neighbors are not seen as a necessity for survival anymore, these community relationships can be an important point of social contact for people with dementia.⁸⁸ This section will look at how neighborhoods can be limiting as it is now, highlight the importance of growing community and placemaking.

83 Kane and Cook, “Dementia 2013: The Hidden Voice of Loneliness,” 26.

84 Weisman, *Discrimination by Design: A Feminist Critique of the Man-made Environment*, 129.

85 Feddersen, and Ludtke, eds, *Lost in Space: Architecture and Dementia*, 140.

86 Anthony, *Defined by Design: The Surprising Power of Hidden Gender, Age, and Body Bias in Everyday Products and Places*, 163.

87 Hendren, *What Can a Body Do? How We Meet the Built World*, 205.

88 Kane and Cook, “Dementia 2013: The Hidden Voice of Loneliness,” 33.

Denied Access

When we used to ask her to go for walks outside, she refused due to the fear she had of falling. Sidewalks became an obstacle as the cracks and shifting surfaces instilled in her the fear of falling and not being able to pick herself back up. The single step of a curb became another barrier. Moving around the neighborhood had become strenuous. The need to depend on another person's body and strength as an extension of oneself grew. As her dementia worsened, her house became an obstacle to her as well. Her house had split floors which meant that for her to go outside, she had to face a flight of stairs. She became physically, emotionally, and socially isolated by these stairs.



*Pressured to move at the speed of the city
Traffic idling, uneven surfaces, time counting down*

fig.09 built world as barriers: crossing the street. illustrated by author.

This is not to say that aging or the individual is at fault, but rather the way the built world has been constructed. In the book *Building Access: Universal Design and the Politics of Disability* by Aimi Hamraie, an assistant professor of Medicine, Health, and Society and American Studies, it is argued that since the mid-twentieth century, disability rights groups have contended that design focused on the 'mythic average user' has shaped

architects' default standards and guidelines.⁸⁹ In the design and construction industry, accessibility is often viewed merely as a set of standards to be checked off. However, the idea of “mythic average user” is not a neutral body but the male, European ideal, frozen in time.⁹⁰ All bodies are different, and as we age, our bodies also change in varying rates and ways. Potential changes could be illness related compounding with ageing and might affect how someone can perceive, access and experience space. Impaired depth perception can make it harder to distinguish far objects from near, and increased sensitivity to glare makes it hard to focus when moving between dark shadow and bright light.⁹¹ Another change is in one's strength and stamina. As someone goes through the performance of ageing, they could potentially only have half the strength and stamina they once had as a young adult which can affect more athletic tasks such as going up and down steep gradients or walk long distances, lifting, gripping, pulling, and pushing. A decrease in strength and stamina can be influenced by mobility limitations as well. Some may be able to maintain their mobility while others can develop an unsteady gait that can lead to unbalance and increase the risk of falling more frequently. Different abilities can also lead to the reliance of wheelchairs, mobility scooters or prosthesis to assist with mobility.⁹² Another big change is bowel and bladder weakness. They become weaker as people age, requiring access to public restrooms more frequently.⁹³ The permanency of the built world makes it seem impossible to change. The stubborn, unchanging built world can turn into “thick injustice when planned for abstractly determined human population, without consideration for a variety of actual bodies”⁹⁴ If the built world as we know it is by design then we also have to power to change it.

89 Aimi Hamraie, *Building Access: Universal Design and the Politics of Disability*, (Minneapolis: University of Minnesota Press, 2017), 19.

90 Brorsson et al., “Accessibility in public space as perceived by people with Alzheimer's disease,” 588.

91 Hauderowicz, *Age Inclusive Public Space*, 21.

92 Ibid.

93 Ibid.

94 Hendren, *What Can a Body Do? How We Meet the Built World*, 149.

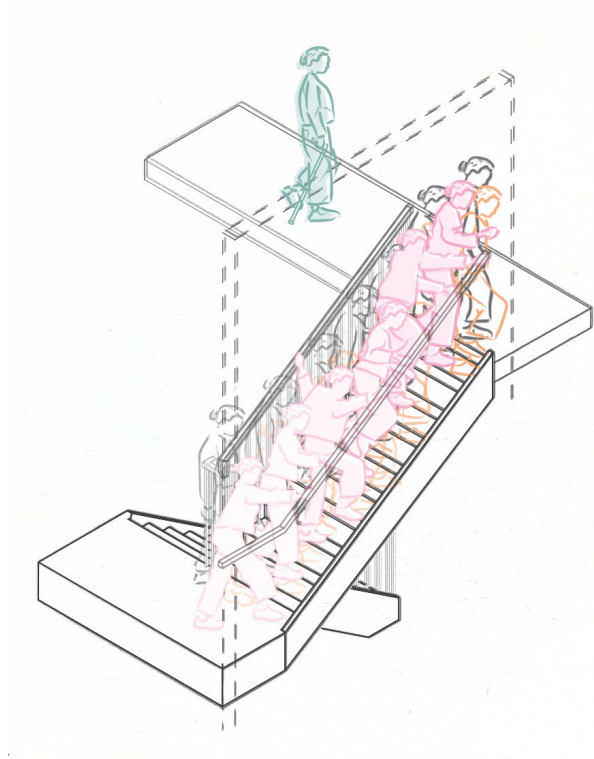


*Another person becomes an extension of oneself
sharing their strength*

fig.10 built world as barriers: curbs. illustrated by author.

With dementia and aging comes progressive physical limitations that tie in with disability studies, which is an emerging field of study that focuses on reframing disability. David Gissen, a disabled designer, professor, and historian of architecture, advocates in his book *The Architecture of Disability* to recenter disabled people in the narrative of design and within the design process. He unpacks how the built environment and design movements have been a tool for the practice of eugenics. In the nineteenth century, there had been a push for the beautification of cities.⁹⁵ The beautification of public spaces was tied to managing spaces based on eugenics. The “ugly law” was created to govern the presence of impaired people in the public. These “ugly laws” made the “undesirables” become invisible to

⁹⁵ David Gissen, *The Architecture of Disability: Buildings, Cities, and Landscapes beyond Access*, (Minneapolis: University of Minnesota Press, 2022), 35



*The consequence of physical barrier can
lead to isolation*

fig.11 built world as barriers: stairs. illustrated by author.

the city. The City Beautiful movement emerged in the height of the “ugly law” in Chicago. The stark white, neoclassical architecture presented with scenes of groomed parks and trees idealized the monumentality of a city and its inhabitants.⁹⁶ This movement then influenced Ebenezer Howard’s “garden city” in the United Kingdom which dealt with the themes of human capacity, infirmity, and nature.⁹⁷ Howard created design strategies to isolate impaired people based on their impairments and related their ailments to nature.

⁹⁶ Gissen, *The Architecture of Disability: Buildings, Cities, and Landscapes beyond Access*, 36
⁹⁷ *Ibid.*, 37

He would remove them from common society to a more rural site so they can be healed by nature.¹⁶ This idea can still be seen today with long-term care homes, or rehabilitation centers where “exclusion on the grounds of race, religion, income, age, ... can lead to homogenous communities that exacerbate fear and prejudice of the other.”⁹⁸ The built world is an instrument that produces physical inequalities in urban spaces that create a sense of exclusion.⁹⁹ These facilities are removed from society, away from being seen, perpetuating prejudices.

Even if you are not removed and displaced into institutional care, public space can become inaccessible as they feel disorienting when trying to interpret the environment that has become hard to navigate.¹⁰⁰ The philosopher John Dewey suggests reframing accessibility in public space as “influence by the ongoing interplay between person and environment,” rather than something static and unchangeable.¹⁰¹

The built world and environment is not just physical space. Public space can derive an emotional attachment and create a sense of belonging. Considerations about ageing and public space must be viewed more holistically. There are intangible elements such as social, cultural, political, spatial, and temporal dimensions that activate these physical spaces.

98 Tobias Armbrorst et al., *The Arsenal of Exclusion & Inclusion*, (New York: Actar Publishers, 2017), 17.

99 Gissen, *The Architecture of Disability: Buildings, Cities, and Landscapes beyond Access*, 57

100 Brorsson et al., “Accessibility in public space as perceived by people with Alzheimer’s disease,”

588.
101 Ibid., 588.

Why Neighborhoods are Important

Neighborhoods are a great place to grow intergenerational bonds. Intergenerational relationships are important to growing a support system. I remember as a child, my grandparents had their friends come over all the time and I noticed the number of visits slowly dwindled over the years and switched to more phone conversations. It's not so much that they lost those friendships, but rather that their friends were also aging at the same time. Soon, it was just family who would visit my grandparents. How can neighborhoods help encourage non-kin, intergenerational relationships to help grow a support system?

Neighborhoods have a vital role to play in reducing and preventing disengagement. It can either enable or constrain the key features of social health for people living with dementia.¹⁰² The ability to maintain good quality of life through outdoor activities and interpersonal relations may be able to postpone institutional care.¹⁰³ In a study that asked a group of volunteers who have dementia to describe a familiar public space, and many described the local vicinity, the neighborhood. This meant that where the volunteers' geographical boundaries of where they felt comfortable were shrinking.¹⁰⁴

"The boundaries to both the social and physical environments that people routinely inhabit constricts over time and this means that the neighborhood takes on a particular significance in a context of living with dementia. According to a social health lens the neighborhood is important because it offers the most immediate opportunities for a person with dementia to participate in social activities and to fulfill their potential and obligations and is thereby a means to avoid the retreat into domestic confinement, which has been shown to compound social isolation following a diagnosis of dementia."¹⁰⁵

102 Richard Ward et al., "The lived neighborhood: understanding how people with dementia engage with their local environment," *International Psychogeriatrics*, Vol 30 (2018): 877.

103 Duggan et al., "The impact of early dementia on outdoor life," 191.

104 Brorsson et al., "Accessibility in public space as perceived by people with Alzheimer's disease," 591.

105 Ward et al., "The lived neighborhood: understanding how people with dementia engage with their local environment," 868.

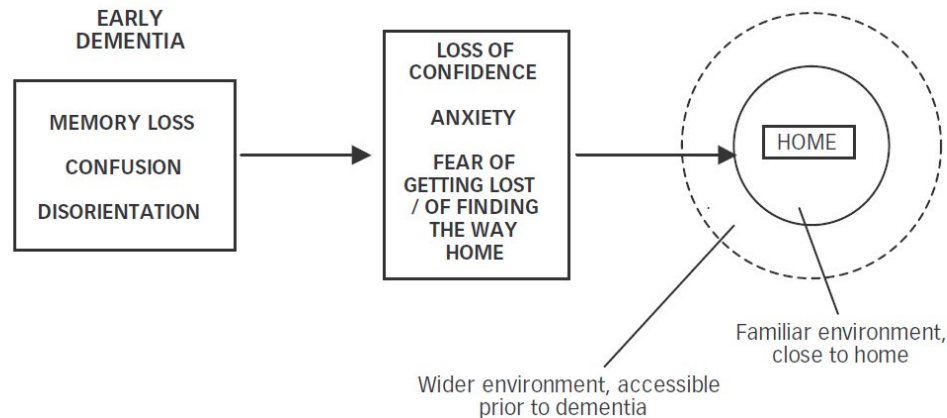


fig.12 a model of the shrinking world of a person with dementia.
source Duggan, S., et al., 2008.

There is a societal fear of ageing that perpetuates the stigma and negative stereotypes attached to having dementia and to old age itself, risking social exclusion. Public space enables the enmeshment of public life, allowing life to unfold in places where the habitants of society are allowed to be, to see, to be seen and interact with each other.¹⁰⁶ Access to public space presents the opportunity to allow people to have informal intergenerational interactions.¹⁰⁷ The interactions of varied generations and ages can lead to people sharing knowledge, having someone to talk to or being able to have someone to rely on. The neighborhood has the potential to become part of a person's support system in their life. The neighborhood is a multi-faceted, environment where spatial, temporal, and experiential factors intertwine with the people who occupy it.¹⁰⁸ This does not mean they will be conflict free but provides the opportunity for chance encounters, informal meetings, and the negotiation of space.¹⁰⁹ When consulting people who have early dementia, the study says that they value the outdoor environment for reasons such as exercise, fresh air, emotional well-being, and the chance for informal encounters with neighbors and friends.¹¹⁰ The environment where your home is located will become a familiar environment over time and familiarity is important

¹⁰⁶ Hauderowicz, *Age Inclusive Public Space*, 32.

¹⁰⁷ Ibid., 19.

¹⁰⁸ Ward et al., "The lived neighborhood: understanding how people with dementia engage with their local environment," 869.

¹⁰⁹ Hauderowicz, *Age Inclusive Public Space*, 34.

¹¹⁰ Duggan et al., "The impact of early dementia on outdoor life," 191.

especially for those with dementia. Change to the environment can cause confusion, feeling a loss of independence and control deterring people from going out altogether.¹¹¹ A study that looked at the relationship between dementia and neighborhoods demonstrated that people with dementia felt like they still had a claim to their neighborhood.¹¹² Neighborhoods are an extension of the home and are in dialogue with each other. They do not exist independently.

Growing Community

Now that my grandmother is living in a long-term care home, she has been removed from her social network. The only people who visit her is family. Phone calls from her friends have also decreased as they are also experiencing ageing, and some have passed. My grandmother has also become non-verbal in the current stage in her dementia; however, she still receives a phone call from a friend occasionally. This friend knows that my grandmother may not answer but she still calls. This friend used to live in the same village as my grandmother in China and the culture was that people in the village are your family. It was customary to address people who are not blood-related as auntie, uncle, sister, or brother. This friend and my grandmother call each other sisters. How can we grow community that encourages non-kin relations?

In Western society, we have slowly moved away from knowing our neighbors and have become more individualists, so how can we grow community in the neighborhood again? Dementia is a condition that has led to people being confined indoors for safety precautions, with little consideration of how people with dementia can participate and benefit from activities of everyday living beyond the boundaries of their homes.¹¹³ Neighboring relations can consist of non-obligatory willingness, of practical and emotional support, through low level, informal, and benign

¹¹¹ Duggan et al., "The impact of early dementia on outdoor life," 199.

¹¹² Ward et al., "The lived neighborhood: understanding how people with dementia engage with their local environment," 872.

¹¹³ Duggan et al., "The impact of early dementia on outdoor life," 192.

acts of kindness and companionship. Neighbors can also serve as a way to keep a eye out for one another, and step in at times of potential risk.¹¹⁴ The action of “neighboring” as a form of practical and emotional support, can offer a diverse connections that can help the person living with dementia to maintain a sense of belonging within their neighborhood.¹¹⁵ Regular and routine interaction with “strangers” can help make someone feel seen as their own person and feel valued.¹¹⁶ Being able to look out for one another to ensure their well-being allows people with dementia to participate in community settings within the fabric of the neighborhood. This capacity to care for others contributes to people’s ability to participate in social life.

Placemaking

The neighborhood encompasses more than just a conglomerate of houses where people reside; it’s about how individuals engage with, utilize, experience, and identify with the space. My grandmother followed a typical routine within the neighborhood. She frequented familiar places such as the mall for grocery shopping, the elementary school to drop off her grandchildren, and the park to meet with friends. Her journey began at home, where she spent most of her day seated on the couch, observing the world from the window. Residing in a corner house, she had a clear view of the intersection and used the bus route, which my dad took every morning, as a way to keep track of time. Venturing outside, she would pass by her garden, catching the scent of jasmine from the honeysuckle bush as she departed. Her usual route often led to the mall, a convenient one-stop destination for all errands. It was also where my grandparents frequently encountered their friends. Even on days when their sole purpose was to purchase a newspaper, they willingly made the trip, hoping for the chance to see

¹¹⁴ Ward et al., “The lived neighborhood: understanding how people with dementia engage with their local environment,” 873.

¹¹⁵ Ibid., 874.

¹¹⁶ Ibid.

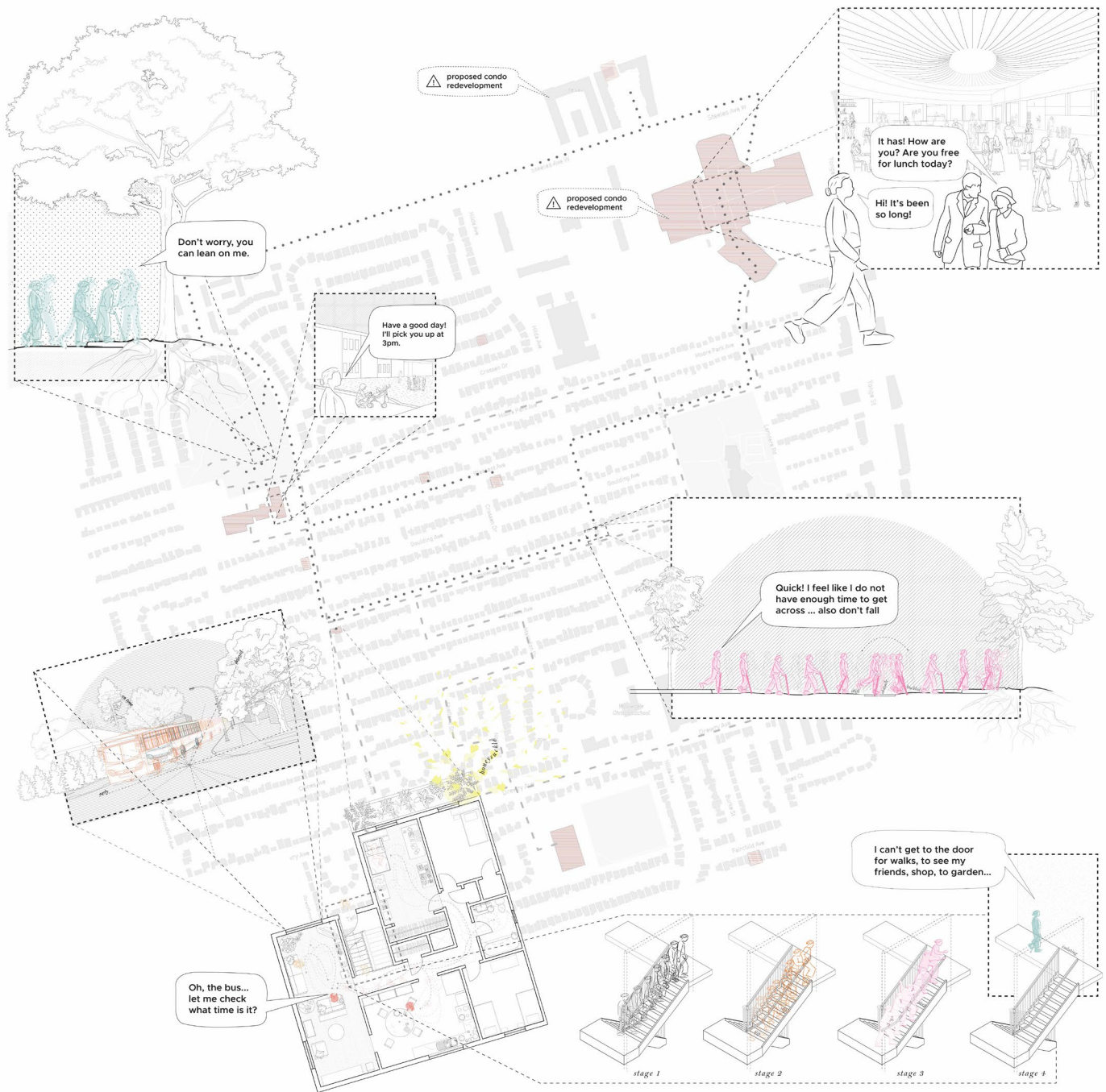


fig.13 everyday neighborhood journey of my grandmother. illustrated by author.

familiar faces. Additionally, my grandmother would visit the park near the elementary school to socialize with friends. Remaining within her neighborhood would have allowed her to maintain her social network and access spaces that held significant value and countless memories for her.

People consider themselves “at home” in certain neighborhoods and identify the larger context in which they live. How people experience and inhabit the streetscape, physically, symbolically, and emotionally depend upon how they choose to accept or challenge the status quo of their given environment.¹¹⁷ The act of “place-making” is an example of how people with dementia can determine how to interact with the environment based on their own capabilities.¹¹⁸ Place-making occurs subtly over time, offering a way for residents to capitalize on a local community assets and potential making it their own. Familiarity will grow with certain public spaces that promote people’s well-being through active participation in place.¹¹⁹ The concept of “place” and “place-making” speaks to the human experience emotionally, spatially, and temporally.¹²⁰ Public space is a geographically located site and only becomes a “place” once meaning is attached to it. The involvement of the community builds in the emotional connection to space over time. This emotional production generates “devotion, generosity and solidarity” in the community. It is dependent on seeing oneself in relations to others to continue the growth of emotional connection.¹²¹ This will have unique meaning depending on the person. A study in Stockholm, Sweden had informants who have dementia tells stories about their lives and by doing so they made places out of spaces because of the meaning they attached to those spaces.¹²² Social interaction in public settings can impact how a person feels about themselves and how they fit amongst others. Claiming social space and being seen in public is a way to validate their right to belong in society.

117 Weisman, *Discrimination by Design: A Feminist Critique of the Man-made Environment*, 67.

118 Ward et al., “The lived neighborhood: understanding how people with dementia engage with their local environment,” 876.

119 Ibid., 876.

120 Brorsson et al., “Accessibility in public space as perceived by people with Alzheimer’s disease,” 589.

121 Menna Agha, “Emotional Capital and Other Ontologies of the Architect,” *Architectural histories* 8, no. 1 (2020): 9.

122 Brorsson et al., “Accessibility in public space as perceived by people with Alzheimer’s disease,” 597.

How people interact with others socially in public spaces impact how they see themselves and others. The right to be a part of and not just exist in public is an important way for people with dementia to assert their own legitimacy in belonging to the public sphere.¹²³ Engaging in public place-making is essential.

Designing for the Neighborhood

“The city planner has not yet come to realize the full nature of [their] task: the provision of an environment suited to every phase of life and growth, from infancy to senescence.”¹²⁴

- Lewis Mumford, 1949 (*American historian, sociologist, philosopher of technology, particularly noted for his study of cities and urban architecture*)

We have no control over what or how much our bodies change as we age, but as we age the environments that we live in remain the same. It becomes disabling and constraining. Research has shown that there is potential for design to alleviate stressors for dementia and ageing.¹²⁵ When designing the built environment, consideration for a full sensory experience for the body is encouraged.¹²⁶ Two key aspects of the ecology of ageing are agency and belonging. Having agency is to feel a sense of autonomy over daily life while belonging is felt through experiences and contributes to the formation of identity attached to places and social settings.¹²⁷ Both determine the quality of life for the individual.

Strategies such as inclusive boundaries encourage intergenerational interactions and meetings. This can be accomplished through physical separation if required while still allowing visual connection, creating

¹²³ Hauderowicz, *Age Inclusive Public Space*, 36.

¹²⁴ Hauderowicz, *Age Inclusive Public Space*, 9.

¹²⁵ Ward et al., “The lived neighborhood: understanding how people with dementia engage with their local environment,” 868.

¹²⁶ *Ibid.*, 869.

¹²⁷ Hauderowicz, *Age Inclusive Public Space*, 11.

inclusive boundaries.¹²⁸ There is an initiative in New York city that encourages local businesses to provide amenities for older adults, such as accessible bathrooms, free cups of water or even special happy hour deals.¹²⁹ Another strategy is to design for versatility. Spaces that promote various interpretations can form its identity through shared experience from the users.¹³⁰ From an age-inclusive perspective, the atmospheric experience is age-less. It offers both young and old a common ground for individual experiences. Colors, smells, textures, water, and wind can be felt over time in accordance with the seasons, temperature, time of day, and different lighting conditions.¹³¹ The future is unknown but if the built world allows us to achieve agency and belonging at all ages, then it can lead to a stronger connection to place and community.

The World Health Organization (WHO) created the global Age-Friendly Cities (and Communities) project launched in 2005, emphasizing “active ageing” and “optimizing opportunities for health, participation, and security in order to enhance quality of life as people age.”¹³² Recommendations outlined in 2007 from a London research team include:

1. Think beyond families, people need support and social contact with people of similar age.
2. The accessible local environment should be perceived in “short distances strung together with staging posts” benches, sitting places at bus stops, public toilets, well maintained pavement, good road crossings.
3. Develop interests between generations – intergenerational interaction is essential.
4. Older people ageing in place become “a point of stability and continuity” for the community.
5. “Neighborhood” is the goal to be achieved rather than the starting point.

128 Hauderowicz, *Age Inclusive Public Space*, 174.
 129 Armbrorst et al., *The Arsenal of Exclusion & Inclusion*, 35.
 130 Hauderowicz, *Age Inclusive Public Space*, 184.
 131 Ibid., 200.
 132 Ibid., 41.

In 2015, they revised the recommendations by adding the following points to the recommendations:¹³³

1. Better homes and “walkable” neighborhoods.
2. Accessible public transit.
3. Opportunities for employment and volunteering.
4. Adequate incomes that enable a comfortable life and participation in desired activities.
5. Accessible health and social care services that minimize the impact of adverse health conditions or disability.
6. Readily-available information, including through the internet
7. Dignity and respect through positive language and images of ageing for all, irrespective of their gender, class, ethnicity, or disability status.



fig.14 the WHO age-friendly city. source Dominique Hauderowicz, 2020.

133 Hauderowicz, *Age Inclusive Public Space*, 41.

What I found missing from these recommendations was how to execute these goals. For example, how do you generate interests between generations, how do you alter the societal mindset from segregating the older generation to them being the pillars of the community? They are good points with no action plan.

Overall, the neighborhood can become a tool and be an abundant resource for people to grow community and to claim public space through placemaking by providing a sense of belonging and agency. Public space is a multifaceted network with the potential to go beyond how we engage with it now.

Case Study

Play Street: The Transformation of a Copenhagen Play Street

Musholmgade Street in Copenhagen became a play street in the 1950s, designed by Max Siegumfeldt. He converted large portions of end streets and back alleys of central Copenhagen into community play streets, creating safe inner courtyards where children and adults can play and leisure.¹³⁴ Future development led to the creation of separate paths and removed the opportunities of chance encounters and the elastic qualities of the place it once was. Too many harsh, predetermined boundaries do not let the community decide for themselves how they want to use the space.



fig.15 play street at musholmgade, copenhagen, 1959. source Dominique Hauderowicz, 2020.



fig.16 play street at musholmgade, copenhagen, 2019. source Dominique Hauderowicz, 2020.

134 Hauderowicz, *Age Inclusive Public Space*, 168.

Case Study

Block Party: From Independent Living to Disability Communalism

A contemporary precedent that is more aligned with neighborhood interventions is a project from the Center for Architecture. David Gissen's multidisciplinary team developed the project called Block Party: From Independent Living to Disability Communalism. The project reimagines architecture and urbanism that can support autonomy whilst also providing mutual aid and communal support in Berkeley, California. This project challenges the current zoning policy for private, single-family properties to switch to a more just, diverse community where disabled people can live together, cooperate, and exercise individual and collective agency over their lives and environments.¹³⁵

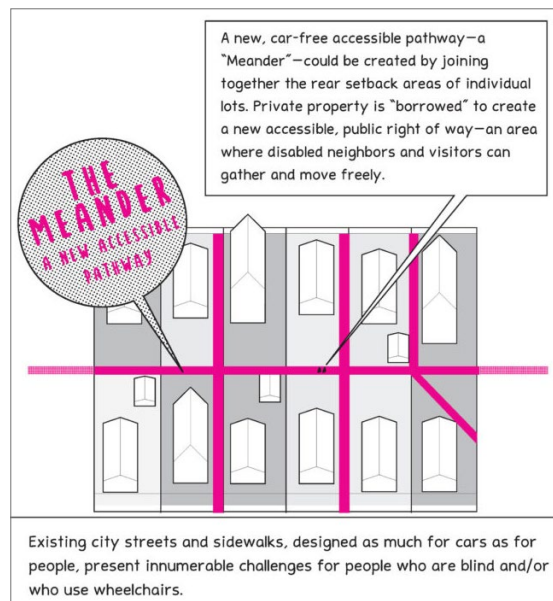


fig.17 block party: strategies of commoning. source Center for Architecture, 2023.

¹³⁵ Center for Architecture, "Strategies of Commoning," accessed December, 2023, <https://www.centerforarchitecture.org/digital-exhibitions/article/reset-towards-a-new-commons/strategies-of-commoning/>.

“What if the neighborhood could adapt so those with dementia did not have to be displaced?”

Reimagining Livability

Current cities can be isolating, overwhelming and risky for those with varying abilities, and dementia is no exception. I decided to consider the urban scale rather than just focusing on the home because people with dementia should not be confined by the boundaries of their residence alone. They should feel secure in their local environments. In the neighborhood that has been pivotal to my family, I have explored a series of urban and architectural scale systems that can help grow community and care to make an environment that is dementia friendly. I have looked at the neighborhood retrospectively, as if the new interventions that will be discussed in this section were implemented when my grandmother still lived there. The following interventions take into consideration reducing barriers of the built world to be more accessible, creating urban conditions that can instill confidence while navigating the neighborhood. There are proposed community programs and services to aid in making resources more accessible, as well. My proposal builds on the work of Aimi Hamarie, a crip author who is challenging what modernist deem as a livable city. “Livable cities” have been characterized as “good and efficient”. Livability calls to question which bodies get to live in these spaces. They offer a new term alterlivability to reclaim livability

as a justice driven and anticapitalistic design method that commits itself to ongoing work of prototyping, trial and error and revision on the way to better urban futures.¹³¹ If we design for the most vulnerable then it yields benefits for all.

Looking at reimagining livability in the Newtonbrook West neighborhood as an interwoven site of urban and community interventions in effort to support those with dementia. The following strategies are adaptable and can be applied to other neighborhoods based on the specificity of the community and the residents have a say as to how to negotiate the program and use of space.

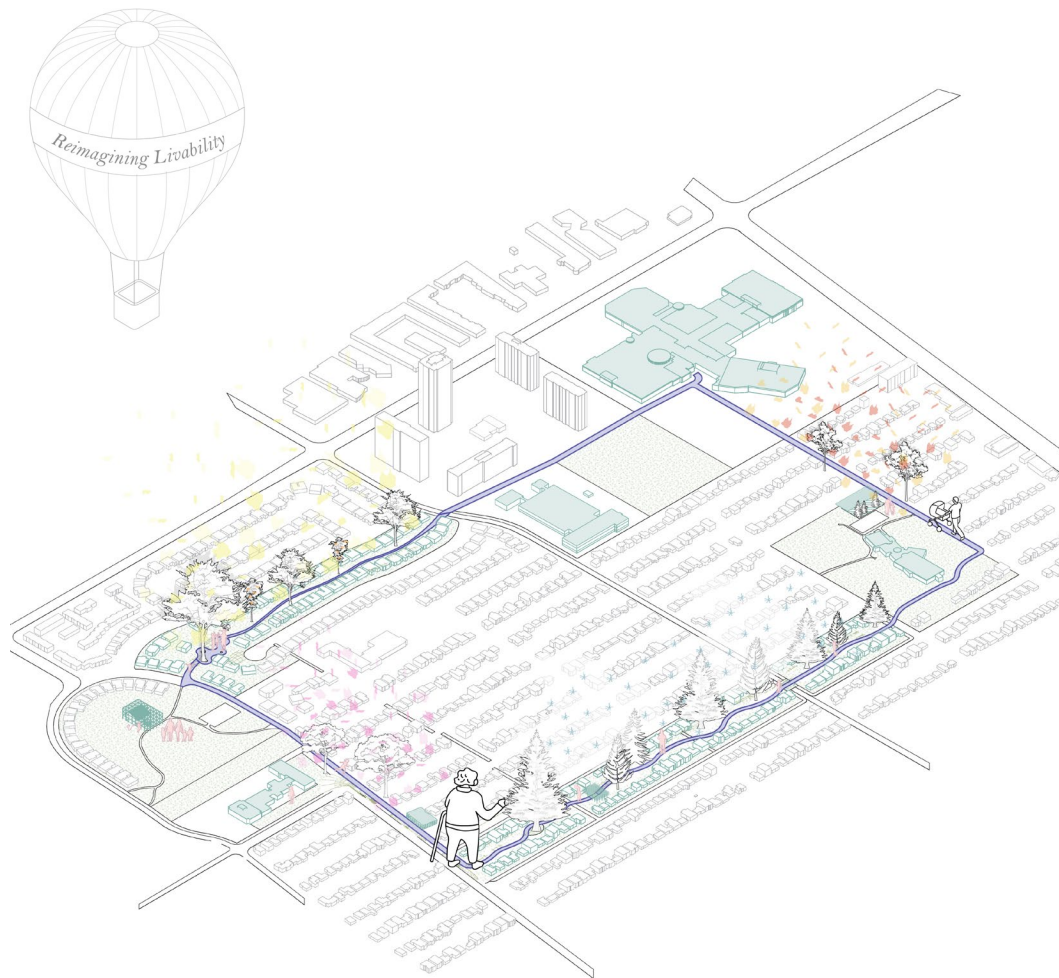


fig.18 reimagining livability of the newtonbrook west neighborhood. illustrated by author.

131 Aimi Hamraie, "Alterlivability," 426.

The Home

The first scale that my project addresses is that of the home. From observing the barriers that my grandmother faced, the initial challenge was accessing the outdoors. Split-level homes, such as hers, require stairs to enter and exit the home. There is potential to retrofit garages if people no longer drive and have no use for them. These spaces can serve as private areas for individuals or be opened up to the community, fostering a network of communal spaces established by the residents. This initiative can facilitate the sharing of interests and the exchange of knowledge among neighbors. The garage interventions can be part of a broader urban intervention, which I will describe in the following paragraphs.



fig.19 my grandmother's under utilized garage is retrofitted to become a greenhouse to offer an indoor-outdoor space for her everyday life. illustrated by author.

Circulation

The Greenbelt

The second scale that my project addresses is the scale of the neighborhood. The neighborhood can be seen as an extension of the home. I propose the insertion of a greenbelt. The greenbelt challenges exiting property laws so that the community can negotiate how they use their space. The greenbelt is conceived by looking at reimagining privatized backyards and questions the notion of private property and its borders. By removing the division of space created by law and fences, it can become a more porous environment that generates social and visual connections. Then, if a person with dementia gets lost and wanders, people will be able to help lead them home if they get lost. It can also bring a sense of security to those with dementia knowing that there are people around, looking out for them passively. The city can buy back a third of the land from the homeowners for the shared path to become eminent domain and the residents have the choice to determine how much of their backyard they want to share after that. It can be none, can be another third of the property or the entire backyard can be shared with the community. This method can also make it more affordable as people grow older and for first home buyers bringing in more intergenerational communities by breaking up parcels of land into many parcels.

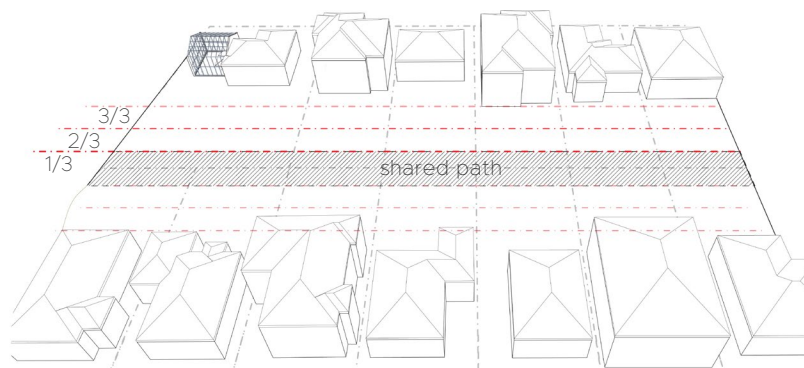


fig.20 negotiation and commoning of space, rethinking private property and its borders. illustrated by author.



fig.21 the wandering loop running through the greenbelt. illustrated by author.

After land is negotiated, different methods of creating permeable separation can take shape as artificial landforms, shrubbery, and short fencing. The height of these boundaries limited to guardrail height of 1100mm, to keep visual connections and can also function as an aid for balance. The garages or outdoor sheds mentioned before can become a network of communal spaces, established by the residents, as extensions of the home integrated within the greenbelt.

Here in fig.21 is the greenbelt, where you can see the landforms become informal seating, a playscape and a place to lean on to rest or find balance. The curation of certain trees and plants favoring a particular season can become an identifier of place whilst also creating micro atmospheres to help with navigation. The green belt is curated for winter, featuring more coniferous trees to maintain touches of green year-round, along with a distinct scent of pine. With the added health benefits of fresh air, natural shading and making the journey of wandering enjoyable.

The Wandering Loop

The path going through the greenbelt is a part of a larger circulation strategy called the wandering loop. Different circulation methods are implemented, decentralizing the car and prioritizing people while still connecting to pivotal anchor points of the community as highlighted in fig. 22.

The wandering loop is a method of navigation for dementia as it helps bring a person back without confusing directions as inspired by the *Alzheimer's Respite Center* as mentioned earlier. Through the neighborhood investigation of my grandmother's journey, it helped inform the anchor points of the site while also taking into consideration existing boundaries such as school districts, and existing amenities. There are three different circulation methods being explored. The wandering loop denoted in purple is the main walking path. The proposed materiality is a textured, non-slip rubber crumb material typically seen in splash pads and playgrounds. The material possesses a sensory haptic component, allowing you to feel each step, which is advantageous for the young and elderly, as it reduces the risk of harm in case of falls, addressing a common concern. The loop is a consistent colour to be easily identifiable for anyone who strayed from the path and wants to get back.

Taping into the senses, time and seasonality can help with navigation. In fig.18, the section of the wandering loop that runs through the green belt on the south side will be mainly coniferous trees offering a distinct scent and acting as a winter garden in the colder months. The east side is more heavily influenced by fall, west by spring and north path by summer. The sensorial qualities can enhance spatial perception and navigation for individuals with dementia.

Catwalk

A circulation strategy that already exists in the neighborhood are catwalks. Catwalks are walking paths that run alongside the length of two houses to create short-cuts of large city blocks depicted in orange in fig. 22. Catwalks are often unmapped, known primarily to locals, serving as markers of placemaking and fostering a sense of familiarity for those who utilize them. This method of circulation helps make journeys more customizable and can branch from the main path to create mini loops. These catwalks can also be programmed by the residents to have community gardens, seating, or installations. They can determine how these spaces are used to make it their own. These circulation strategies can be adapted and implemented in other neighborhoods based on their community needs.

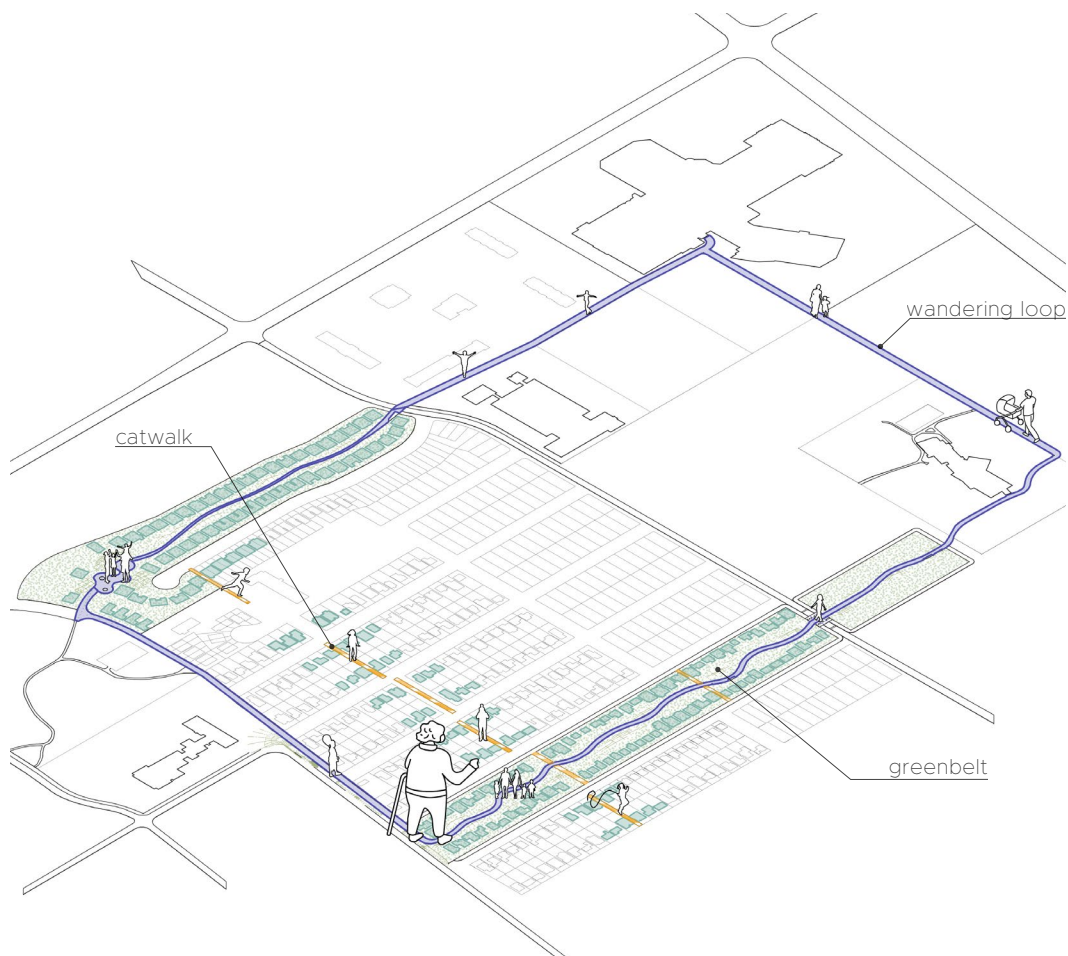


fig.22 circulation axonometric of the neighborhood illustrating the proposed wandering loop, greenbelt and catwalk. illustrated by author.

Intersections & Safety

While trying to reduce dependency on automotive ways of travelling, I acknowledge that they are still part of everyday life. There are conditions of the loop that interact with cars which become important. The condition where cars run parallel to the loop, it is important to have zones and layers of safety. The use of landforms can provide a safety barrier while also leaving openings to become a permeable boundary physically and visually. It is important that the wandering loop boundaries do not exclude the neighbors beyond the loop and to not seclude the residents within the loop boundaries. The landforms are the more solid boundary for safety with landscaped openings that can also be a place for seating that connect to the sidewalk on the other side if a person needs to catch the bus or they live outside of the loop boundaries.



fig.23 urban condition of an automotive street running parallel with the wandering loop. illustrated by author.

In fig.24, is where the loop and street intersect. The speed bumps are the first precaution for slowing cars down which leads to the stop signs. Here billiards line the loop to show cars that people are the priority. Typically, the billiards are facing the pedestrian paths, being the obstacle for the people to walk around, whereas here, it is facing the cars so that they drive more carefully between the billiards. While the loop colour continues to maintain visual consistency, the material changes just where they intersect to indicate a haptic change on the surface. Finally, an effective strategy to establish clear boundaries without obstructing the driver's view of pedestrians is to utilize low vegetation or railings.

Understanding flow is also important for the implementation of a mobile care vehicle that helps makes medical care more accessible and familiar rather than daunting. The mobile care vehicle is in relation to the community program, the Health Hub which is a proposed community intervention. The principle of having healthcare services in the neighborhood is to center care over cure.

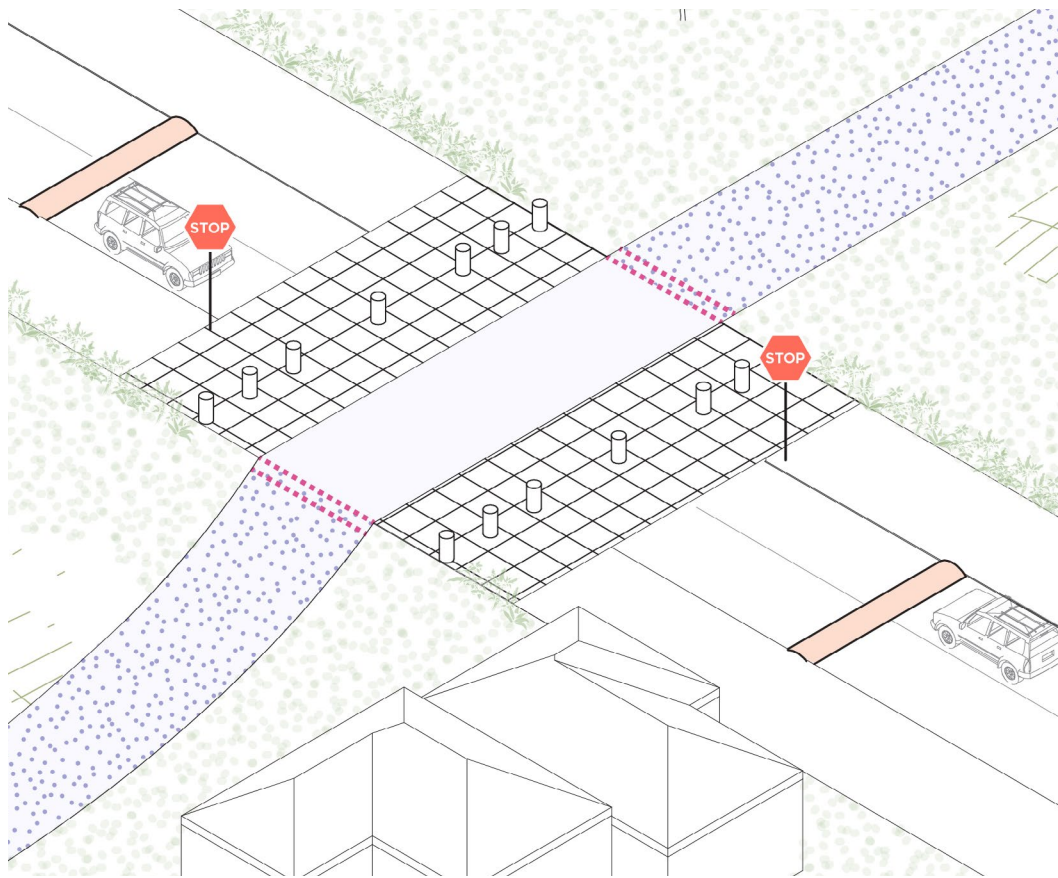


fig.24 street meets loop intersection. illustrated by author.

Support Infrastructure

Urban Support Infrastructure

As people move around the neighborhood, wishing to spend time outside, or in need of assistance, there are different urban support infrastructures that can be found along the entire loop.



fig.25 urban support infrastructure along the wandering loop. illustrated by author.

Illustrated in fig.25, the help button shown is like the ones on university campuses. Help buttons are placed every 200m along the wandering loop if you need medical assistance or are lost, and are generally a safety feature for all. When you call the help button it is received at the health hub which connects to the community support infrastructure. Public restrooms are available along the loop, allowing people more time in public spaces. More access to restrooms helps eliminate fear of finding yourself in need of a restroom when there are none especially for those who are ageing, young children and mothers. There is at least one public

restroom on each section of the loop. The entire loop is on average an hour walk and everyone moves at different paces and speeds. Seating is important for public spaces to provide space to socialize and rest. Offering a variety of fixed and loose seating allows people to have a choice. The availability of loose seating empowers individuals to configure them according to their immediate needs, granting them a sense of ownership over the space and the freedom to utilize it as they see fit.

Currently, suburban neighborhoods prioritize cars and there are many surface parking lots available. In the neighborhood, the mall has a large surface parking lot that has the potential to be activated for different seasonal purposes. The intervention looks at using the standard parking spot dimensions to create a modular structure that can become temporary community spaces such as market structures and interactive seating. In other scenarios, it can be implemented to activate street parking as well. The modular system is an urban support infrastructure that can host community events.



fig.26 modular structures to activate surface parking lots, christmas market scene.illustrated by author.

Community Support Infrastructure

The following community support infrastructure outlined in this section are inspired by programs that would have helped my family support my grandmother to remain in this neighborhood. An emphasis on health services, offering a variety of activities, and food can be seen in the following interventions.

Health Hub

The Health Hub's goal is to provide care for everyday living. There are different ways to care that can help with everyday life. The hub can offer services such as physiotherapy, massage therapy, an around-the-clock nurse's station, and can offer at home care with the mobile care vehicle. The help button positioned along the loop directs calls to the Health Hub, where responders can address accidents such as falls and provide assistance in deescalating stressful situations. It is also located by the community center where sports injuries may occur. The health hub is open for all community members of all ages. The public restroom for the east section of the loop is located here as well. Having health services for the local area makes care services more approachable and less daunting. Its proximity to home makes it more conveniently accessible.



fig.27 health hub. illustrated by author.

Living Room Gallery

Spending time outdoors is free but there should also be open, public indoor spaces that are free to the community as well. The Living Room Gallery is a proposed makerspace café, a community space where you can occupy for the entire day. The local community center had a limited amount of classes for adults as most of the current classes are for people under the age of 18. There is only one art class offered for people age 65+, once a week for one hour. You do not need to spend money in order to use the makerspace. Residents can also borrow crafting resources to take home, similar to the public library system. The café component is to bring food and drink into the neighborhood since most are around the outskirts of the neighborhood. This space allows you to move at your own pace while creating intergenerational interactions and friends over a shared interest. The façade acts as a drying rack from within but presents the artwork like a gallery on the facade for people to share their work with the community at all times of day.



fig.28 living room gallery. illustrated by author.

Community Kitchen

The proposed community kitchen is located by the elementary school in Moore Park wanting to offer a playground for food amongst the existing play structures of the park. The community kitchen is a community intervention that has meal prep on the ground floor and a green house on the second floor. There is a lot of open land in the park that can offer outdoor community garden space. Gardening offers low impact physical activity, intergenerational interaction, and building relations which is pivotal for staying engaged with the community. It offers to make fresh produce more accessible as well. Additionally, collaborative cooking can lead to sharing recipes and bonding when language can be a barrier and people can communicate through cooking. This can also result in group dinners. For those who are unable to cook anymore, meals can be delivered to the door of residents who need a lending hand. It also doubles as a system to check in on the person daily, bringing the social interaction to them. Cooking classes for all ages can be offered here, with sessions taking place on the ground floor and a teaching garden located on the second floor.. It is a program that can pass knowledge down between generations and a way to bond over a shared activity.



fig.29 community kitchen, playground for food. illustrated by author.

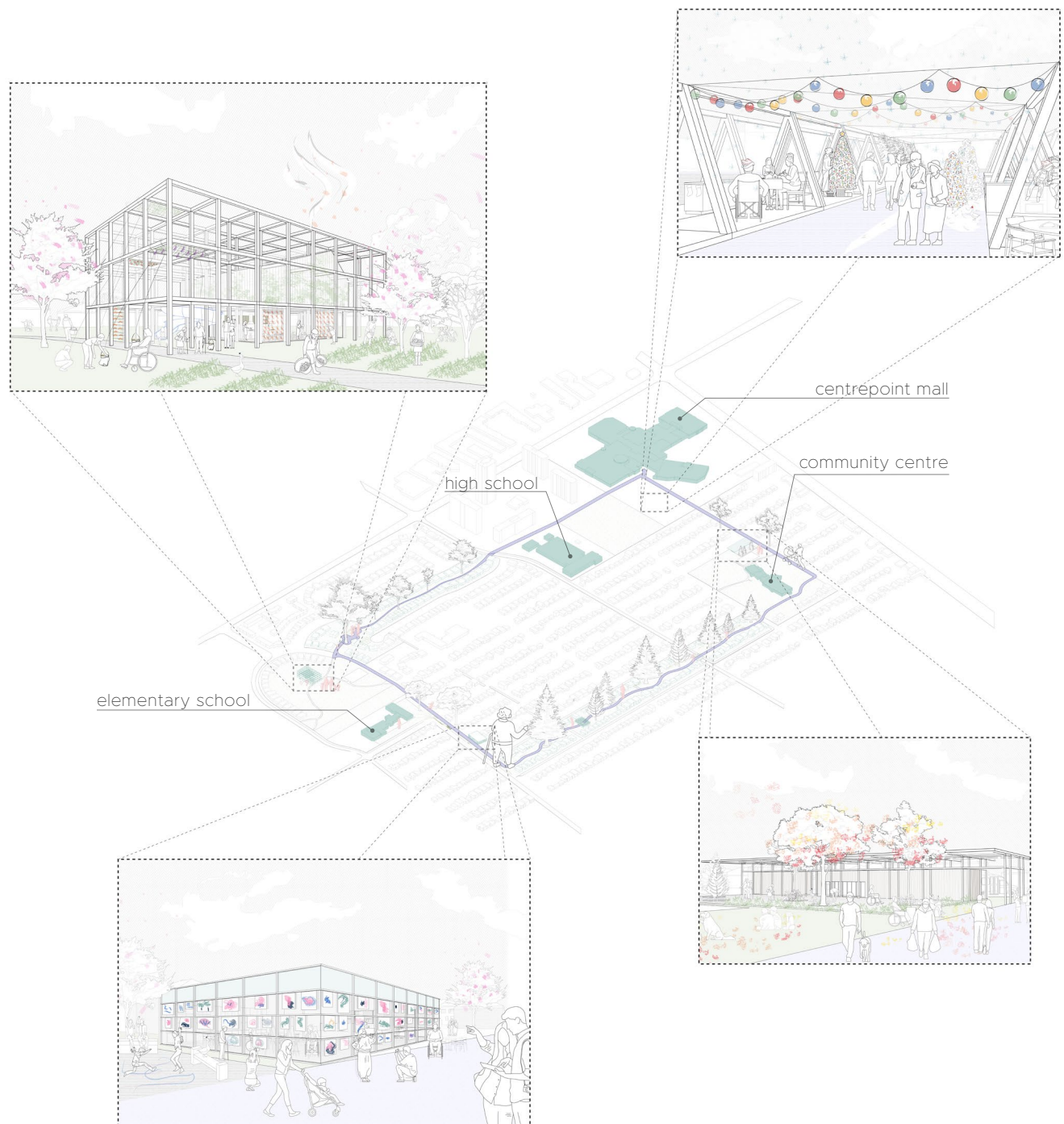


fig.30 community intervention locations. illustrated by author.

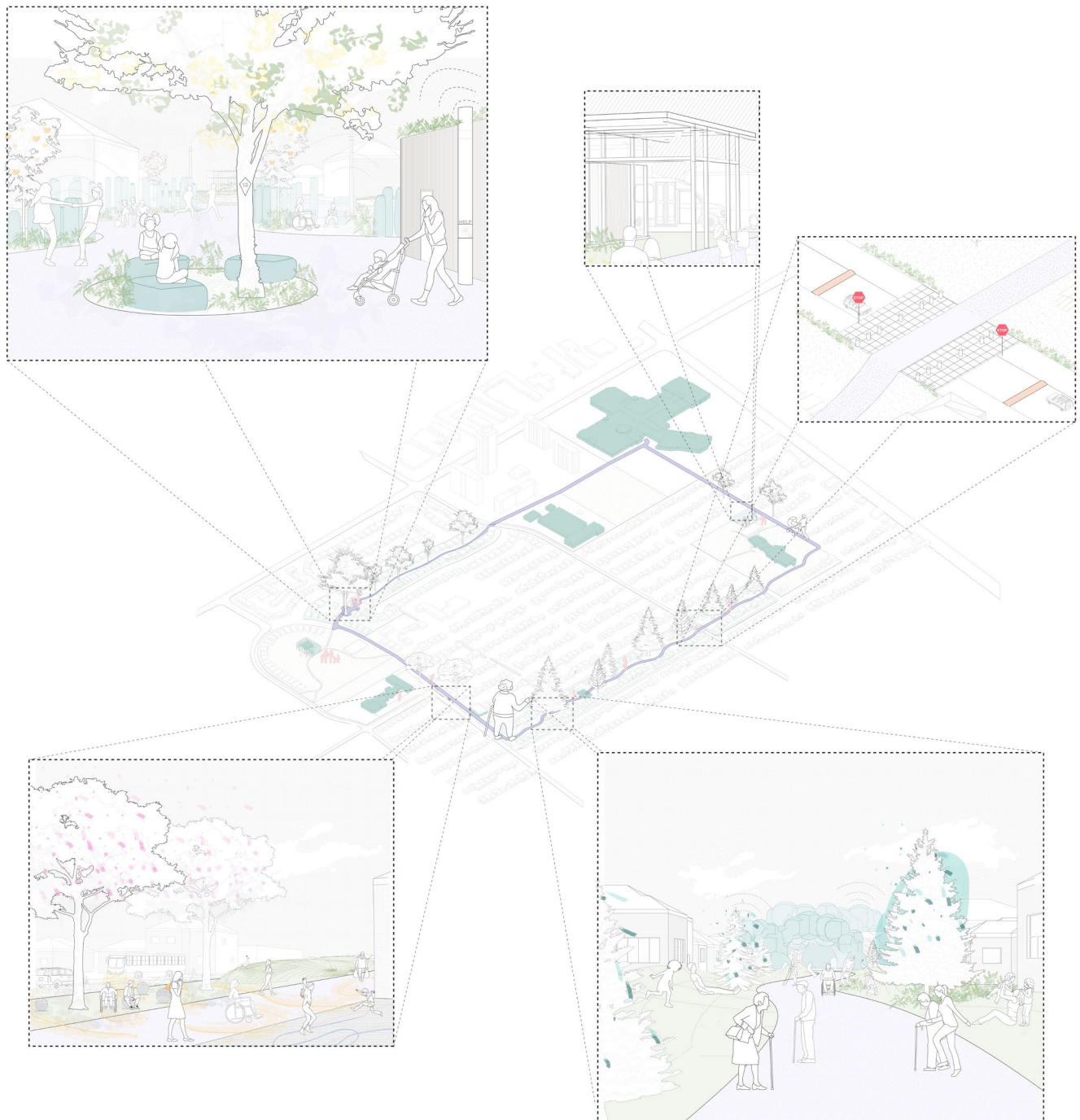


fig.31 urban intervention locations. illustrated by author.

With the combination of urban and community interventions, a new network of support is created for the entire community. The hope is that these strategies and interventions can support the stages of ageing and those with dementia. If no changes occur to the public realm in regard to ageing and dementia, then the same systems and problems will be perpetuated. The current healthcare system is already overwhelmed and cannot support the incoming ageing population. We need to start rethinking what it means to live in our neighborhood and to grow communities of care.

*“Understanding
your positionality
is important”*

Epilogue

I am grateful for the time given to me to work on this thesis. This thesis has allowed me to explore a topic I am passionate about and has allowed me to grapple with my own personal queries that has prepared me for the next step of working with other communities and hearing other people's stories.

Understanding positionality is an important first step. I feel like I now have the research and understanding to take on other people's stories and concerns to help further develop this project. With more time I would look at the city of Toronto's demographics and find neighborhoods who have a large ageing population and conduct community meetings to see how their communities would like to engage with their neighborhoods.

Feasibility

Throughout the thesis process every time I wanted to do something “radical” it scared me. I had this voice telling me that this will never happen, it disrupts what already exists, that this is not possible. In allowing myself to not be confined by the existing systems and social structures, I was able to showcase a new mentality.

This project had to grapple with challenging existing systems of capitalism, ageism and ableism. I approached this project by thinking about an ideal world and how to fathom it within our reach. So, if in an ideal world and this project were to be executed, I would start with home interventions. Looking at how to make the home accessible for the resident while still thinking about how to connect it with the neighborhood at large to help grow community and relations. The next step would be to create urban connections and infrastructure to make the existing services and amenities accessible for everyone to get to. These interventions include the circulation strategies such as the wandering loop and green belt, and the intersection and safety interventions. The next phase would be to add new community services to the urban infrastructure to build the social infrastructure.

If this project were to be built in our world today, questions about its funding would naturally arise. The method of an existing tax structure called Tax Incremental Financing (TIF) was suggested:

“Tax increment financing (TIF) is an incentive mechanism that can be used to encourage property development or redevelopment, usually within designated areas. Tax increment financing is generally used to encourage development in situations where, due to environmental conditions or other economic factors, development would be unlikely to proceed in the absence of financial incentives.”¹³²

¹³² Policy and Finance Committee, “Using Tax Increment Financing as a Development Incentive within the Draft Etobicoke Centre Secondary Plan Area (Ward 5 - Etobicoke Lakeshore),” *City of Toronto*, (February 2003): 2.

The suggested method of payment may not be sustainable in the long run if, following the implementation of these changes, there is a need to increase property taxes for the affected residents. The increase in property tax could negatively impact the elderly and potentially contribute to the gentrification of the neighborhood, thereby displacing existing residents which is not the desired outcome. The project challenges capitalist ideology. This project highlights the inadequacies of current tax and payment systems and calls for a rethinking of how we value property over sustainable living.

Resources

In Appendix I, there is a Design Guide that outlines these strategies from Chapter 4. It is a document that moves away from the rigid, convoluted language of standards and laws to adaptable strategies that can be customized to meet the different needs of the communities in a more accessible manner.

Appendix II is a story book that can become a pedagogical tool for all ages to grasp the idea of dementia. Throughout the story, we follow a grandmother lost in the neighborhood who relies on her senses to help trigger memories that lead her home. In the back of the book, it describes how designing for the senses can help with navigation and encourages the reader to pay attention to their senses.

Finally, Appendix III contains a drawing aimed at sparking your imagination regarding how these spaces will be inhabited in the reimagined world. It's only when meaning is attached to a space that it truly becomes a place. The top half of the drawing features fictional memories from three generations, illustrating how one place can hold different meanings for different people.

Conclusion

The hope is that these strategies and interventions will help inspire us as a society to challenge the status quo of our current structures and system for better urban futures for all. This is all in effort to answer the question: what if the neighborhood could adapt so those with dementia did not have to be displaced?

crip studies
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social justice
dementia
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Bibilography

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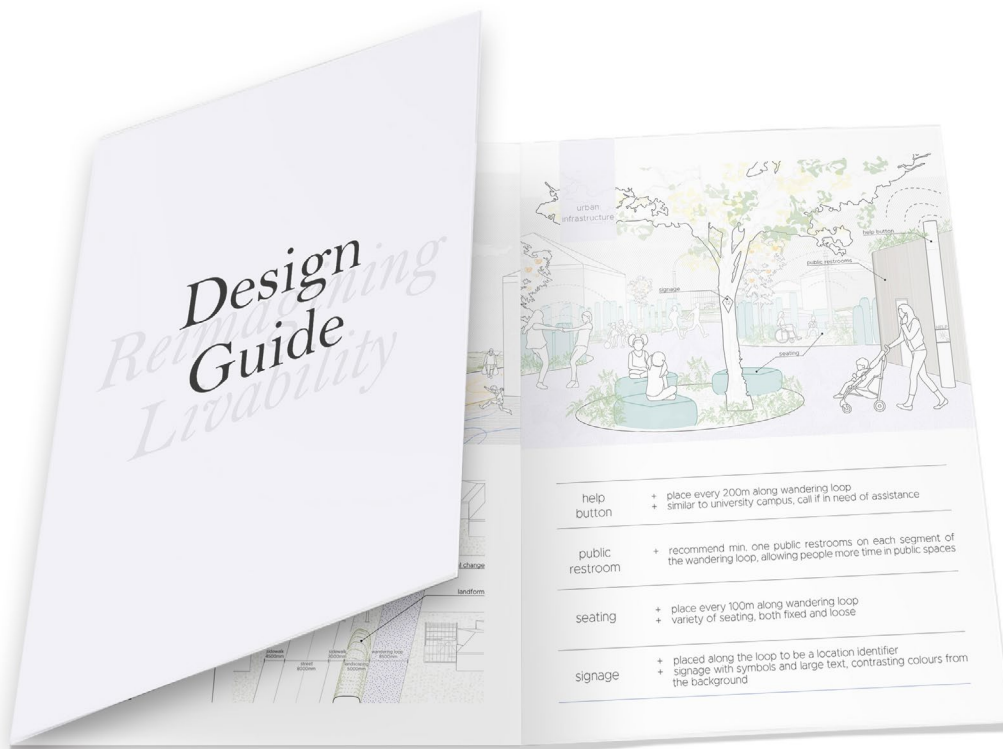
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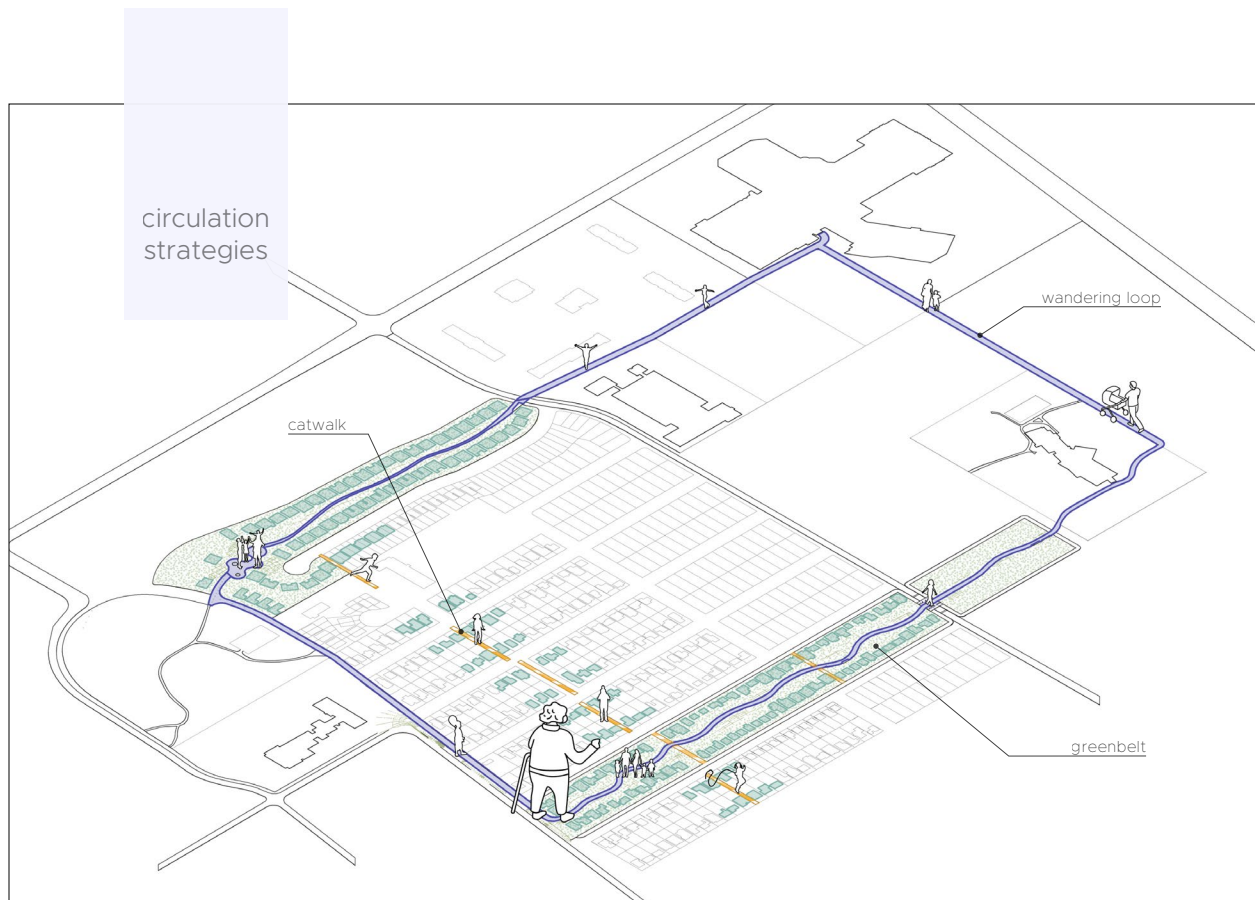
Appendix I



Design Guide

*Reimagining
Livability*

Looking at reimagining livability in the Newtonbrook West neighborhood as an interwoven site of urban and community interventions to support those with dementia. The following strategies are adaptable and can be applied to other neighborhoods based on the specificity of the community and the residents have a say as to how to negotiate the program and use of space.



wandering loop

- + wandering loop connects anchor points of the neighborhood
- + location of wandering loop to be determined by community
- + recommended material: textured, non-slip rubber crumb

greenbelt

- + act of commoning: connecting backyards together
- + location of greenbelt to be determined by community
- + in combination with wandering loop

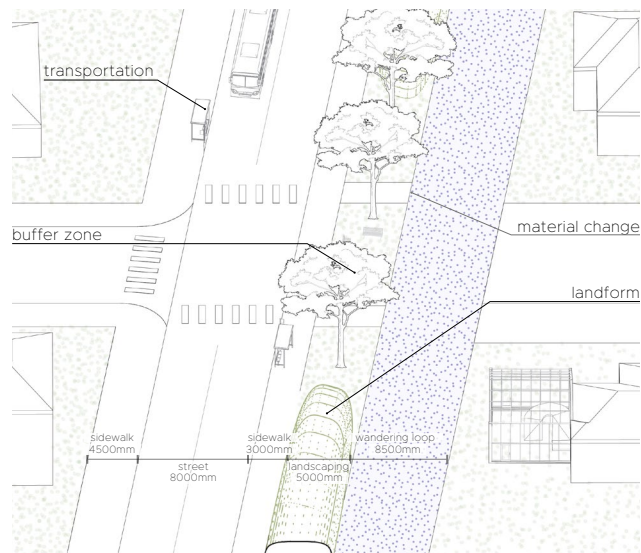
catwalk

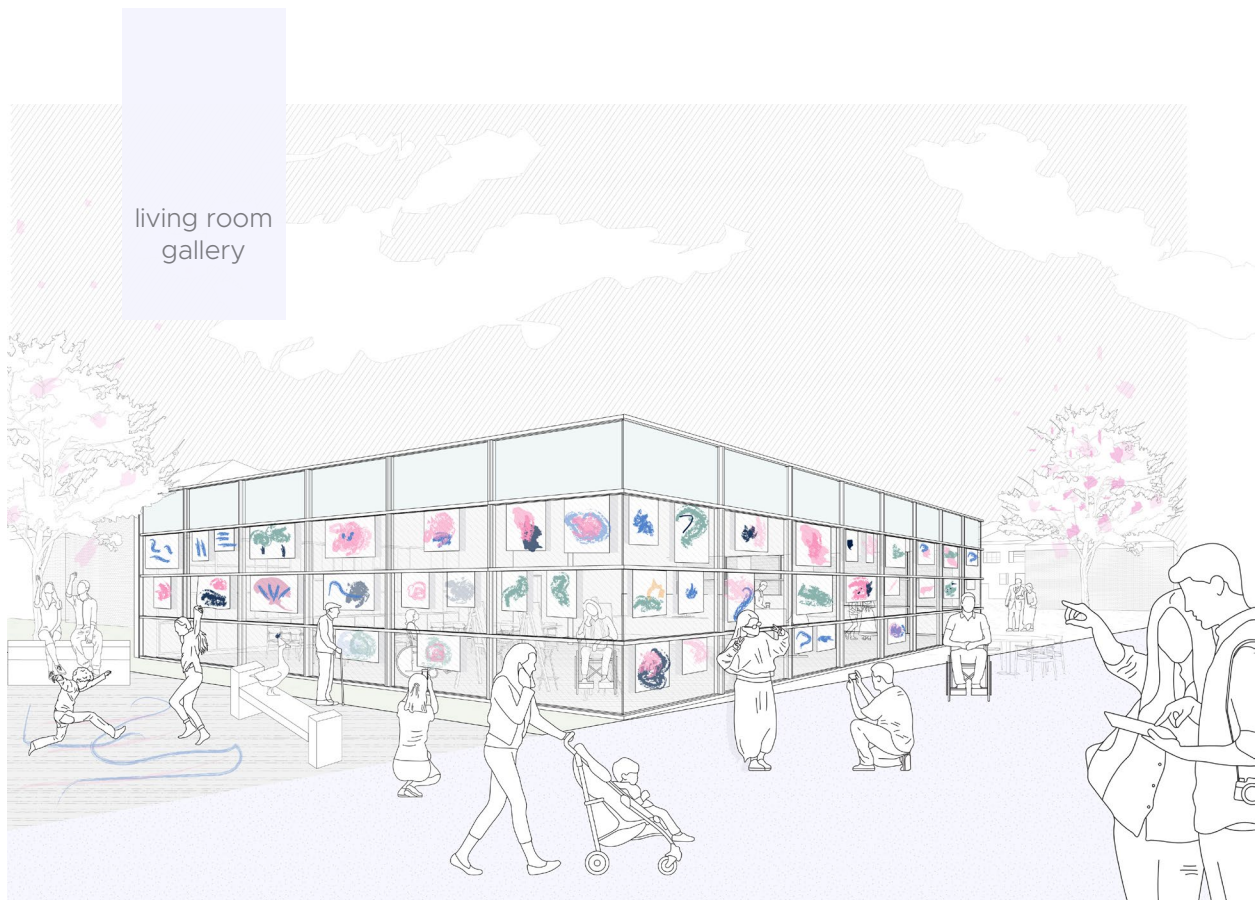
- + short-cut of large city blocks, the length of two houses
- + makes pedestrian journey more customizable
- + location of greenbelt to be determined by community



principles

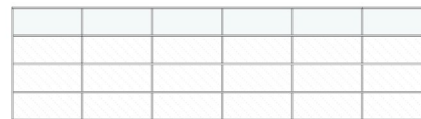
- + urban street condition where cars run parallel to the wandering loop, providing a safety barrier while also leaving openings to become a permeable boundary physically and visually
- + landforms inform boundaries
- + material & colour change in paving indicate environment change
- + buffer zone



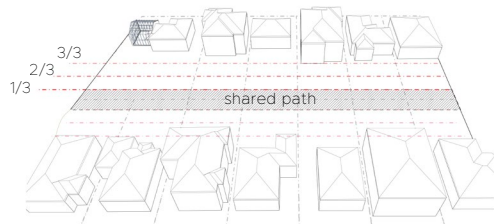


program principles

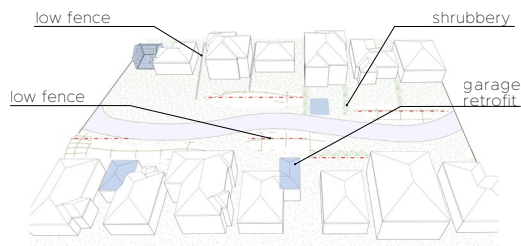
- + maker-space
open all day to anyone who wants a space to work and craft
- + cafe
bringing amenities into the neighborhood
- + library of things
borrow art supplies and tools
- + interaction with facade
gallery facade, always interacting with the public



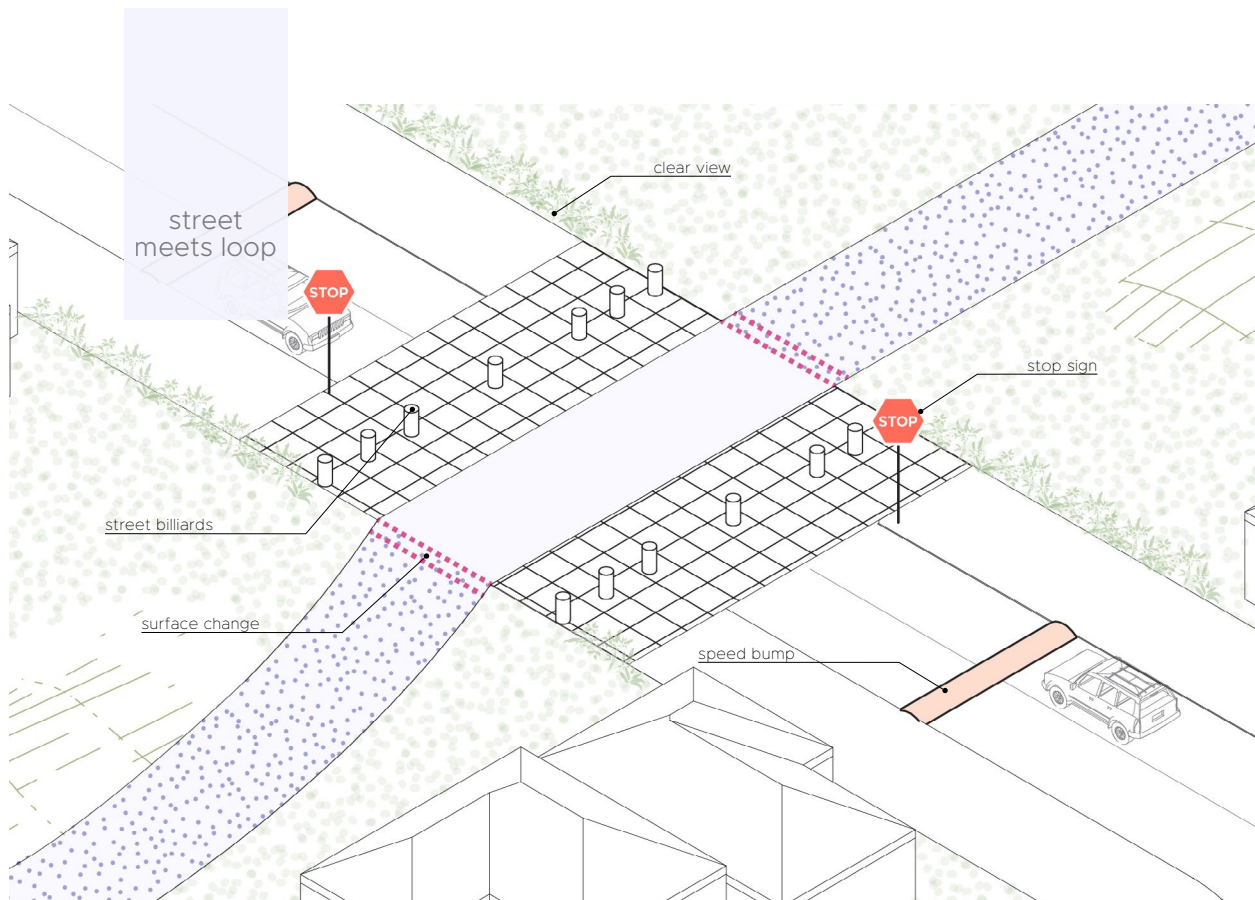
facade variation



- + the city can buy back the land for the shared path
- + residents have the choice to determine how much of their backyard they want to share
- + 0% / 50% / 100% of backyard shared with the community
- + break up parcels of land into many parcels



- + permeable separation
 - artificial landforms
 - shrubbery
 - short fence
- + max. height 1100mm to keep visual connections and can aid balance
- + garages/ sheds become a network of communal space, established by the residents

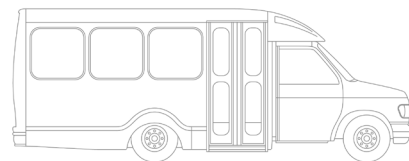
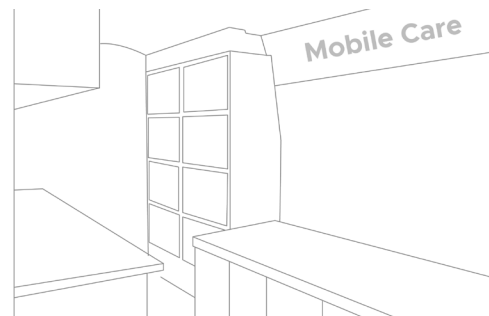


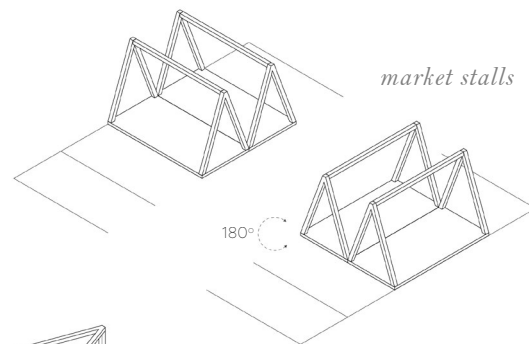
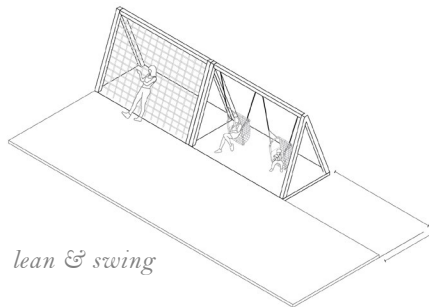
speed bump	+ speed bump initially slows down the vehicle
stop sign	+ pedestrians will dictate when vehicles can proceed
surface change	+ haptic change in surface will indicate where and when there is a change in environment, rubber crumb to hard surface
billiards facing cars	+ street billiards positioned to face cars instead of pedestrians to indicate that pedestrians are the priority
clear view	+ no tall trees or objects to obscure the view of incoming pedestrians/ vehicles, use of low vegetation to indicate boundaries



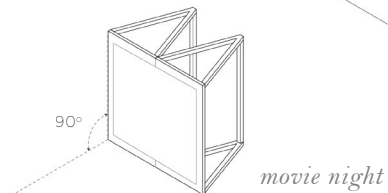
program principles

- + different ways to care
*physiotherapy, psychotherapy,
massage therapy - everyday care*
- + nurse's station
*can aid local emergencies for all
ages*
- + mobile care vehicle
*can do at home visits, bringing care
to your door*
- + interaction with
neighborhood
*mobile care vehicle's home base &
help button calls are received here*





- + activate surface parking lots and street parking with a modular system that fits the standard parking spot dimensions to create multipurpose structures





help button	+ place every 200m along wandering loop + similar to university campus, call if in need of assistance
public restroom	+ recommend min. one public restrooms on each segment of the wandering loop, allowing people more time in public spaces
seating	+ place every 100m along wandering loop + variety of seating, both fixed and loose
signage	+ placed along the loop to be a location identifier + signage with symbols and large text, contrasting colours from the background

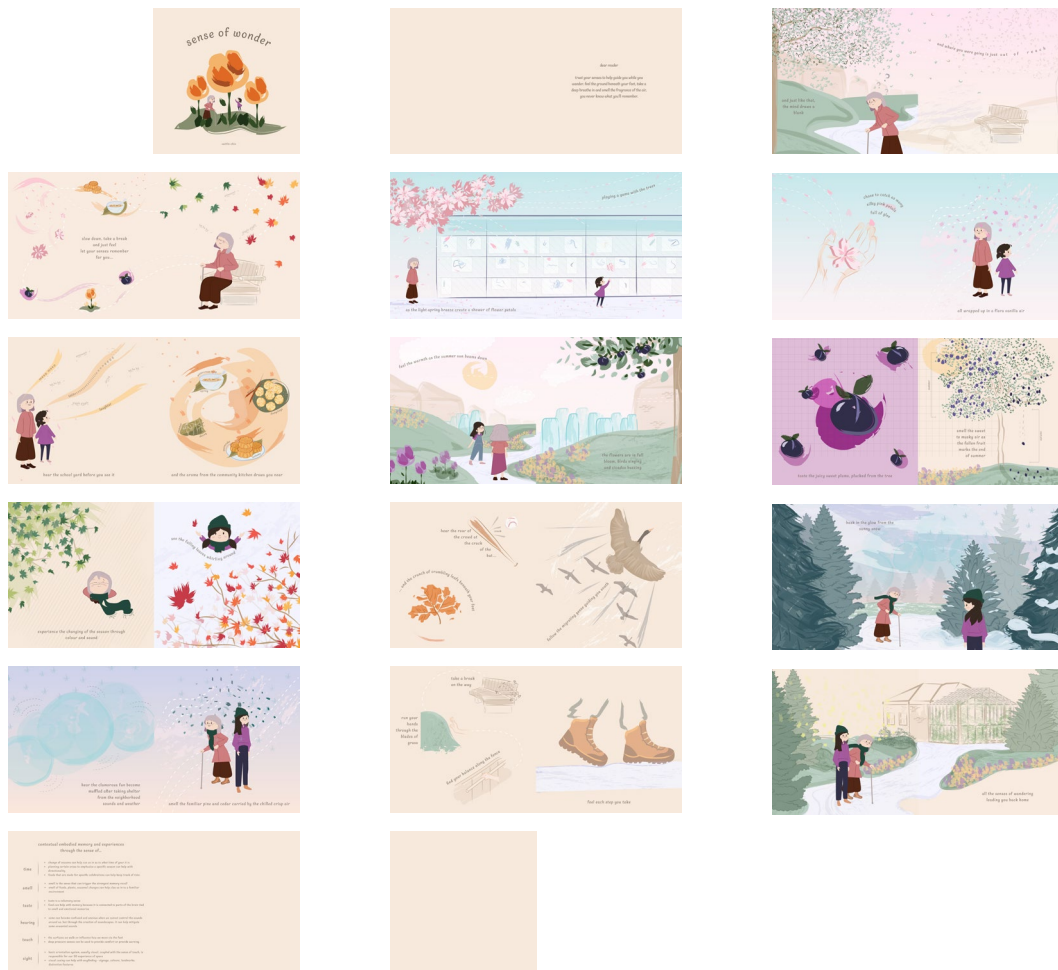


program principles

- + collaborative cooking
cooking together to share recipes, assist others with cooking
 - + meal plans
meals cooked here for those who need a lending hand, delivered to their door
 - + cooking classes
for all ages
 - + teaching garden
second floor greenhouse for year round classes and food growth
 - + outdoor community garden
low impact physical activity & growing food locally
 - + intergenerational interaction
cooking & gardening are open to all ages, building relations
 - + interaction with the building
people can interact with the structure of the building
- * program can be determined by community to meet their needs *

*What if the
neighborhood could
adapt so those
with dementia
did not have to be
displaced?*

Appendix II



sense of wonder



caitlin chin



dear reader

trust your senses to help guide you while you
wander. feel the ground beneath your feet, take a
deep breathe in and smell the fragrance of the air,
you never know what you'll remember.



and just like that,
the mind draws a
blank



and where you were going is just out of reach

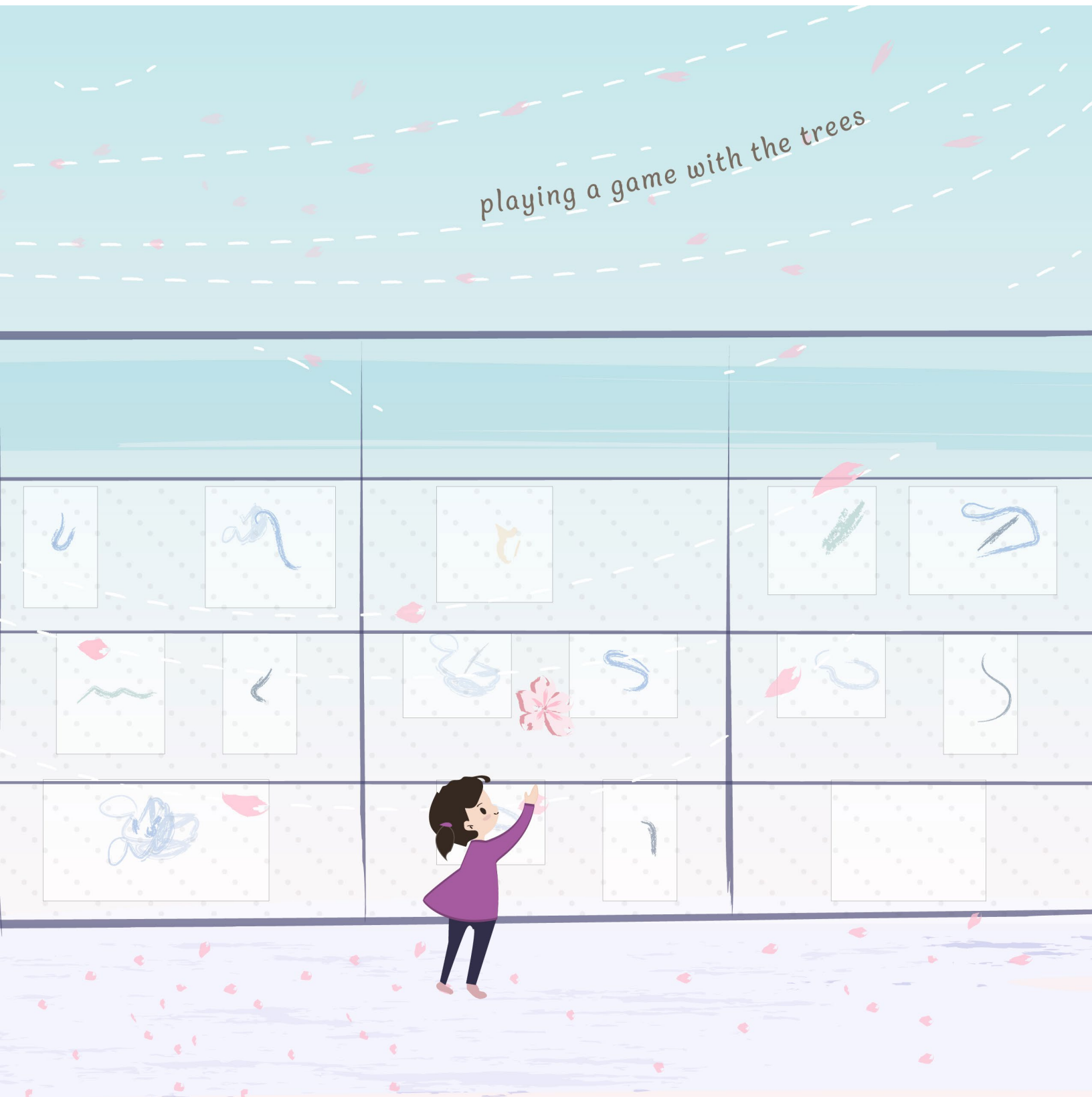


slow down, take a break
and just feel
let your senses remember
for you...





as the light spring breeze create a shower of flower petals

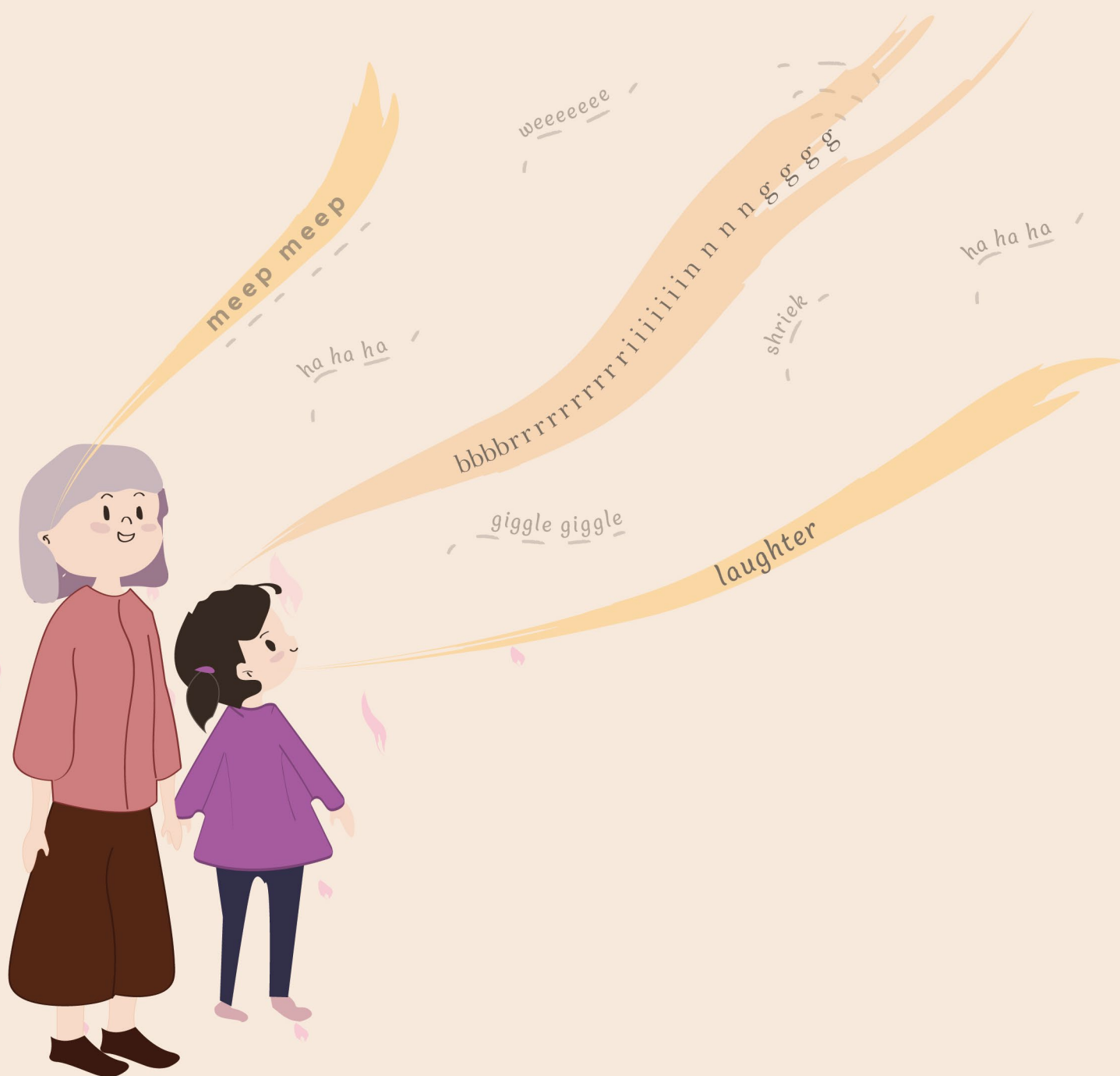




chase to catch as many
silky pink petals
full of glee



all wrapped up in a flora vanilla air



hear the school yard before you see it

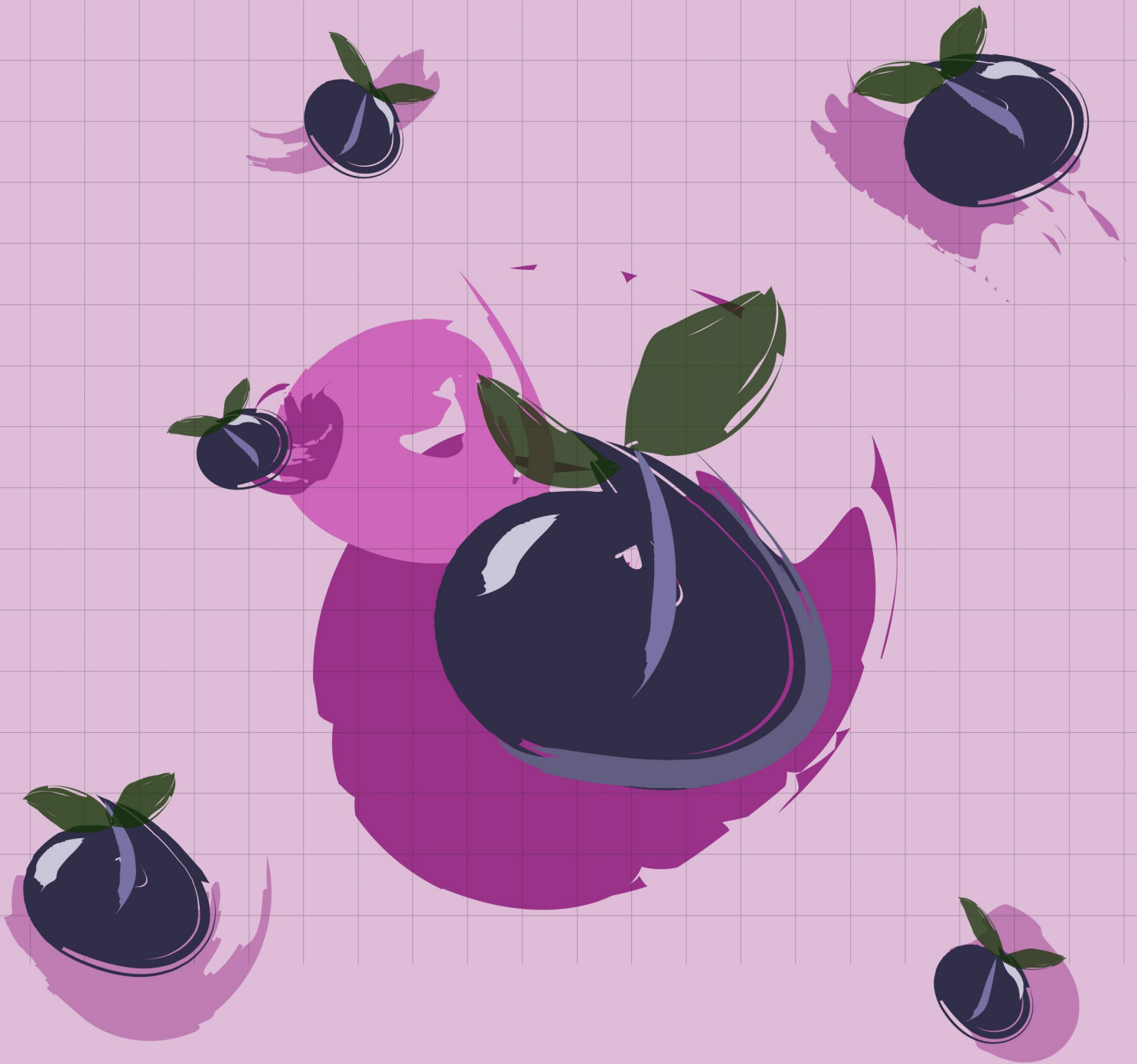


and the aroma from the community kitchen draws you near

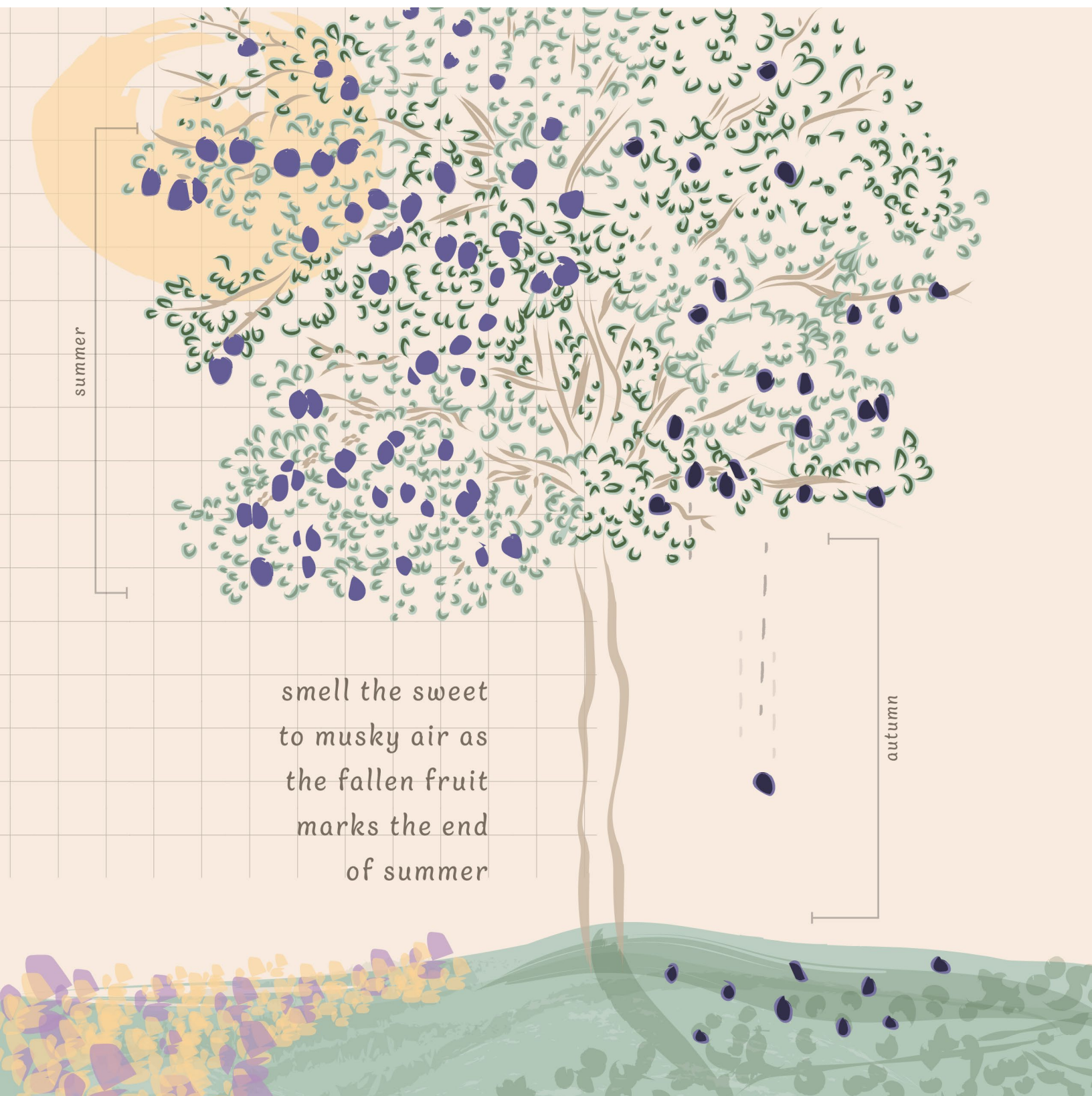




the flowers are in full
bloom, birds singing
and cicadas buzzing



taste the juicy sweet plums, plucked from the tree



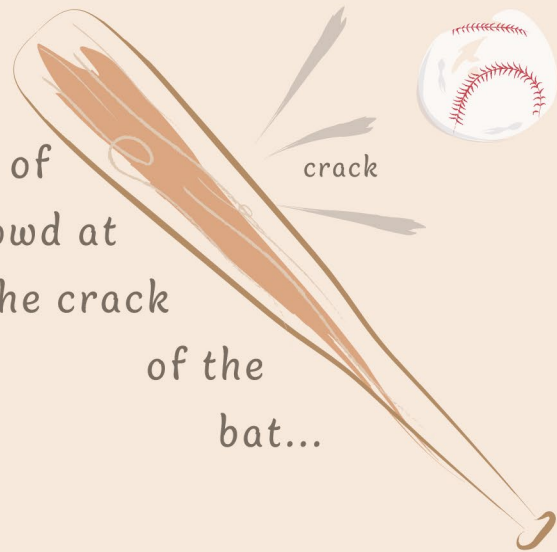


experience the changing of the season through
colour and sound



see the falling leaves whirling around

hear the roar of
the crowd at
the crack
of the
bat...



... and the crunch of crumbling leaves beneath your feet





follow the migrating geese guiding you south

bask in the glow from the
sunny snow







hear the clamorous fun become
muffled after taking shelter
from the neighborhood
sounds and weather



smell the familiar pine and cedar carried by the chilled crisp air





feel each step you take





all the senses of wandering
leading you back home

contextual embodied memory and experiences through the sense of...

time

- + change of seasons can help cue us in as to what time of year it is
- + planning certain areas to emphasize a specific season can help with directionality
- + foods that are made for specific celebrations can help keep track of time

smell

- + smell is the sense that can trigger the strongest memory recall
- + smell of foods, plants, seasonal changes can help clue us in to a familiar environment

taste

- + taste is a voluntary sense
- + food can help with memory because it is connected to parts of the brain tied to smell and emotional memories

hearing

- + some can become confused and anxious when we cannot control the sounds around us, but through the creation of soundscapes, it can help mitigate some unwanted sounds

touch

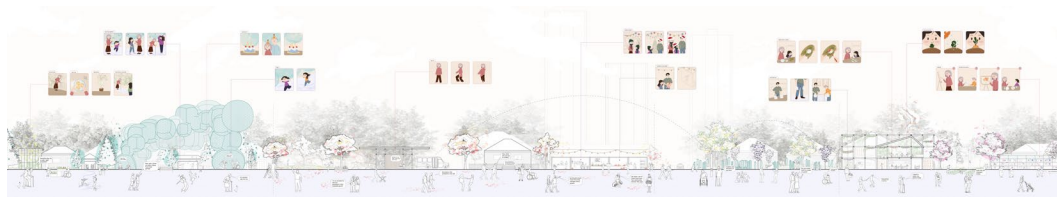
- + the surfaces we walk on influence how we move via the feet
- + deep pressure senses can be used to provide comfort or provide warning

sight

- + basic orientation system, usually visual, coupled with the sense of touch, is responsible for our 3D experience of space
- + visual cueing can help with wayfinding - signage, colours, landmarks, distinctive features



Appendix III



12'



