

Memories of Home: An Emotional Landscape for Elderly Care

by

Breanna Curren

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Dalhousie University is located in Mi'kmaq'i,
the ancestral and unceded territory of the Mi'kmaq.
We are all Treaty people.

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Contents

Abstract.....	iv
Acknowledgements	v
Chapter 1: Introduction	1
Personal Basis of Inquiry	1
An Aging Population	4
Caregivers Overlooked and Undervalued	5
Vulnerable People in Vulnerable Places.....	6
The Concept of Health and Care.....	8
Thesis Description	9
Chapter 2: Theoretical Basis	11
The History of Elderly Institutional Care	11
Beguinages: A Model for Modern Care.....	11
Almshouses: Places of Punishment	12
The Introduction of Isolation	13
The Medicalization of Elderly Domestic Space.....	13
The Issue of Sight Dominant Design	15
The Habitus of Aging	15
Parameters of Place	17
The Scales of Place to Cultivate Belonging.....	18
Intergenerational Creative Care	19
Memory, Sensation and Emotion.....	20
Literature and Imagination in the Design Process.....	21
The Emotional Palette	22
Beyond Physical Landscapes.....	23
Barragan’s Domesticated Garden Landscape.....	25
The Kitchen as a Sensory Space	25
Case Study: Maggie’s Place.....	25
More than a Kitchen	26
Chapter 3: Developing a Working Method.....	27
Selection of a Site.....	27

Site: Wallace, Nova Scotia	27
Place: A Comprehensive Habitus	30
Sites of Memory	30
Patterns in Everyday Elderly Living	36
A Line of Experience	36
Edges: The Emotive Thresholds.....	40
Mapping Atmospheres for the Elderly.....	40
Path to Craft a Story	42
Layering Place, Path, Pattern, and Edge	43
A language for Material Activation	50
Matrix of Material Applications	50
Chapter 4: Design Response	53
A Place to Call Home.....	53
Place: A Nova Scotia Kitchen Party.....	54
Path: Along the Sunrise Trail	57
Edge: A Home for Nostalgic Objects	60
Pattern: Hosting Intergenerational and Creative Care.....	63
Emotional Materials	67
Chapter 5: Conclusion	75
References	77

Abstract

Institutional healthcare models are failing Canada's elderly. A long culture of agism has led to the creation of sterile, visually dominant, and commodified architectural environments that lack the emotional and social supports needed during an inherently vulnerable time of life. Through architectural memory, emotion, and sensory experience, a people-focused approach to elderly care engages a person's sense of self, belonging, and place. Intergenerational programming for the elderly, the surrounding community, and caregivers, intertwines creative care concepts with health and housing. Place, path, pattern, edge, and emotive materials are parameters that transform the intangible qualities of human life into a physical configuration of spatial emotion. Wallace, Nova Scotia, was used as a testing site to explore the various scales of place using the working methods of continuous line drawings, imagined narratives, and memory mapping to identify and cultivate a habitus of place for the elderly to live.

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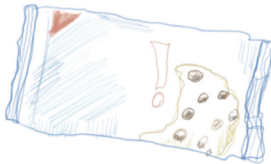
Thank you to my studio companions for teaching me more than a class ever could. I will never forget the potlucks, snack runs, and late nights.

To my friends and family, thank you for your patience and grounding presence throughout this journey. Even though you never know what I am talking about thank you for always listening to me chat about my research.

And to my grandparents the biggest thank you for inspiring this work and shaping me into the person I am today. It has been the greatest pleasure to work towards a thesis that would make you proud.

Chapter 1: Introduction

Personal Basis of Inquiry



Nostalgic objects tied to memories of my grandparents.

My childhood memories of my grandparents are colored by their unrelenting devotion for my family and their communities. The memories that have stayed with me are simple moments, like painting my grandmother's walls with a measuring cup filled with water and a paintbrush, as well as playing with pricey antique toy trains that were never meant for a child's sticky fingers. Much of who I am today has been shaped by my grandparents, they sparked my love for art with carefully crafted Christmas ornaments and melted crayons that would create brightly colored paintings at the kitchen table. Sneaky trips to the cookie cabinet before dinner, hand in hand with my grandfather, taught me that a spoiled appetite is worth a little fun and adventure. These memories reflect mundane moments of growing up and yet they reveal so much about my grandparents' incredible presence and influence.

When I reflect on all the moments of love and happiness, I feel a deep regret and anger that the end of my grandparents' lives was so unnecessarily difficult and isolating. My grandparents were incredibly resourceful and resilient people always willing to help and contribute to community. Societal, economic, material, and political pressures and the current state of Canada's elderly care environments have made it so that my grandparents were left out of everyday life, viewed as economically and socially redundant, instead of creative, intelligent, and emotional people.

My grandmother possessed a beautiful quality, she had a way of leaving both; place and people a little better off than

how she found them. Even as her battle against Parkinson's disease became more and more challenging, she continued to care for everyone in her life as if their well-being was her personal responsibility. My grandmother was surrounded by a supportive family who were fortunate to be able to prolong her time living at home in her cherished community by acting as her caregivers and advocates. Empowered by the unwavering support of family caregivers and community care services, my grandmother not only maintained her sense of self, but she also continued to extend her resilience, and her gentle spirit to others.

My grandfather, like my grandmother has been one of the most influential people in my life. He never failed to crack a joke or come up with a quick response to any situation. Again, my family worked together tirelessly with home care services to extend my grandfather's quality of life by allowing him to live at home and in his local community for as long as possible. Eventually, my grandfather transitioned into institutional long-term care to receive much needed support for his progressing dementia. My grandfather the once quick-witted man who had bravely persevered at home for so long after the loss of his wife, quickly lost his vibrant spark. He came to view his new home as a prison, and while he would still always offer me a special smile, he lost the daily comforts and interactions with community that had previously kept him grounded and happy at home.

Most frustrating is that my grandfather's story is not unique, and very few are as fortunate as my grandparents to have family members able and willing to fill in the gaps of Canada's care system to prevent an early entry into an institutional care home. So many people share similar stories of their loved ones struggling to cope, grieving their lost sense of

home, and navigating undignified deaths in lonely places. Much of the apprehension associated with elderly care homes comes from the lost sense of belonging and self that is often unavoidable in institutional care. Architectural environments that are intended to provide care to elderly people are often located at the outskirts of place. Elderly people are pushed aside by a persistent ageist attitude that prioritizes a visuocentric approach to health, over a holistic appreciation of what it is to be a person experiencing the world.

Elderly care has existed between the disciplines of welfare, housing, and health in Canada without ever reaching a solution that views elderly people as an integrated valued part of society. Elderly care in Canada is limited to institutional settings such as, retirement homes (continuing care or assisted living), nursing homes (long-term care facilities), and home care (Picard 2021, 49). Home care is divided into two main categories: health services, and support services. Home health services includes nursing services such as dressing changes, and medication preparation. Supporting home care services consists of bathing, housekeeping, and meal preparation. People want to stay at home, in their beloved communities, going to their favorite restaurant or coffee shop, and enjoying the little moments that make life worth living. Despite this collective desire to age in community, most of Canada's long-term care budget is spent on institutional care. Just 18% of Canada's elderly care budget is spent on home or community-based care. In 2021, 419, 800 households reported they needed home care services that they did not receive (Government of Canada 2022c). Poor funding and access to other forms of

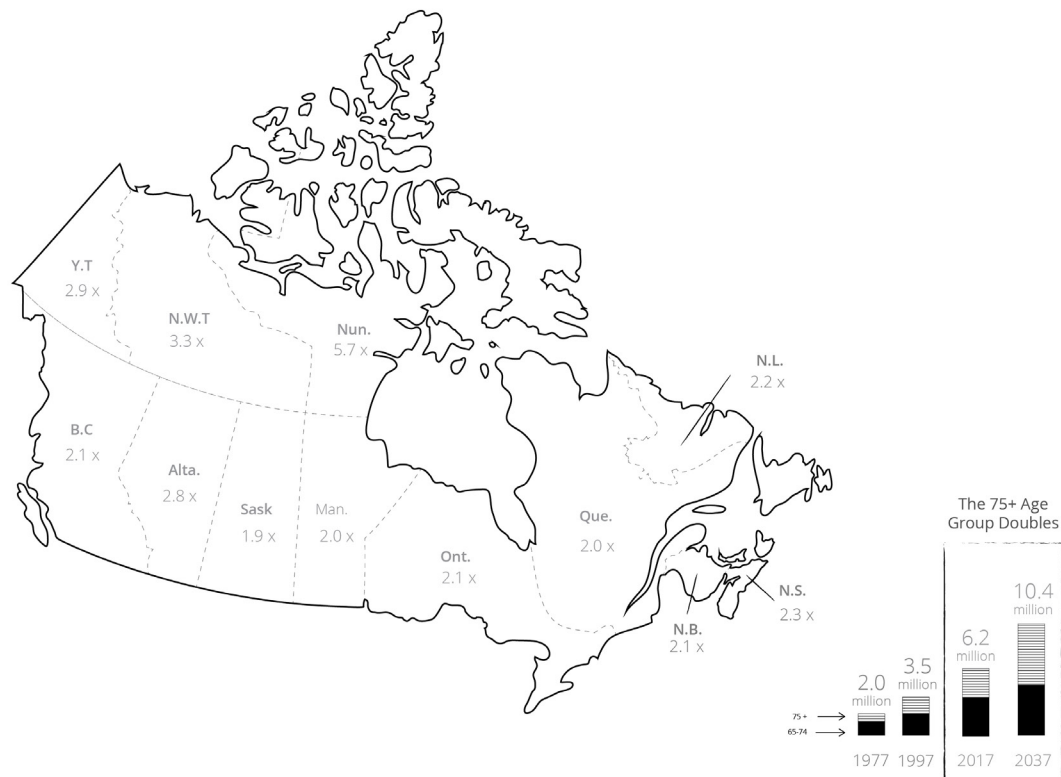


A collage contrasting the existing spaces of institutional care, against bright future possibilities that consider emotional engagement.

community-based care mean that people are left with very few options, resulting in early entry into institutional care.

An Aging Population

Proactive planning and consideration in designing housing for the elderly is critical to ensure that there are adequate options of care for older adults. Care must also extend beyond its current state, where architectural environments often represent an appearance of health, instead of working to create a positive engagement with the feeling of being at home for elderly people. The need for change in how elderly care is designed is even more pressing today, as a dramatically increasing global and Canadian population of people aged 65 and older requires sustainable social,



A map of the aging populations of people over the age of 75 across Canada, according to the Government of Canada (Government of Canada 2022).

and health interventions to provide holistic and preventative standards of care. In 2022, 7,330,605 people in Canada were over 65 years of age, translating into 18.8% of Canada's population (Government of Canada 2022b). The percentage of Canada's population that is over 65 years old is expected to rise to one fourth by 2040, and those requiring long-term care is estimated to increase by 60% according to the Canadian Medical Association (Labrie 2021, 11). Additionally, the number of people in need of home care is expected to rise by a third over the next decade (Labrie 2021, 11).

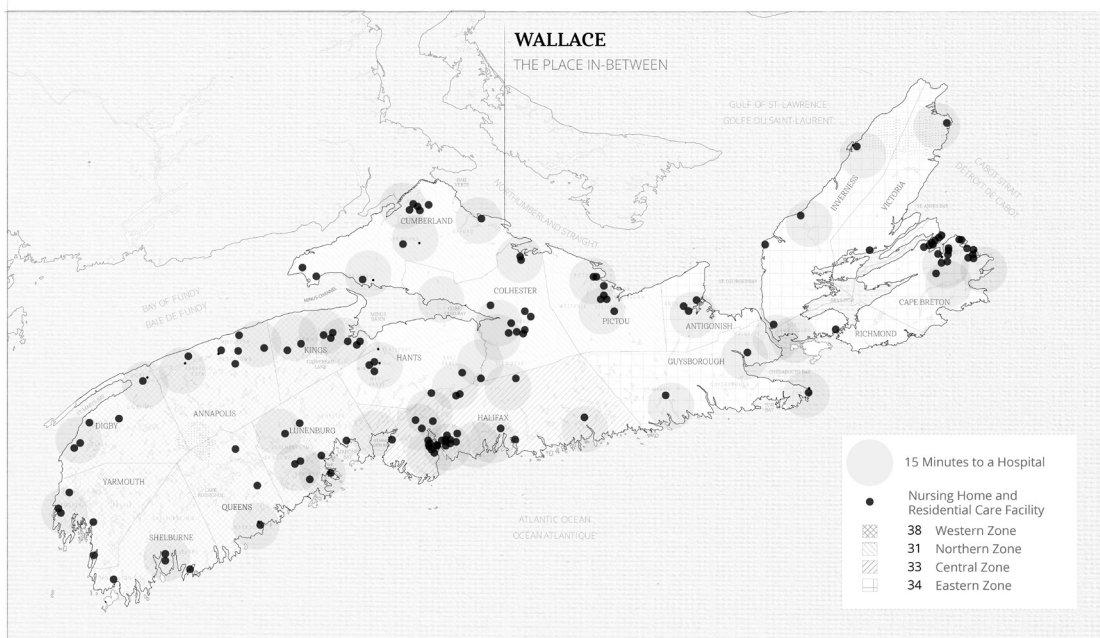
Caregivers Overlooked and Undervalued

The growing amount of people needing care in the coming years will put even more stress on already overworked and undervalued caregivers. Registered nurses, home care staff, physical therapists, and other elderly care



A place of care requires more than mere physical needs to be met. A place of care includes physical health along side learning, prosperous economies, access to transportation, connection to the natural environment and creative care activities.

ACCESS TO HEALTH CARE



A map of Nova Scotia's existing nursing homes and residential care facilities, in addition to the 15-minute radius to access a hospital by car.

professionals, as well as family caregivers need respite and assistance. Currently, 23% of Canadians will care for a care-dependent adult throughout their lifetime and more than half of unpaid caregivers report feeling tired, worried, anxious, and overwhelmed (Government of Canada 2022a). There are few programs or locations for caregivers to exchange knowledge, support, and most simply friendship. A declining number of people able and willing to provide care make it unlikely that care will go beyond mere physical needs.

Vulnerable People in Vulnerable Places

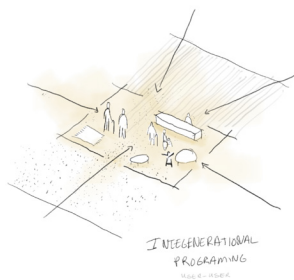
Most at risk are those living in rural areas due to a limited access to healthcare, amenities, and social networks. Additionally, little attention has been paid to the emotional and affective dimensions of everyday rural life (Hanlon and Skinner 2022). Currently, 6,601,982 people live in remote

areas, of those living in rural places 1,454,033 people are above the age of 65 (Government of Canada 2022b). Living in rural areas is likely to limit a person's proximity and access to healthcare facilities like hospitals, nursing homes, and home care services.

Rural towns and communities, however, do offer greater opportunities for localized projects, as well as possessing supportive social, and informal care networks (Cohen and Greaney 2023, 143). Strong social networks significantly benefit healthy aging by providing familiarity and security to older adults. Rural areas also view caring as a community responsibility. This is crucial to creating resiliency and intergenerational connections that will make elderly care proactive and preventative.



A wish image for elderly care. An elderly woman interacts with two young kids, she feels like she belongs, and she is connected to place through her senses.



Connection to place, intergenerational programming and multi-sensory programming are the overlooked principles that connect an elderly person to the environment, to other people and to themselves.

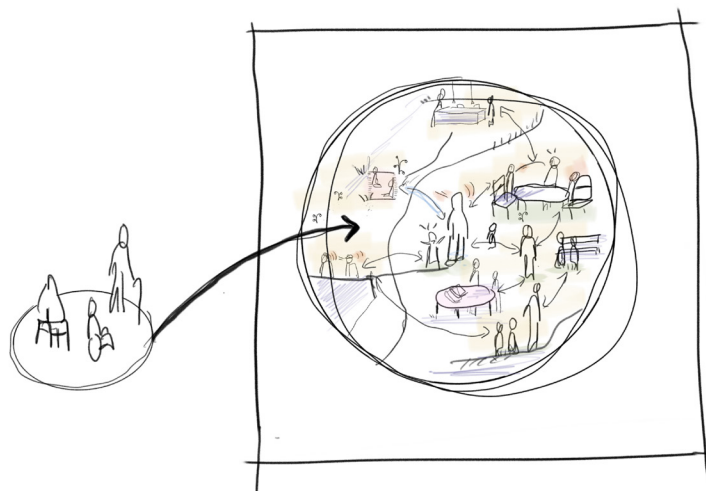
Rural areas are also very influential on a person's day to day life because of their remote geographical locations. An architectural environment of care, as well as the natural environment contribute to the ability and likelihood that a person will be able to age well. Aging well is associated with the overall positive health, cognition, activity, and physical fitness of a person as they grow older. Aging well is also more likely when a person's environment fosters self-acceptance, positive relations with others, autonomy, purpose in life and personal growth (Bar-Tur 2021). The intimate connection between a person and an environment plays a large role in determining holistic health (Menec et al. 2015). Specifically, natural environments have been found to have both direct and indirect impacts that improve social connectivity and the quality of life of rural seniors who routinely interact with the surrounding natural landscape (Cohen and Greaney 2023, 147). The consideration of how a design interacts with an environment is a critical consideration because the surrounding environment has both the ability to be supportive to a person's well-being, or to create an isolating experience that generates the opposite damaging effects.

The Concept of Health and Care

Institutional care can no longer be the typical solution to support aging adults. It must be acknowledged that older adults are a vital part of creating a sense of community and place, many seniors are active community leaders, volunteers, and dedicated part-time employees. Despite widespread ageism that views elderly people as irrelevant, recent studies show that older adults are relatively healthy, active, and independent people (Bar-Tur 2021). The strengths, resources, and resilient nature of elderly people

help to create intergenerational connection and support within the social fabric of a place.

Cultural and historical narratives illustrate institutional care as places derived from punishing and isolating practices that manifest in modern eldercare designs and typologies. The rejection of institutional care lends to the importance of creating environments that foster a sense of belonging and support holistic health for both communities and older adults, particularly in rural places where the natural environment and history of place play a pivotal role in daily life.



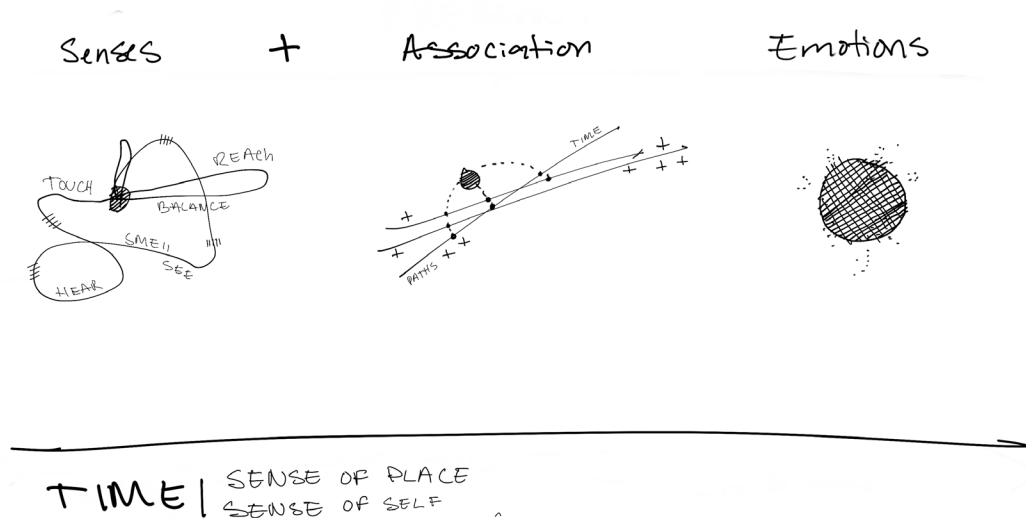
The elderly should be one of the core considerations in creating place.

Thesis Description

Even with its many pitfalls institutional care is still viewed as the most practical solution to the challenge of aging. This thesis aims to provide a change of perspective; to design a place for those left between living autonomously at home and fully under institutional care, and those with nowhere to go. This work does not consider or focus on any specific type of illness or issue of aging, but instead looks to those

forgotten, at the outskirts of place, in small rural towns isolated from large connective infrastructures. The intended user and imagined inhabitant of this architectural thesis is the person who is struggling to cope at home. This person is still largely independent but is becoming victim to the ageist attitudes of the world. They are beginning to feel left out of daily life and its simple pleasures. The thesis positions itself preventatively to connect older people to themselves, their environments, and most importantly to others.

Placing the elderly at the centre of our communities considers the intangibles of human experience as critical components of holistic elderly care. This thesis posits that time, history, and local narratives found in cultural and physical landscapes, in addition to intergenerational and creative programming are critical to care facilities. Translating memory, emotions, and sensory experience into a physical language of architecture fosters a caring environment to encourage a sense of self and belonging for the elderly in communities.



Our senses and memory work together triggering past associations that allow emotions to materialize in spaces where we feel safe. Our senses, associations and memories all work together to relate a person to their sense of place, other, and self throughout time.

Chapter 2: Theoretical Basis

The History of Elderly Institutional Care

The rejection of institutional care as a viable and positive option in old age is tied to the cultural and historical narratives that depict such institutions as sites of desolation reflected today in their modern architectural configurations.

Beguinages: A Model for Modern Care

To understand the built environment of modern eldercare the beguinages of the 14th century are important to highlight the positive impact of incorporating health with community and social connection. Beguinages, were architectural complexes typically found in Belgium and the Netherlands that offered religious lay women or beguines an alternative to living alone (Giovanazzi 2021, 2). Beguinages varied in size from smaller arrangements to larger convents and architectural complexes, buffered from the surrounding neighborhood by a wall, or moat (Giovanazzi 2021, 2). A beguinage consisted of four sub-institutions, the hof or court, the infirmary, the church, and the table of the holy ghost otherwise known, as the Poor Table that functioned as a local almshouse. Additionally, the inclusion of the infirmary alongside various other service buildings, like a local brewery, bakery, and a working farm allowed for a seamless combination of health with individual and collective life (Giovanazzi 2021, 5). The diverse connective programs of a beguinage successfully balanced the privacy gained from physical separation with the benefits of shared community and social spaces. Those living in a beguinage community enjoyed constant interactions with the outside world and their community.



Beguinages were sites of social and economic interest (Giovanazzi 2021, 3).

The typological arrangement of a beguinage positively contributed to social connectivity and activation of the local community because of its placement of living around shared social spaces. Individual houses would be arranged around a central garden or courtyard (Giovanazzi 2021, 3). The close proximity between living and social spaces allowed for moments of solitude to be preserved, at the same time as promoting inter-personal relationships of care (Giovanazzi 2021, 5). At the domestic level connected individual living spaces created intergenerational opportunities for residents. The typology of the beguinage allowed women of all ages to enjoy a contemplative life, where intergenerational care was a simple result of a shared lifestyle. The architectural and social structure of beguinages offers thoughtful insights into intergenerational care that should be applied as a modern concept for elderly care design.

Almshouses: Places of Punishment

The 16th century brought a shift in architectural spatial attitudes towards housing the elderly. Much of the positive social benefits of the beguinage was lost in the emergence of the 16th century English almshouse because of the poor social, spatial, and economic treatment of poverty in this time.

The almshouse was the typical architectural model for elderly care of the 16th century, it housed the elderly and others defined as deserving aid. Those needing help were categorized into two groups; the deserving, and undeserving poor, based on their ability and reasons for not being able to work. Almshouses first described its user group as inmates, defined by their lack of capital, poverty levels, unproductivity, and improbability of upholding positions in the workforce

(Giovanazzi 2021, 10). This categorization of the elderly based on their potential lack of economic productivity and heightened levels of dependence was incorrectly associated with immorality (Mah and Gallup 2021).

The Introduction of Isolation

A person's perceived worth continued to be assumed based on a person's financial status in the 19th century when for the first time the elderly became their own isolated category. The late 19th century introduced specialized care, as a result local almshouses and workhouses transitioned into old age homes when young children and people suffering from mental illness were moved to other specialized institutions (Davies 2003, 7). Workhouses and almshouses were left to support elderly populations in need, but these buildings were originally designed as places of punishment, the architecture aimed to impose and intimidate (Mah and Gallup 2021). The contemporary typology of elderly care emerged from this historical moment when older adults were left behind in built environments that were not designed with healing in mind.



Satirical image that shows the transition from workhouse to individualised care following the introduction of the Retirement Pension Scheme in 1908. (Giovanazzi 2021, 13).

The Medicalization of Elderly Domestic Space

The 20th century spatialized the elderly and their seclusion from everyday life as a newly defined demographic group through a shift from the institution to the medicalization of their domestic sphere. Modern institutional care evolved from a history of neglect into an isolating architecture that exploits older adults through the gradual pathologization and materialization of their personal space (Giovanazzi 2021, 29). Societal attempts such as the 1908 retirement pension scheme individualized senior care by making the elderly responsible for their own health. The pension

scheme allowed for basic economic security, however it also associated this age group with an inevitable social decline based on their productivity (Giovanazzi 2021, 29) Older people in the 20th century are taken advantage of as an area for capital accumulation leading towards a typological shift in design towards individual solutions. A dream of an ageless retirement is sold through the commodification of large scale, age-segregated communities, and facilities that promote a leisure lifestyle that is often only accessible through private payment schemes (Giovanazzi 2021, 42–43). The domestic realm of the elderly care home has been stripped of its intimacies and personality through its prioritization of the appearance of health over creating architectural spaces that afford people emotional grace.

The concepts of aging and care have developed from the goal of preventing illness and preserving overall well-being, into a desire for longevity above all else (Giovanazzi 2021, 43). The trend towards prolonged physical health is clear in elderly care with the incorporation of sport facilities, spas, and other externalized systems into the domestic space of the elderly care home. The mono-generational nature of elderly care facilities, however, prevents such programs from having the intended holistic effect on health because residents of elderly care are all typically of the same age demographic making the home increasingly inward focused. In this scenario instead of taking a daily trip to the local pool or gym, people are staying within a facility for prolonged periods, limited in their social interaction beyond visits with family members and other residents. The opportunity for daily encounters with others in a community is negatively impacted when elderly care extends to include additional programs without properly incorporating community

accessibility and inclusion. It is imperative that an elderly care design balances protecting residents with offering daily passive encounters with the outside world much like the beguinages of the past.

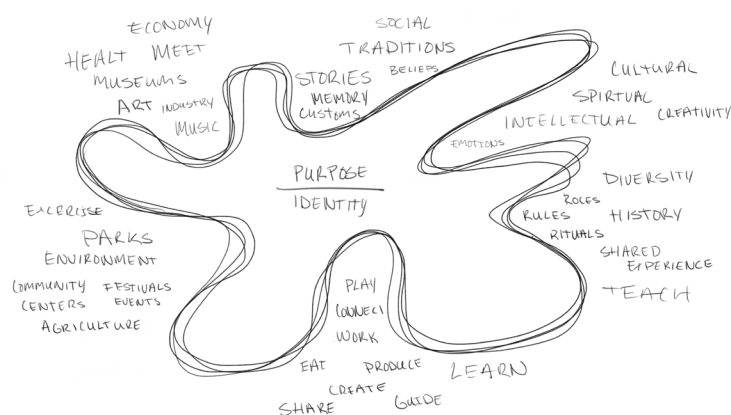
The Issue of Sight Dominant Design

Architectural models of institutional elderly care rely on sight as the dominant sense, an error that is common across western healthcare architecture. Rooms repeated along long double loaded corridors offer little natural light or ventilation. Interiors clad in flat smooth plastic of varying shades of white and cream with an occasional pop of synthetic color make it painfully obvious to people that they far from home. Much like modern hospitals, long-term care architecture is a machine formed by a series of boxes that hold people and technical apparatus to prolong life (Jencks and Heathcote 2010, 54). Healthcare environments that approach life by disregarding its emotionality are reminiscent of their punishing past in their somber use of repetition and lack of ornamentation that generates a jarring architecture of homogeneity (Jencks and Heathcote 2010, 66). Many existing institutions do not allow residents to personalize their space and people are forced to leave many of their nostalgic objects behind, like a set of prized antique toy trains, or hand-crafted Christmas decorations collected for years.

The Habitus of Aging

Bourdieu's term *habitus* sparks an opportunity to create a place for nostalgia, memory, and a person's sense of self to live. The habitus is the important mediating layer between an individual and the collective (Otero-Pailos 2010, 8), as well as the learned set of preferences or dispositions by which a person orients themselves to the social world (Hillier

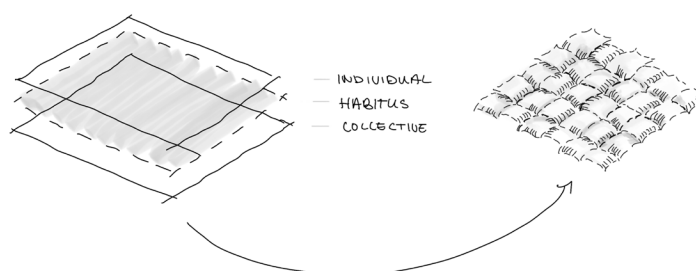
and Rooksby 2005, 27) . Within the realm of the habitus, a person can shape a place and in turn be shaped by one. The interdependent relationship between a place and a person makes it so that, as a person ages and faces exclusions from social life they may become lost in the marginalized space of the habitus environment. Bourdieu was criticized for being overly deterministic and reductive, yet the habitus is not inherently determinist (Edgerton and Roberts 2014). Instead, the habitus allows for consideration of the dualism between us and our physical environments, and what it is to be human, shaped by attitudes and behaviours linked to mental, physical, and social processes.



Purpose and identity are always in flux, impacted and shaped by many social, cultural, political, and economic factors.

The habitus of a place serves as a catalyst, constructing social bonds, emotional experiences, and a sense of belonging for elderly people and communities. The term place in this thesis is concerned with housing the elderly in relation to their mental, physical, and social environments. Place and a sense of place is where people and their own identities blend with the social, built, and natural environments to create

a repository of memory and stories. Places of memory and social interaction are the centrepieces of a region, where memories of self are ritualized and new memories of belonging can be accumulated and re-experienced (Bloomer 1977, 50). Place is viewed as a location both within and external to the home that naturally draws and threads together elements of care and connection to house the elderly in supportive communities. Transforming the *habitus* into a place for the elderly requires the full scope of an older person's experience as an emotional, creative, intelligent, and physical person affected by environmental and collective social structures to be considered in design. Using the habitus as a guiding principle for elderly placemaking will encourage a holistic approach to care that fosters new opportunities for daily passive encounters, fleeting moments of being, and interactive experiences between older adults and other members of a community.



Transforming the habitus from the layer in-between the individual and the collective to be an interwoven concept that will place the elderly into everyday life.

Parameters of Place

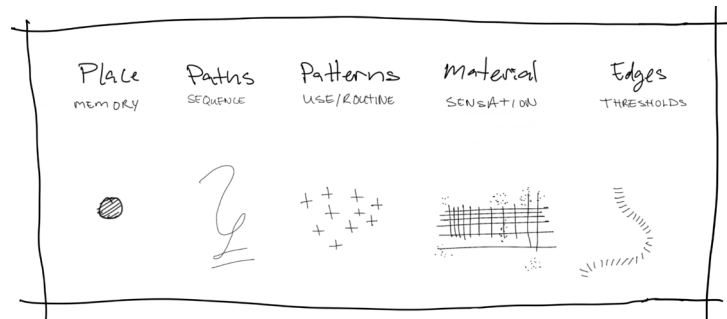
Place can be further explored in its relation to the human experience through the added parameters of path, pattern

and edge argued as critical to a dwelling experience by Kent Bloomer and Charles Moore. While the work of Bloomer and Moore as well as the work of many early theorists consider the body paramount to experience; time, landscapes, and social structures are also powerful determinants of perception. Each helping to substantiate the more subjective elements of emotion, memory, and sensation to counteract new forms of ageism. However, place, path, pattern and edge remain key architectural components that work to address the problem of aging as not just as an issue of the body but a problem of emotional experience. This thesis positions itself critically in relation to early theorists of experience that universalized and idealised able-bodied experience. The suggested methodology reframes the elderly as critical parts of their own meaningful existence where the body works in tandem with a person's life course rooted in their connection to their habitus of place.

The Scales of Place to Cultivate Belonging

Place acts at multiple different scales, regionally it is a waypoint in-between locality, and locally place becomes a building for a community. At the building scale place is where people congregate and share overlapping moments of experience, while at the room scale, place is the heart of a space, defined by an element that holds meaning. For example, people connect themselves to their environments through the personalization of space to transform it into a place that is a projection of themselves. Creating a space for people's evocative objects is integral to ensure a sense of belonging is achieved at the most intimate level. An evocative object is a companion to a person's emotional life and a provocation of thought (Turkle 2007, 5). People's objects hold onto memory and meaning. People grow

attached to their nostalgic objects and it is the architect's task to create a place for people's most treasured items (Zumthor 2006, 36). Moving into institutional care has often meant leaving cherished items and ultimately the memories associated with them behind, a devastating experience that can be alleviated by designing space to allow people to alter, control, and express themselves by creating a home for each person's own evocative objects in their domestic spaces.



The parameters of this thesis are place related to memory, path related to a sequence of experiences, pattern as people's routines and rituals, edge as thresholds, and material as supporting tool to ignite sensation.

Intergenerational Creative Care

Creative care aligns itself with the important principles that make evocative objects emotional companions, creative care allows a person to project themselves into a space and express themselves dynamically. Creative care acknowledges the physical components of health in addition to incorporating creativity, crafting, art, and expression as critical for self-expression and well-being. Creative care includes, but is not limited to, programming such as art, theater, dance, knitting, storytelling, music, and writing. The objects created within the scope of creative care become

evocative objects or actions that are emotional projections that personalize space. For example, hanging a painting done in class or using a mug crafted in a beginner's pottery lesson.

Intergenerational programs in tandem with creative care also use imagination to transform relationships and the way people think about aging. These sorts of programs increase the likelihood of diverse participation as they can be tailored to a specific region, culture, or even each individual person. Programming contributes to positive patterns and routines of daily life where activities can be both communal or solitary. The architectural spaces that accommodate them can be designed to transform based on what type of space might best serve each activity. The incorporation of flexible space designed for creative care programs benefits elderly residents, caregivers, and members of the community creating opportunities for learning and shared experiences in daily life at all ages.

Memory, Sensation and Emotion

In support of identity activation and a flexible architectural environment of care is a strategy that revolves around memory, sensation, and the role of emotion in relation to an older person's experience. Memory is triggered by our senses, and it plays a large role in how we perceive space both, physically and mentally. Memory is how we recall past things, embrace the present and contemplate the future through its likeness to the past (Yates 1974, 58). A person's senses as defined by Gibson, are the visual, taste-smell, auditory, basic orienting and haptic systems (Pallasmaa 2012, 41). People rely on each of their senses to locate themselves in relation to the external world. As people age,

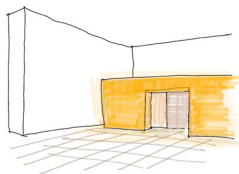
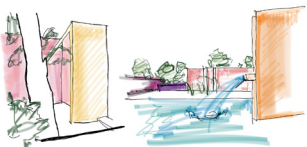
they experience a decline in their cognitive skills, but a balanced approach to sensory design supports older adults' wayfinding ability and projects their identity into space. An activated approach to sensory architecture improves an elderly person's and a community's experience of a place by providing a clear orientation, sense of security, and identity (Feddersen and Lüdtke 2014). The design process must reflect a narrative approach that utilizes memories and imagination to extend beyond the physical limitations of perception. A new approach to design that considers memory, the senses and emotion as key components of design helps to bring a people back to a dual experience of themselves and the outer world.

Literature and Imagination in the Design Process

Luis Barragan's design process is studied for its ability to render highly sensory and emotive works. Barragan's process valued the role of the written word and imagination as paramount to the design process and the creation of sensory spaces. Barragan thought that designed spaces were enhanced by the literature that explained them, stories that imagined progressions and movement in space to enhance the magic of such places (Pauly 2008, 50). Barragan's design process involved a literary phase, that involved creating spoken or oral portraits for a project that worked to tell a story about the gradual route of experience through a design (Pauly 2008, 138). The oral portraits would be paired with perspective sketches and ideas about the movement of a project to explore a mix of restful and engaging spaces.

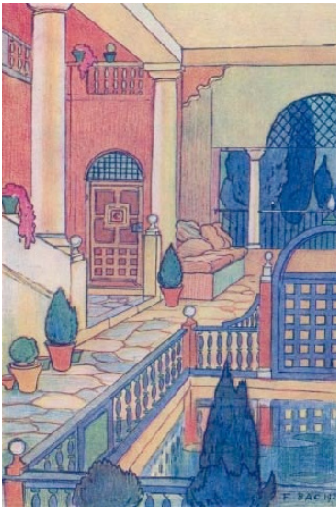
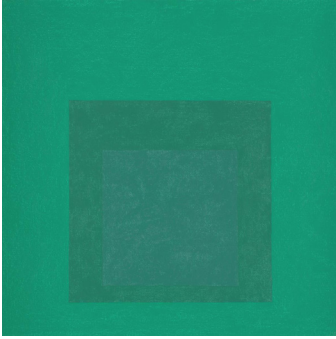
The Emotional Palette

Color also played a highly emotional role in the work of Luis Barragan and while a dominance of visual stimulation is to be avoided, color continues to play a highly sensorial role for older adults. Color is also experienced through a person's senses, and is described using analogies or associative terms that connect an impression of a color to a recollected scene (Feddersen and Lüdtkke 2014, 25). These inner images are an archive referred to when someone sees and experiences a color (Feddersen and Lüdtkke 2014, 25). For those in old age color provides a biographical aspect to place that makes color more than just an aesthetic choice (Feddersen and Lüdtkke 2014, 31). Instead, color creates surroundings and living environments that impart a sense of familiarity (Feddersen and Lüdtkke 2014, 31). A sense of comfort that is impactful when it is paired with the use of local materials to place a person within a regional context (Feddersen and Lüdtkke 2014, 31).



Sketches of Barragan's emotive use of color and materials.

The work of Luis Barragan exemplifies the use of color as a tool to relate a person back to a regional context by celebrating the hidden colors of the local landscape. Barragan's use of color, and local materials intertwines a person with the world and in turn invites people into the identity of that place. Color in Barragan's work was influenced by his childhood in Mexico. For him naturally occurring colors derived from nature were of particular interest such as, the indigo blue, and earth red dye extracted from cochineal and shells (Pauly 2008, 25). As well as, the yellows of crushed flowers and plants that create a codex in which the daily routines of Mexico are revealed in its multiplicity of shades and hues (Pauly 2008, 25).



Barragan drew inspiration from artists and artwork pictured here. (Above) Josef Albers' the *Homage to the Square* (Below) Ferdinand Bac's *La Tour du Calife* (Pauly 2008).

The colors of Barragan's work were also heavily influenced by artists that worked expertly with color. One of his major influences was cartoonist Ferninand Bac who illustrated lush magical gardens in varying hues. Other influences were artists: Churcho Reyes, Magritte Delvaux, De Chirico, Brauner, and Bauhaus prominent figure Josef Albers (Pauly 2008, 150). Barragan was inspired by these artists who boldly pursued color for its emotive qualities, and he used color in his work to brighten people's everyday (Pauly 2008, 27).

Beyond Physical Landscapes

In addition, to his use of color influenced by local landscapes, Barragan believed that landscapes offered an area for reflective experience that balanced introversion (time lived) and idleness (enchanted space) to create a place for both personal and collective rest. Landscape is defined in geography as a term that unites material and visible environments with the immaterial and invisible mental structures of an environment (Uwajeh and Ezennia 2018, 80). This definition of landscape aligns closely with how the concept of the habitus is formed by the contrasting layers of social attitudes and behaviours occurring between a person and their physical and cultural environment. Landscape is shaped by the cultural attitudes of people, and helps to declare a person's identity in relation to a place (Uwajeh and Ezennia 2018, 81). Within a landscape historic nodes and stories of place can be identified that link a person back to a region and one's ability to be actively intertwined in the fabric of a place. Supporting this argument is the thought that architectural structures allow for landscapes to become domesticated spaces. Landscape's are the externalization of human memory holding stories and associations through

time that affect how we feel about a place and ourselves (Treib 2009, 17).

Rural towns and the elderly people living in them experience placelessness as rural towns undergo a casual eradication of their memories and stories that creates another sterile and standardized landscape (Seamon 1979, 64). This is again the same issue occurring within the institutional long-term care home, an erasure of identity and stories. To rectify both issues a new approach to design must take place that encourages a layering of imagination, and narrative storytelling both at home and in the external landscapes of a place.



Wallace by the sea. The sketch is of the main street in Wallace, looking towards the local restaurant and public fishing wharf. The area of Wallace is surrounded by the warm water of the Northumberland Strait. The water rolls in over mudflats and many saltwater marshes. The bright yellow grass stands out in stark contrast to the blues of the seas and the skies.

Barragan's Domesticated Garden Landscape

The garden in the works of Luis Barragan was designed by reclaiming landscape as part of the domestic realm to ultimately form what this thesis considers the habitus. The habitus operates as a place that allows space, landscape, and architecture to articulate the experience of daily life. The landscapes of Barragan were informed by his own recollections from childhood. He thought that memories were melded with dreams, that the play of water, trees and various structures of his childhood home disappeared and reappeared in his work without ever directly borrowing from the past (Zanco and Vitra Design Museum 2001, 116). Barragan credited Ferdinand Bac for his belief that the garden was more than just a haptic and visually pleasing space, instead he thought that a garden allowed a person to experience true serenity (Zanco and Vitra Design Museum 2001, 119). The garden in Barragan's work was a transitional space meant to be enjoyed much like a living room, inviting a person to sit and participate in both collective and personal reverie.

The Kitchen as a Sensory Space

Case Study: Maggie's Place

Maggie's Care homes found across the UK are transitional sites for cancer patients that also pursue the concepts of rest and reflection and strive to support people's day to day rituals. The design of these facilities revolves around the concept of kitchenism, where the kitchen much like the garden in Barragan's work becomes a comfortable place to dwell. In this space the divide between a caretaker and a patient is broken down from its hierarchical status into a relationship based situation because of the replacement

of a traditional reception with a kitchen space (Jencks and Heathcote 2010, 13). The kitchen becomes a social space in the design of Maggie's Care Centres intended to allow for casual encounters in-between guests in an informal gathering space.

More than a Kitchen

A kitchen like a garden is a place within the domestic realm that offers a location for daily rhythms, functions, and social interactions to overlap. A kitchen is a place associated with many memories and narrative moments in people's lives, from learning to cook with a grandparent, to science fair projects, and crafts taking place at the kitchen table. The kitchen is also associated with many different engaging sensory experiences like the smell of brewed coffee or the sounds of chopping veggies. On a social level a kitchen that simply allows older adults to prepare and reheat simple meals, or fix a cup of tea encourages older adults to maintain their independence and everyday competences (Feddersen and Lüdtkke 2014, 195).

The garden kitchen seamlessly integrates the concepts of Luis Barragan's transitional gardens and domestication of landscape to create a relationship between a person and place with the social activation of a kitchen's daily rhythms. The garden-kitchen unlike the institutional care model works not as a functional place of labor but instead as the habitus of place for the elderly to live and interact with others in a community.

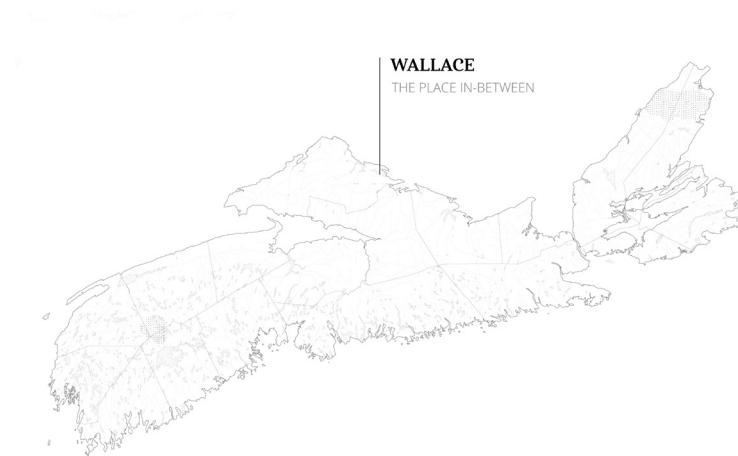
Chapter 3: Developing a Working Method

The working method for this thesis involves creating a habitus of place across multiple different scales: the region scale, the town scale, the building scale, and the room scale. The work involves translating the intangibles; memory, emotion, and sensory experience by using the parameters of place, path, pattern, and edge proposed by Kent Bloomer and Charles Moore as ordering arrangements. These parameters will be supported by a narrative layering of collected stories, imagined moments, and oral portraits inspired by the design process of Luis Barragan. In conjunction with continuous line drawings, and perspective vignettes a haptic architecture of choice driven by the pursuit to connect an elderly person back to themselves, and others creates a sense of belonging. The outlined working methods expand beyond a biased perception based on bodily experience by using a selected site to test and explore a historicity of place and time. The haptic qualities of material, social interactions, and narrative storytelling transform atmosphere and feeling into in a community that holds the elderly as the core consideration.

Selection of a Site

Site: Wallace, Nova Scotia

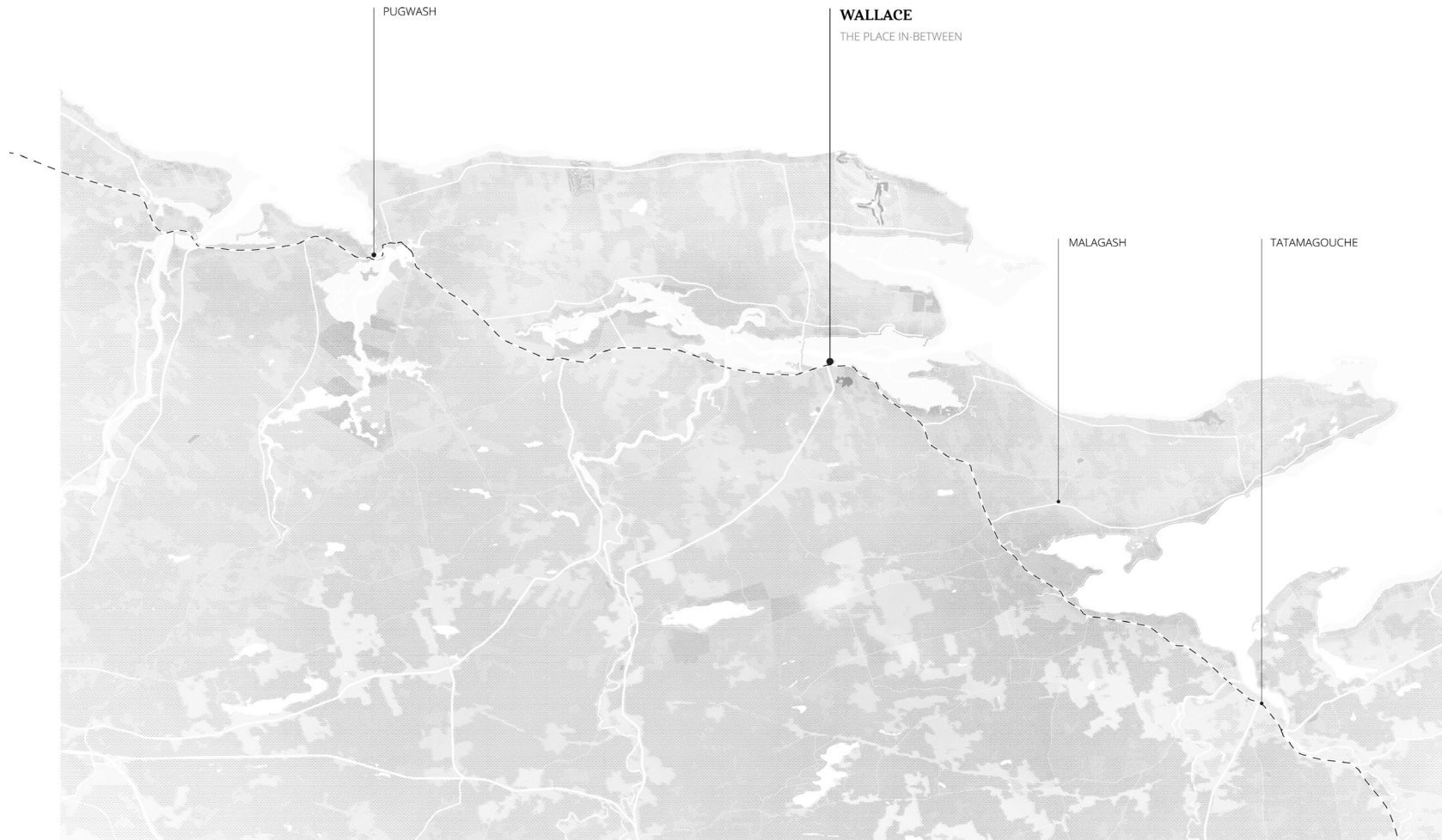
Wallace, Nova Scotia, was chosen as an example of a rural town with a centre struggling to support its aging population. Wallace, like Nova Scotia and other Atlantic provinces has a high percentage of people over the age of 65. Nova Scotia's rural towns provide an opportunity to explore the unique qualities of landscape, an aging population, and a small-scale social structure of linking coastal towns.



Location of Wallace, originally known as Remsheg: “the place in-between”.

Originally named Remsheg by the Mi'kmaq, Wallace is known as “the place in-between”. It is the waypoint in-between the towns of Tatamagouche, Malagash, and Pugwash. According to the 2021 Canadian Census, approximately 4,831 people live in Wallace and its surrounding areas. 1,515 people or 35.4% of the enumerated population of Cumberland, Subd. D (the area of Wallace and its surrounding communities) are 65 years of age or older. In comparison to the 19% national proportion of seniors living in Canada this elevated number indicates a much larger percentage of elderly people in the area. Wallace, currently only has one public housing facility that doubles as its senior living. Many people are required to move to find care and face many of the associated emotional disadvantages of leaving a beloved home and community. Wallace, like many other rural towns across Canada is geographically isolated and its inhabitants experience heightened vulnerabilities associated with aging. A connective approach across each scale of place will not only join towns, but people in the mundane and extraordinary moments of life.

ALONG THE SUNRISE TRAIL



Wallace is located along the sunrise trail a road in-between the other coastal towns of Pugwash, Malagash, and Tatamagouche.

Place: A Comprehensive Habitus

Place in this thesis has been treated as a physical and intangible location where the threads of the individual and the collective are woven into a comprehensive habitus that focuses on the experience of an elderly person to fully integrate them into daily life.

Sites of Memory

Sites of memory are the first approach to identify historic nodes that contribute the habitus of Wallace, revealing its current cultural, physical, and social landscapes. A mapping strategy uncovers the sites of memory in Wallace and its surrounding areas by using history to tell the stories of its inhabitation, revealing the narratives that are hidden in plain sight. On the outskirts of Wallace are the old salt mines in Malagash, the site of the old shipyard beside the local museum, and the Trans-Canadian trail. Each site of memory has left impressions on the landscape, such as the original structure of the historic swing bridge that allows walkers to cross the Wallace River via the rails to trails.

Within Wallace itself there are important links to the past and its crafted identity, the remains of the old stone wharf are still visible in the outreaching stone arms that run from the active sandstone quarry at the top of the hill down into the water. The stone wharf and its connection to the local sandstone quarry dates back to the nineteenth century when a gravity rail would move stone from the quarry down the hill and onto a ship to be transported around the world. The outreaching arm of the stone wharf is mirrored by the parallel positioning of the active public wharf. The identification of the quarry, the stone wharf, and the fishing wharf that once supported vibrant industries helps to position a repository of memory at

the centre of the community where the elderly become the keepers of memories.

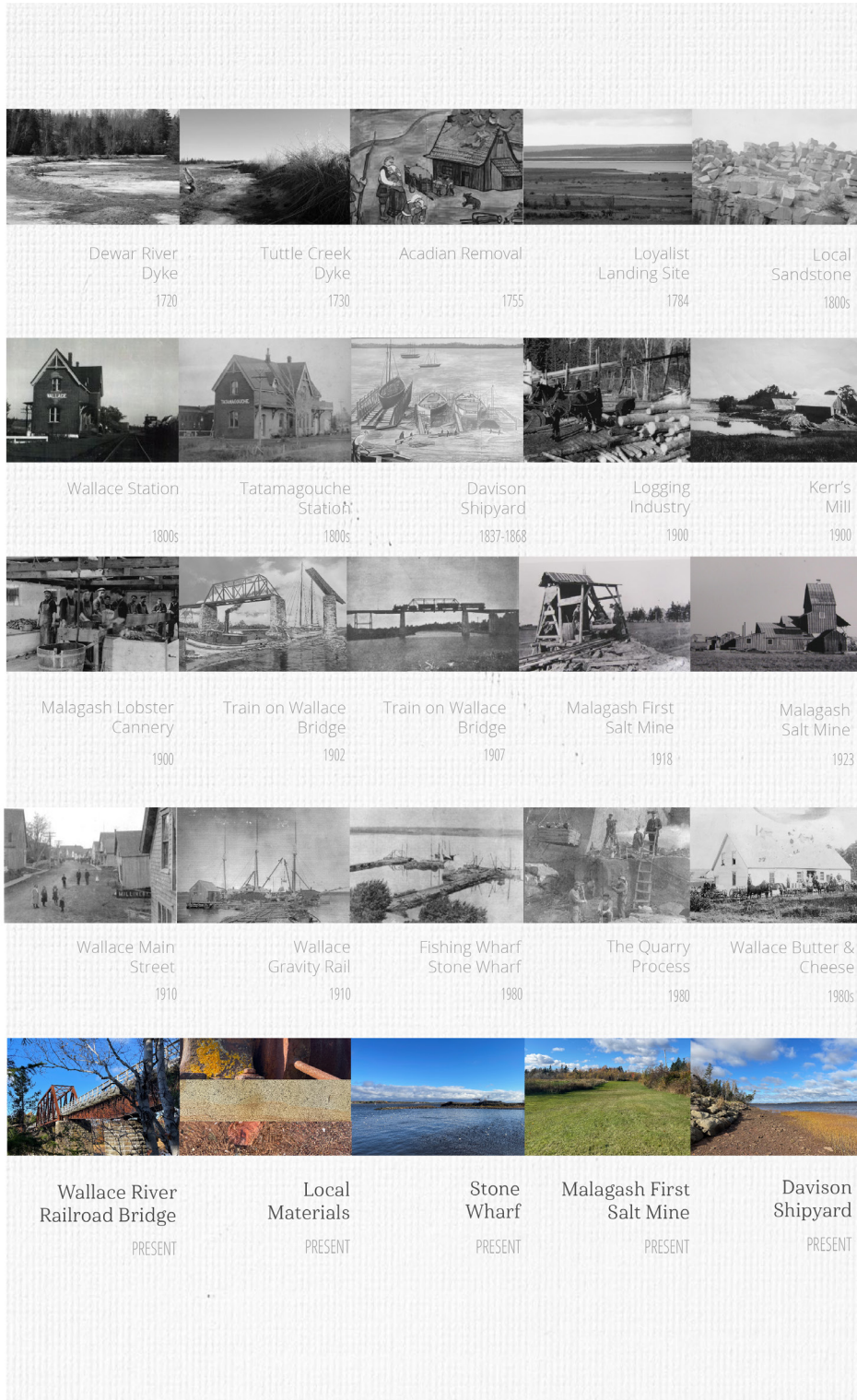
Additionally, a mapping strategy utilizing the same notation strategy as the outlined parameters considers the town of Wallace as a construction of paths, edges, patterns, and notable places to identify possible sites for the placement of the project. The study revealed places of memory located along the water's edge and well as patterns of daily routine located along routes that lead out to the sea. Additionally, the paths revealed in the mapping exercise show a connection to the water, as each observed line follows the slope of the land to drain into the sea. Wallace's deep connection to the ocean is not only tied to the slope of the hill towards the water, but the town's connection to the ocean is also revealed in its clusters of daily routine and sites of memory that occur near the water's edge.



Collected images of Wallace that highlight its historic labor industries such as the nearby salt mines in Malagash, and the Sandstone Quarry.



Looking to Wallace and its surrounding regions nodes of history as well as memory can be extracted like events in a story. Some of which are the old shipping yard beside the current Wallace and Area Museum and the Rails-to-Trails; the historic railroad that still carves walking trails through the area.



The discovered nodes of Wallace's history are contrasted against present day places. The presence and interaction with sites of memory links a person back to the past.



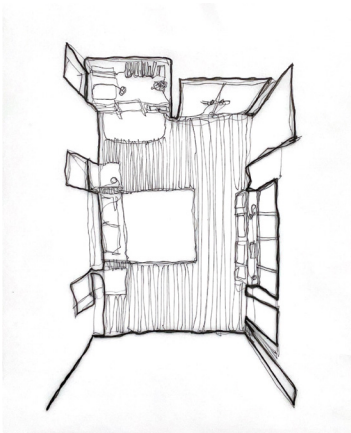
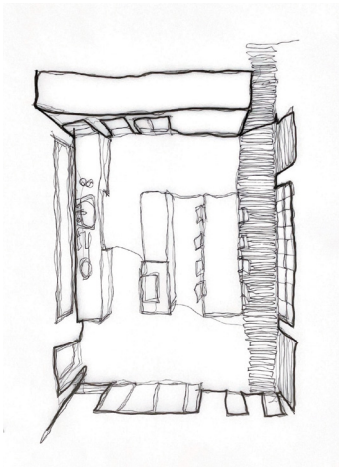
Wallace: A Coastal Town. A small tight knit community, it functions quietly with most of the daily activity happening along the water.



A notation strategy analysis Wallace's landscape to site a design using the architectural parameters of place, path, pattern, and edge. The notations reveal repeated and daily routines, as well as a concentration of memory sites along the water's edge where the old stone, and fishing wharf still exist.

Patterns in Everyday Elderly Living

Patterns are made of paths and places in an interrelated system that allows for bounded space to be understood (Bloomer 1977,96). Pattern is the mundane routines that make up a person's everyday life, the simple repeated rituals that lead to a creation of related paths and places. A pattern may be the routine of stopping inside the door to take off one's shoes, hang up a coat and shove hats and mitts into a drawer. Another imagined pattern is the ritual of waking up and calling a friend over for morning tea on the porch. The haptics qualities of repeated patterns leave lasting impressions on residents, where behaviors create memories that are stored in one's surroundings.



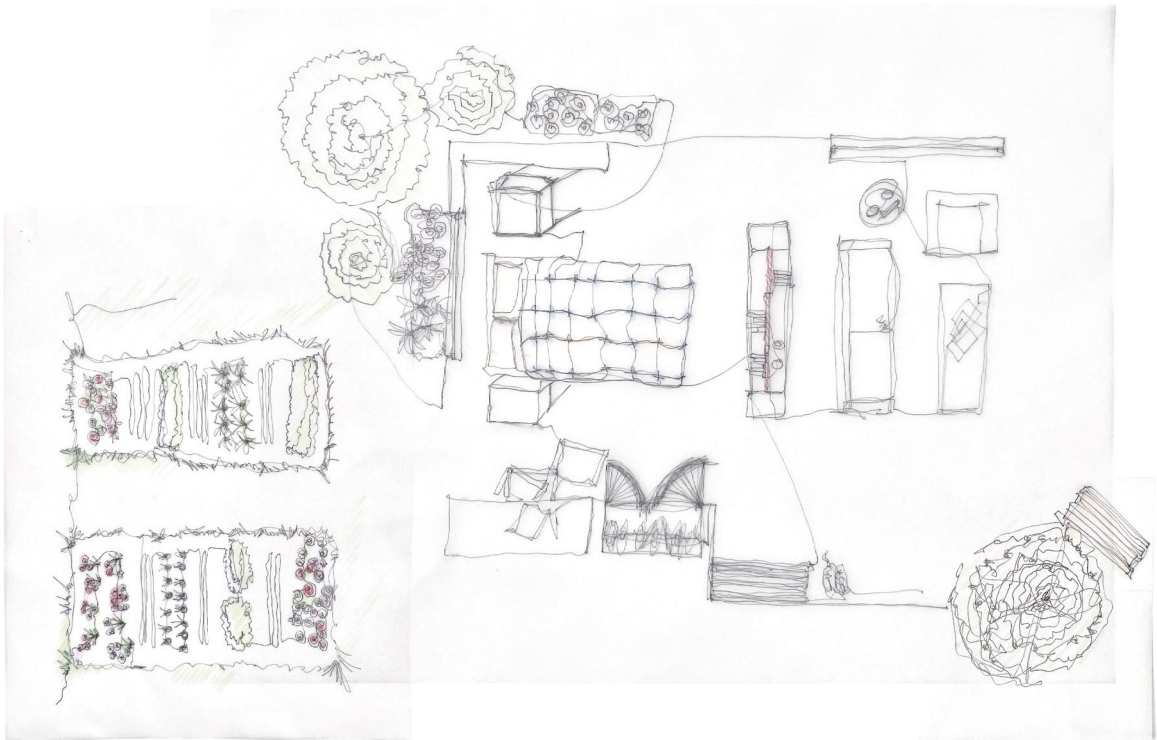
Examples of continuous line drawings inspired by collecting, remembering, and imagining daily narratives.

A Line of Experience

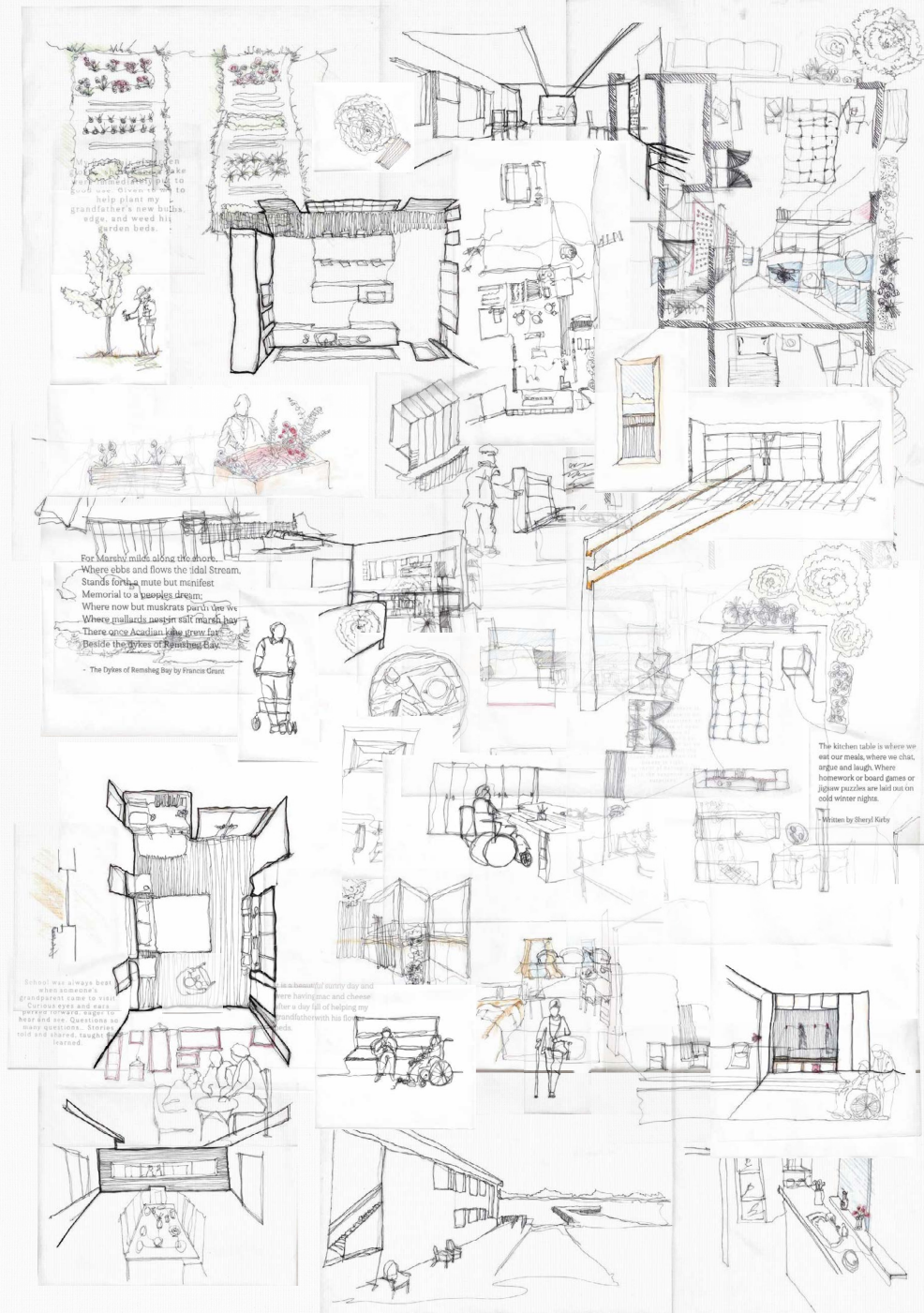
To activate pattern in the design process, continuous line drawings inspired by the ideas of Níall McLaughlin and Yeoryia Manolopoulou are used to imagine the intimate routines of people. McLaughlin and Manolopoulou used continuous line drawings to uncover the artefacts that construct life in designed space by drawing the imagined movement of a person, imitating a daily routine through the layering of drawings with the creative process of pencil on paper.

Patterns and daily rituals are imagined by using continuous line drawings to explore a day in the life of an inhabitant. The layering of these drawings creates a complex map of spatial ideas that support and inform the programs of the project and its spatial arrangements. Programs are layered into the drawing by using collected, remembered, and imagined narratives. These also included some of my own memories of growing up and helping my grandparents tidy their flower

beds, or baking the perfect batch of fudge, while others are imagined moments like an elderly fisherman teaching a curious local child to fish off the edge of the wharf on a sunny day. These dreams and wishes are supplemented with the collected moments of history by Francis Grant of Wallace, Nova Scotia. Francis Grant was a local writer and poet who collected and recorded Wallace's local stories. Programs extracted from this exercise were based on their ability to fuse existing social and cultural structures of place with intergenerational creative care. Patterns of life in Wallace revealed by this work were a local crafting scene of local rug-hooking groups, cooking, and the Nova Scotian culture of sharing food and gathering socially in a kitchen. Other simple moments extracted from the line drawings were imagined daily rituals like tending to a garden, fishing with friends, or collecting the mail.



Examples of continuous line drawings inspired by collecting, remembering, and imagining daily narratives. The drawings here depict an imagined bedroom interacting with a garden on a summer day.



Layered continuous line drawings creates a temporal exploration that use imagination, collected, and remembered moments to extract patterns from the daily life of an elderly person and select a program abstracted thought.

Imagined Moments | Social Catalysts for Interaction



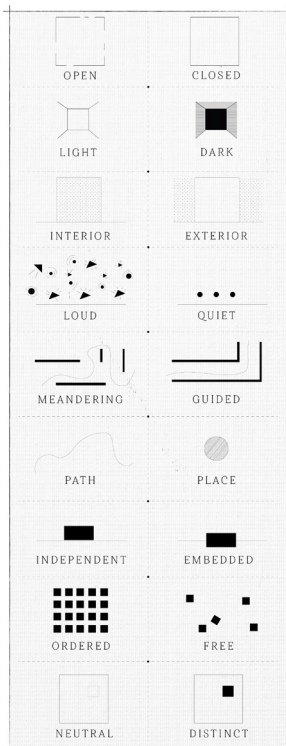
The extracted programs from the previous exercise include cooking, playing crib, taking a walk along with many other activities. Each moment coincides with a piece of writing that was a tool to generate moments of mundane experience.

Edges: The Emotive Thresholds

Edges are another integral element of architecture; edges act as the preface to the perception of architectural space making a person conscious of their movement between one space and another (Boettger 2014, 10). The spatial definition of objects and space is defined by balancing opposing forces, where one space might be bright and lively, another might be dim and calm.

Architects like Luis Barragan designed emotive spaces by blurring the edges of outside and inside, to connect the home with nature by seeing the intimate qualities of both. “The courteous threshold” as referred to by Barragan is a strategy to slowly blend inside and outside. The courteous threshold blurs not only the transition from interior to exterior, it also extends to balance opposing forces.

CONSTRASTING PAIRS



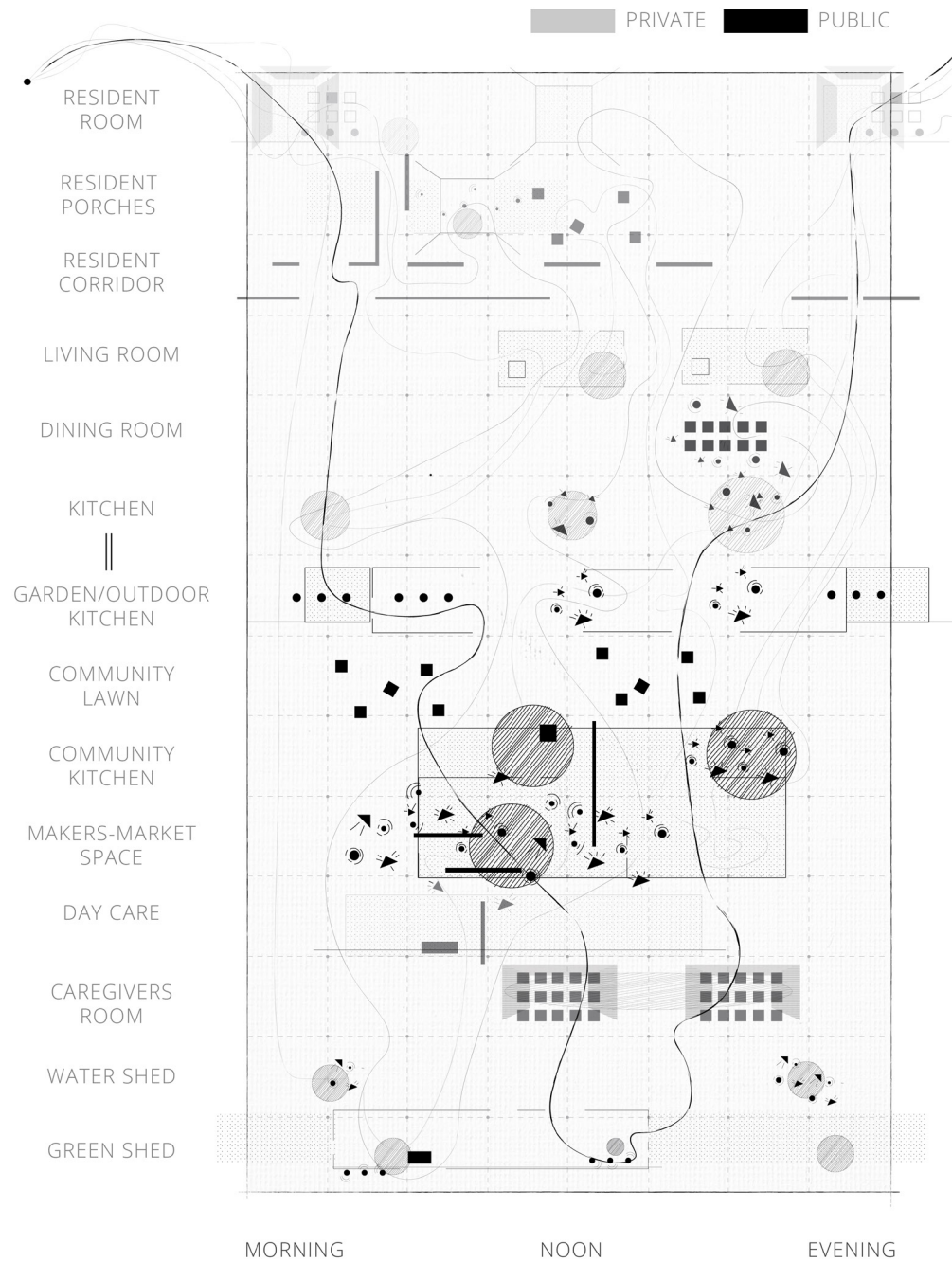
Opposing pairs construct and heighten the feeling of an atmosphere. The presence of one emphasizes the existence of another.

Mapping Atmospheres for the Elderly

An identification and abstract diagramming of opposing forces pursues a flexibility of experience and constructed atmospheres of spatial emotion for the elderly. Architectural atmospheres are created by the careful selection of counterbalancing pairs: open/closed, light/dark, interior/ exterior, loud/quiet, meandering/guided, path/place, independent /embedded, extended/self-contained, ordered/ free, and neutral/distinct (Boettger 2014, 110).

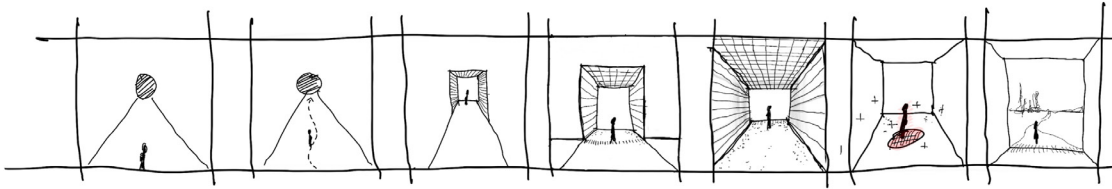
Illustrated with an abstract diagramming exercise, the identification of opposing forces evolves to consider human movement along a path through space. Counterbalancing pairs are mapped on two axes, one being duration (a day), the other a series of rooms and space in the project generated from the patterns discovered in the continuous

line drawing. The chart is divided in two gradients relating to public and private programs. The diagram highlights links between program, space, and time of day to determine qualities that inspire emotional responses.

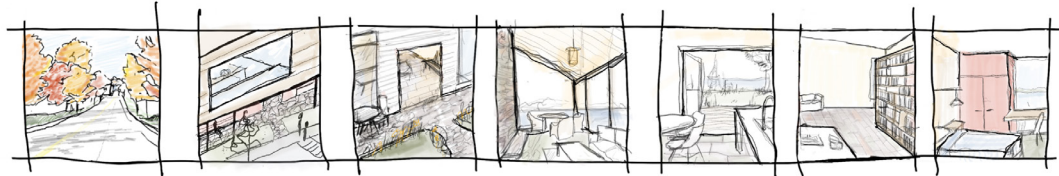


The daily experience chart imagines the day of a user and how each proposed programed space can be designed with sensory qualities as a principal focus early in a design process.

PATH SEQUENCE



PUBLIC TO PRIVATE



Path is a sequence, from recognition, approach, reaching, arrival, orientation, monitoring, and eventual exit. Early design can use path as a creative tool to imagine a sequence of spaces, and a progression from public to private.

Path to Craft a Story

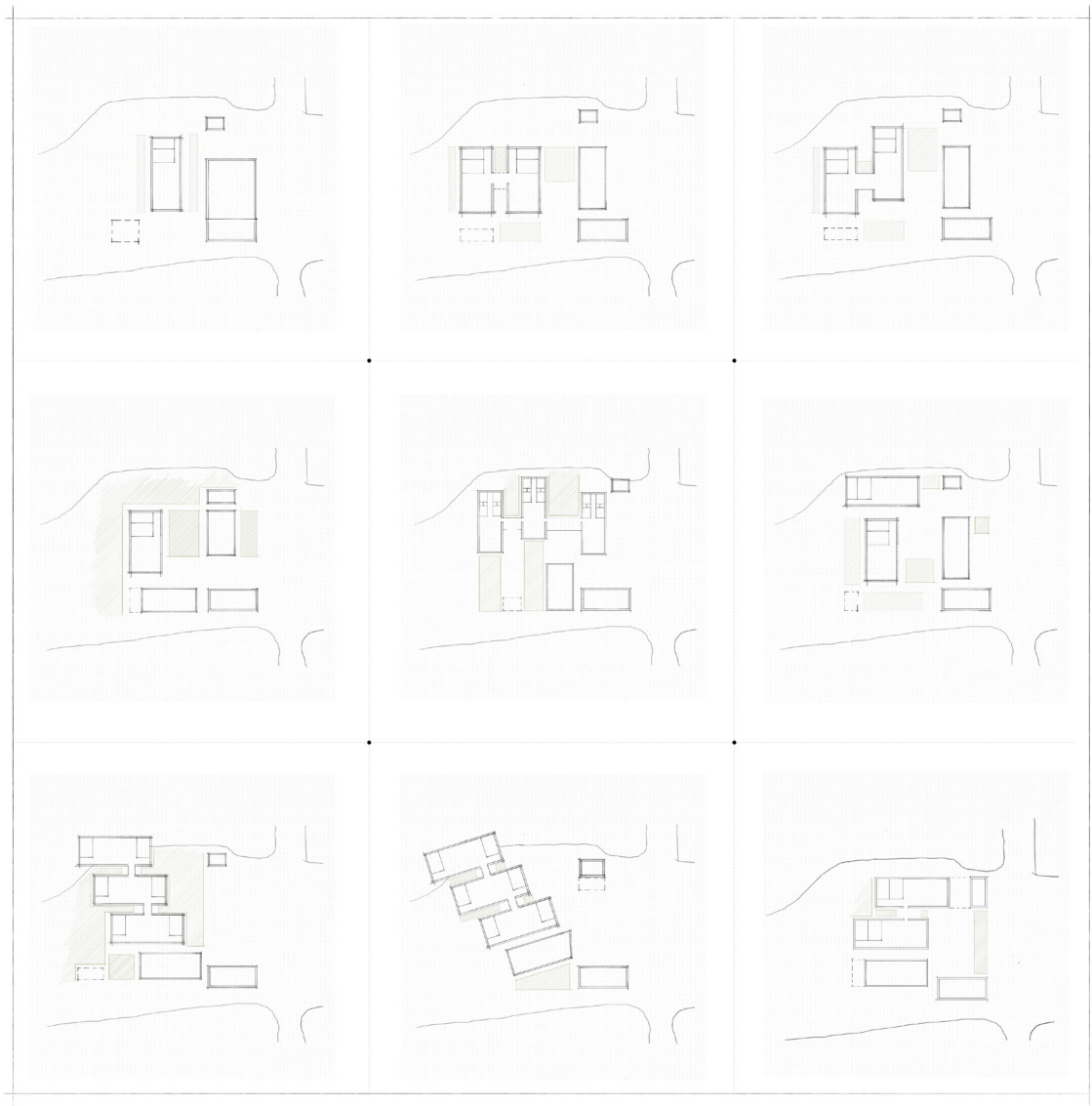
A path implies movement, associated with a sequence of edges and moments defined by the sequential phases of recognition, approach, reaching, arrival, orientation, monitoring and exit (Boettger 2014, 13). The anticipated pathway is the heart of a design, it links interior and exterior, as well as other opposing spaces in one continuous line of experience (Boettger 2014, 11).

To return to Barragan as an influence in the working methods of this thesis a layering of oral or spoken portraits over sketched designs sets up a gradual route of experience. The experience of the path at any scale through a building or site is important to craft a story. Haptic qualities along a path also aid in constructing atmospheres as people are moved along a suggested route where the sensory qualities aid in suggesting divisions between public and private.

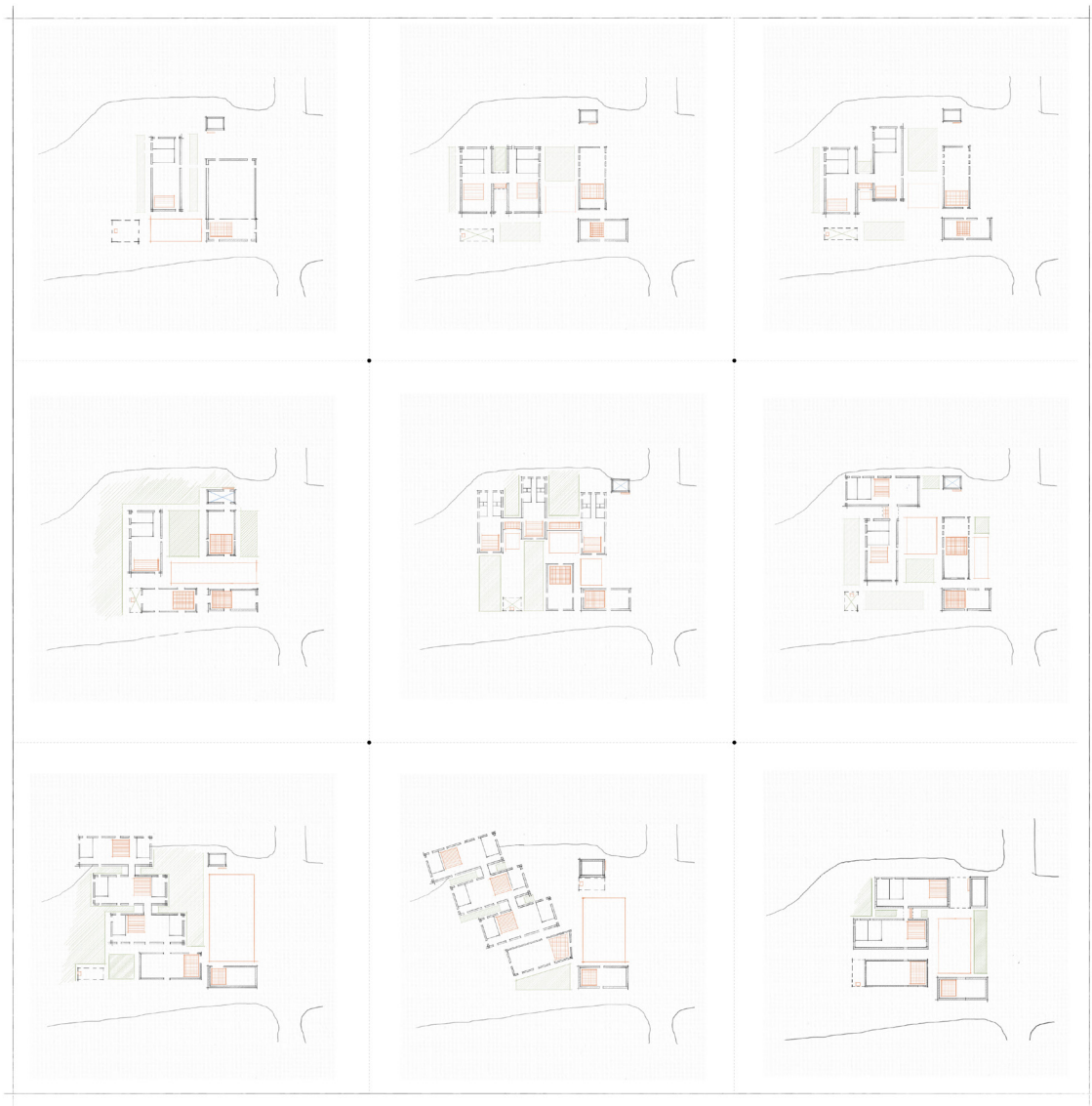
Nooks and hideaways like Barragan's courteous thresholds along a path create moments of rest and lend to the need for privacy and rest even in shared spaces. A nook or hideaway can be thought of as a space to sit and work, read a book, or enjoy a moment in nature. The resulting gradient of shared and private spaces is a critical need for an architecture of choice to provide autonomy and satisfaction to those who integrate themselves into the life of the building. Courteous thresholds also pose the opportunity to make space for people's evocative objects, adding an emotional layer of meaning and connection to an edge condition.

Layering Place, Path, Pattern, and Edge

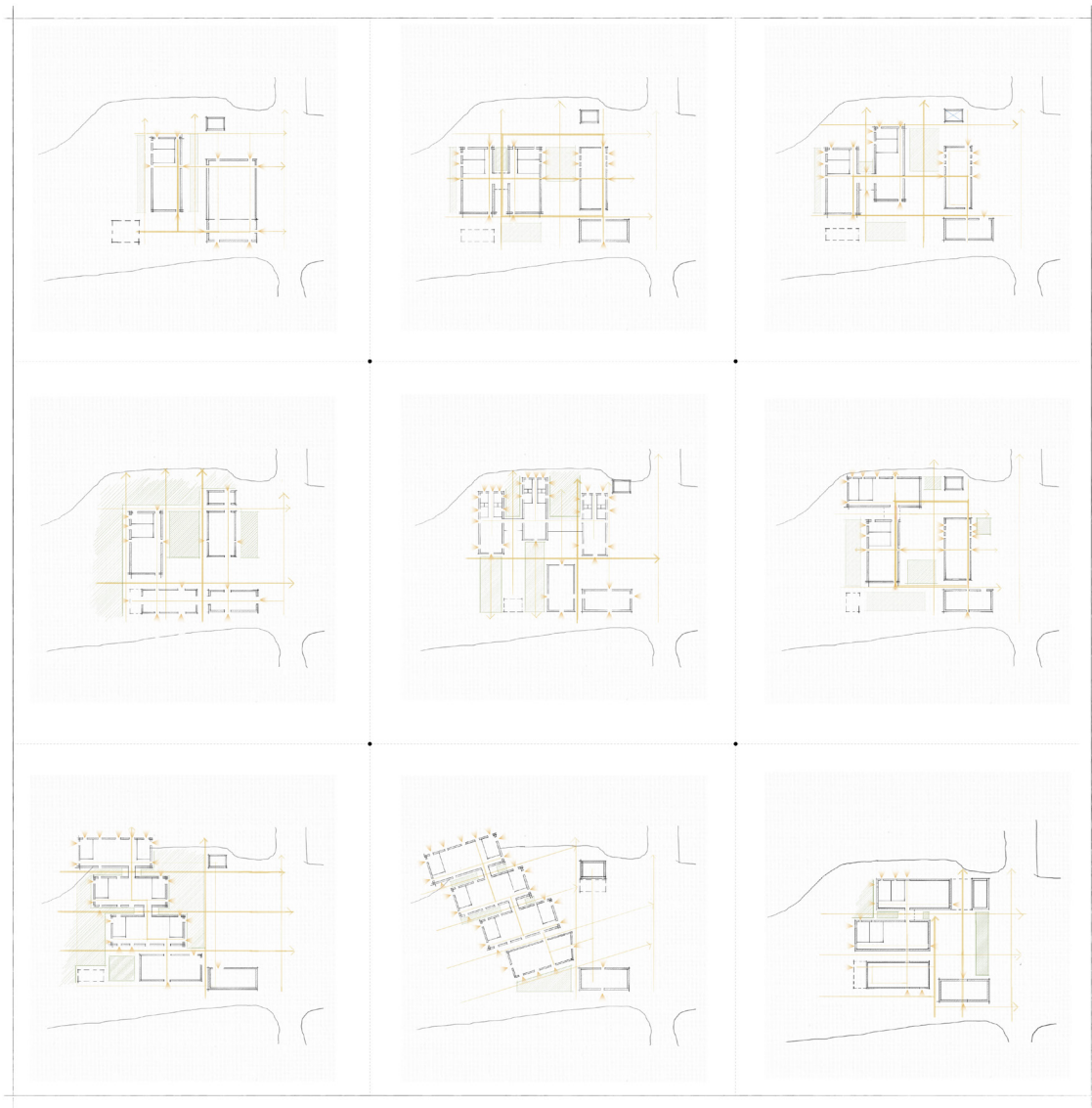
The design parameters of place, path, pattern, and edge come together in one concise diagramming exercise to test and explore a site in relation to each defined parameter. The spatial diagrams are first tested against the constraints of the selected site before layering each parameter. The working method becomes an iterative exercise that begins by searching for place, then identifying paths and their aligning views, defining edges and thresholds, and finally evaluating the resulting patterns of life created by the working combination of the other parameters.



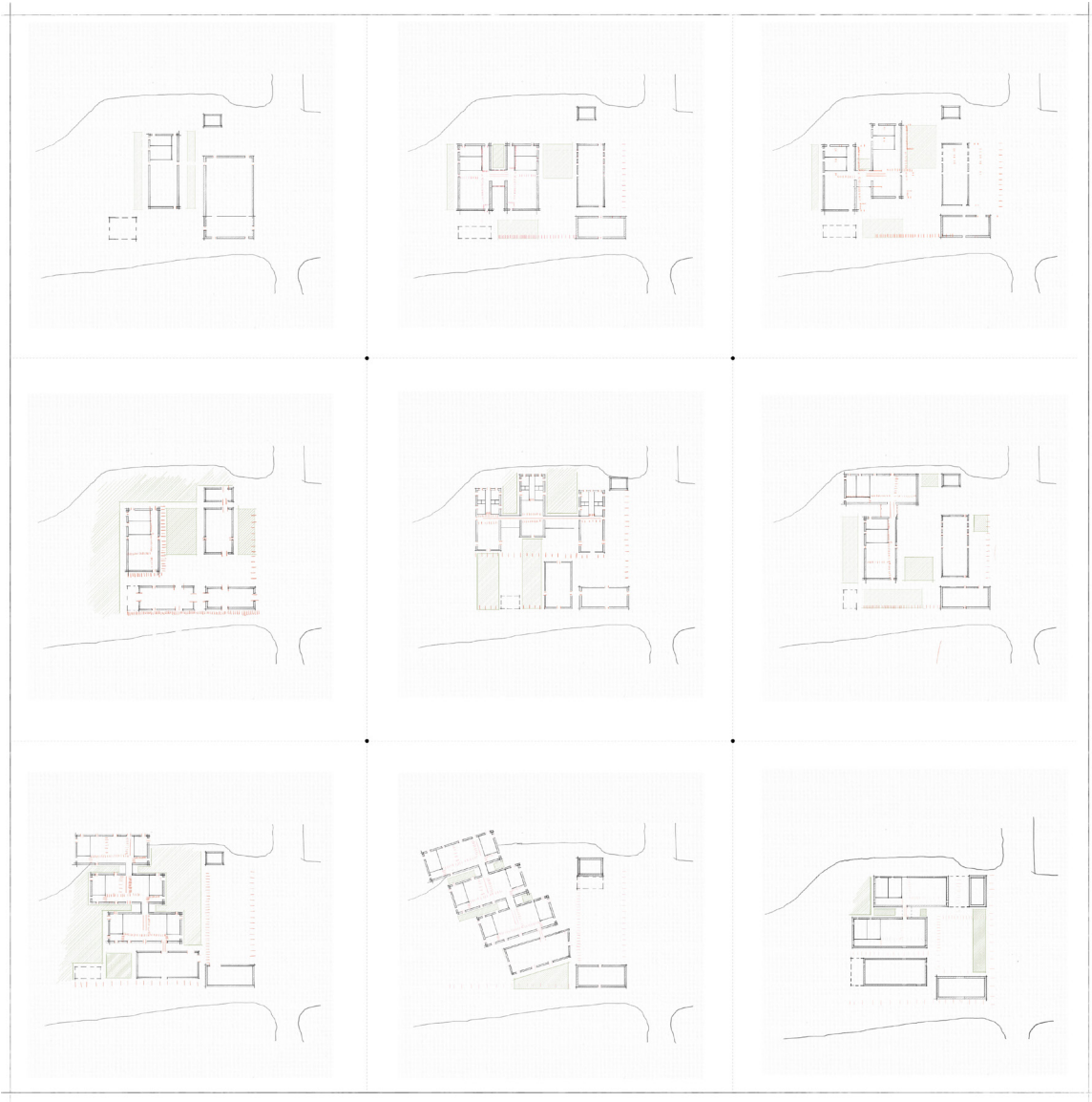
A series of diagrams tests site strategies against the layered parameters of place, pattern, path, and edge. Site is the first layer, based on a place and its given constraints.



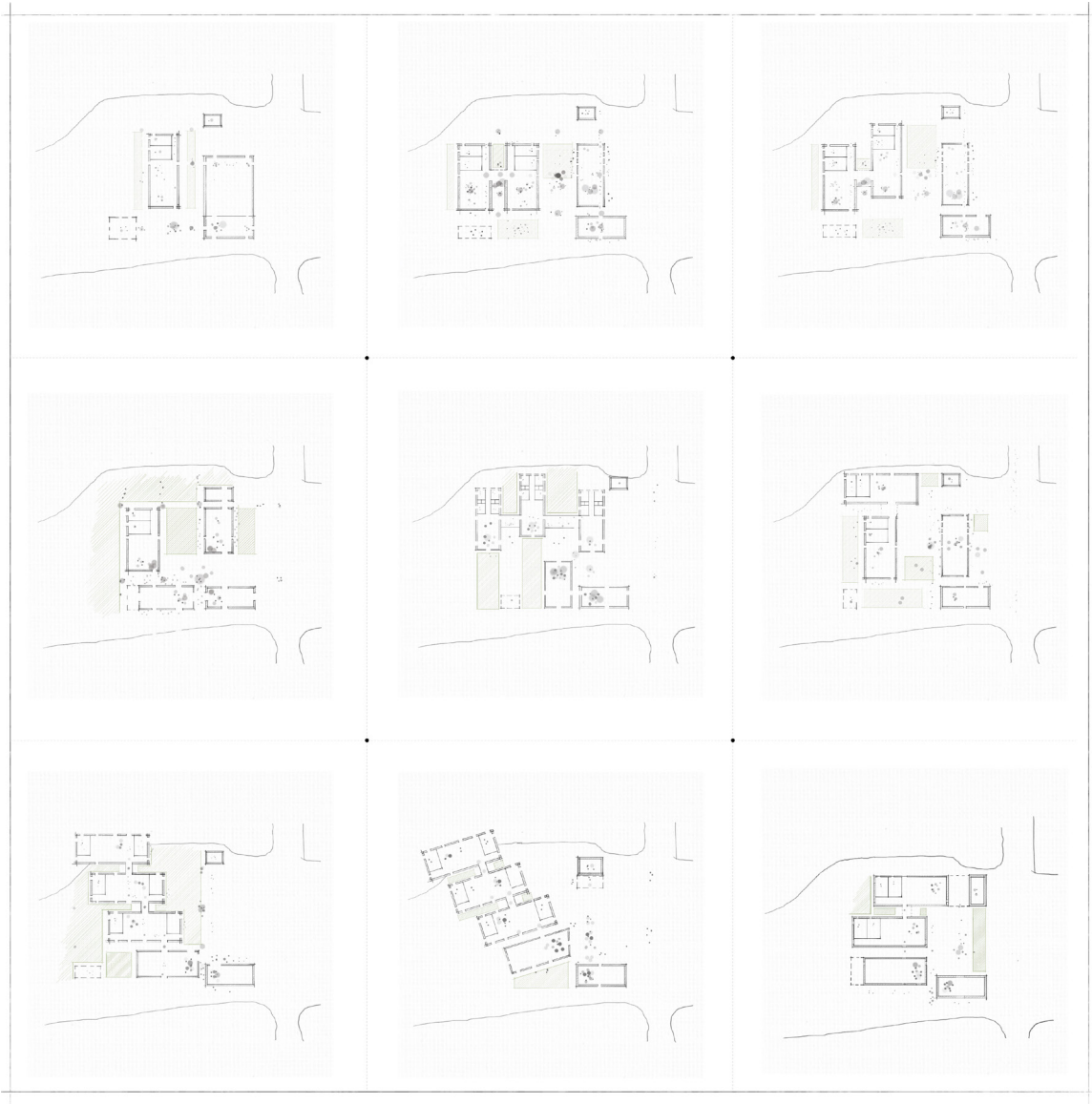
The next layer is place. Where places of activity and overlapping routines are hosted in shared space and where memories are sheltered.



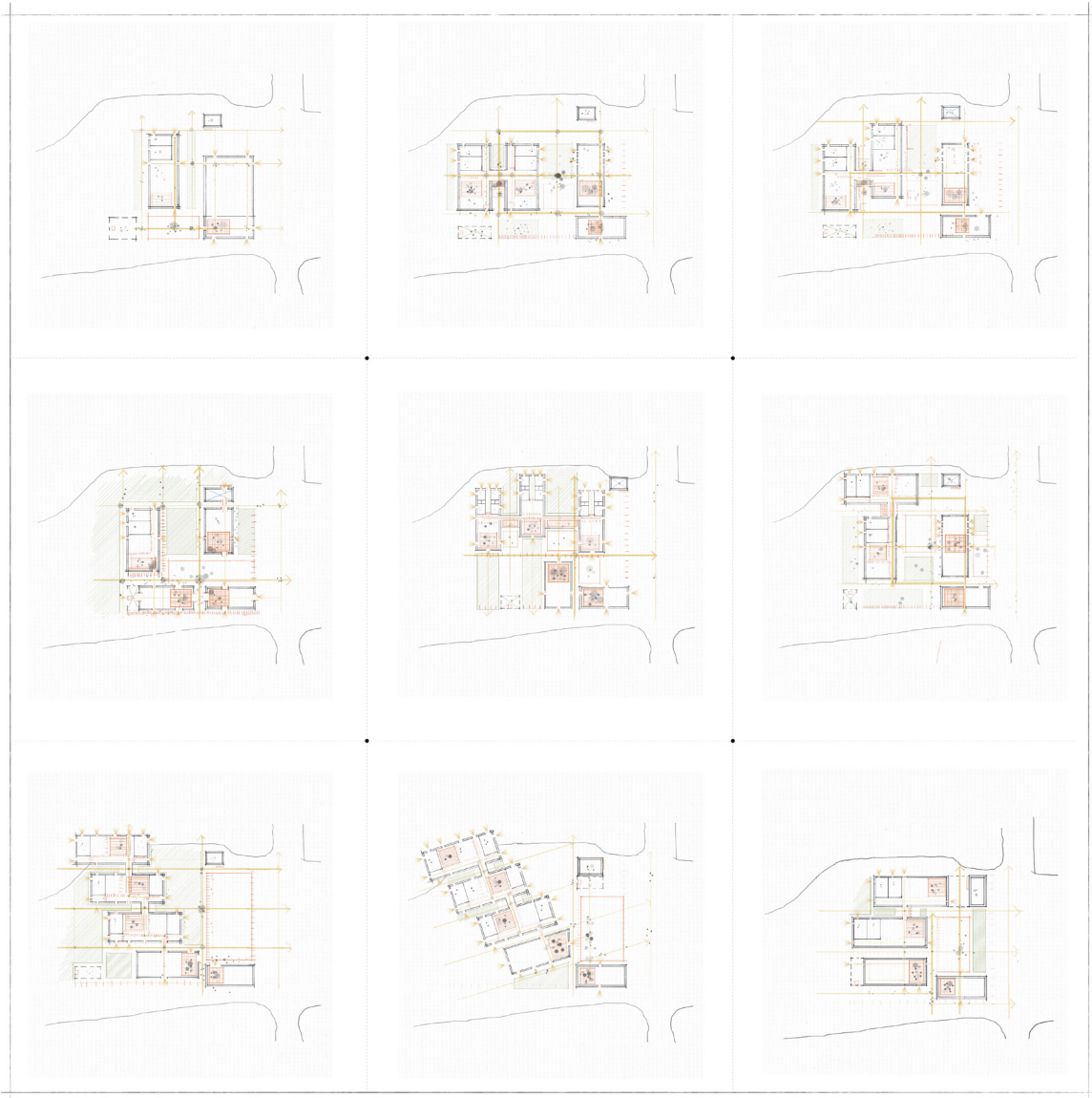
Path and views arrive in relation to place creating lines of movement through a proposed project. Where path align with views towards the water.



A gradient of public and private is considered by laying on the perceived edges of each proposed site strategy.



Pattern is imagined by overlaying the resulting areas of interaction and routine.



The combination of each layer reveals a comprehensive strategy to evaluate a site and the placement of buildings in relation to their ability to create connections between people.

A language for Material Activation

Alongside a layered approach to site, the working methods of place, path, pattern, and edge are supported by a material language inspired by Barragan's belief that color should be informed by the surrounding landscape. Natural materials are intimately linked to a locality and express the passage of time through their gradual wear, such as the local sandstone from the active and historic quarry, and natural wood boards reminiscent of old wharfs and weathered homes. The color palette of the project is shaped by the varying shades of red and yellow reminiscent of the hidden colors of Wallace. The reds and yellows are extracted from the local beaches colored by eroded iron oxide of granite rocks and contrasted by the vibrant ochre yellow of swaying beach grass, colors that appear even more lively contrasted against the expansive blue skies and seas of the area.

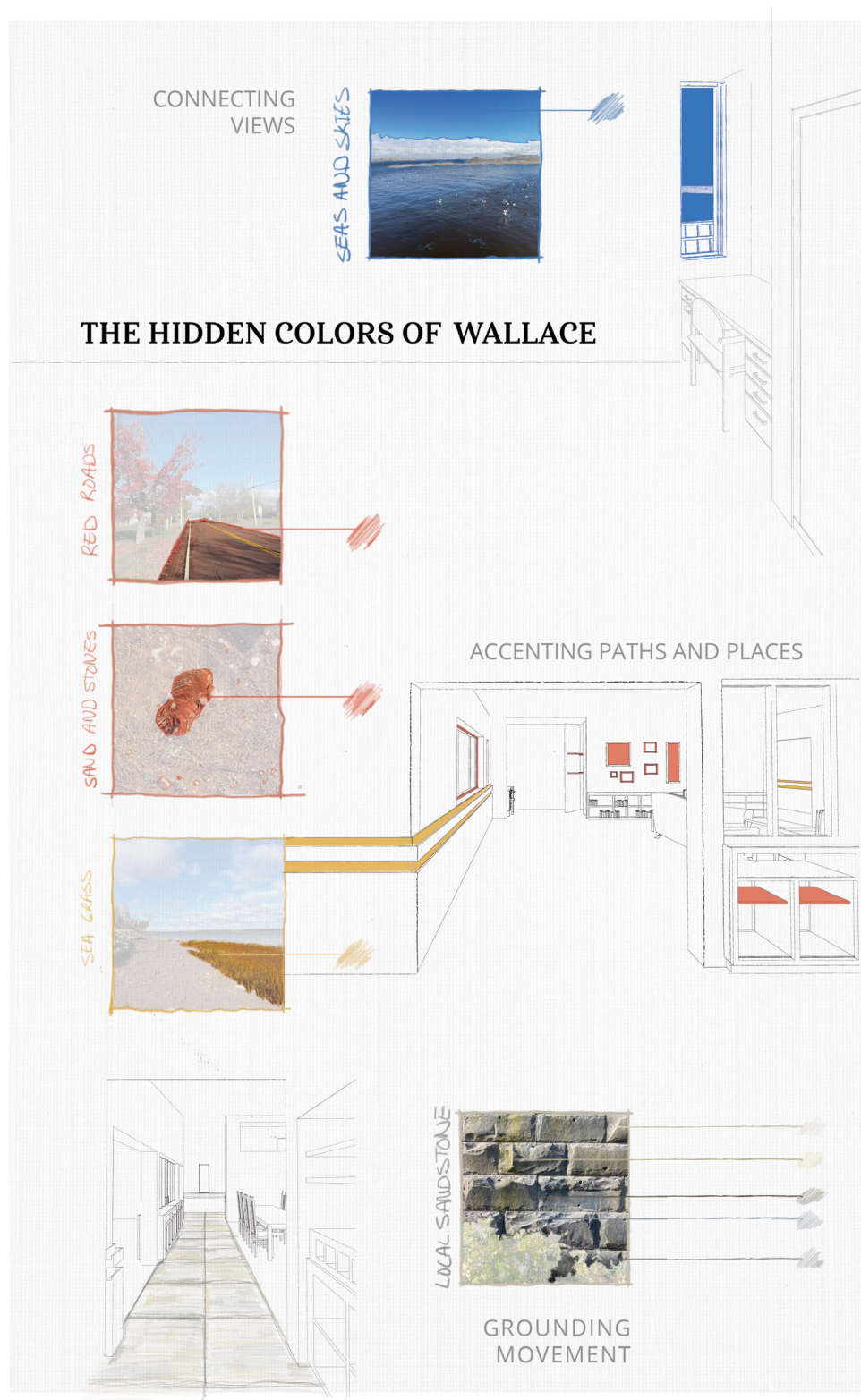
Additionally, color and material are wayfinding tools used to personalize a space or draw attention to important elements, such as a path of travel, or a handrail. Materials even have auditory indications for orientation such as, the brush of a flat sandstone floor that transitions to wood indicating a change in atmosphere, hinting to the arrival at a stay space in contrast to a circulation space.

Matrix of Material Applications

A collection of healthcare precedents, the extraction of the hidden colors of Wallace and an iterative design exercise are assembled to explore the use of color and materials to denote place, wayfinding, express moods, and feelings, as well as mark important thresholds. Material attitudes reveal thoughts and considerations to where people should gather, how they might move along a path, and what spaces are extensions of other landscapes.

Color is also a tool for wayfinding as it brings attention to important thresholds and denotes movement in space. A collection of healthcare precedents is collaged to reveal how color can be used practically, as well as emotionally.





Inspired by the color concepts employed by Luis Barragan the hidden colors of Wallace are extracted to form a material palette of memory. The palette features the blues of the seas and skies, the red rocks and beaches, as well as the locally quarried sandstone.



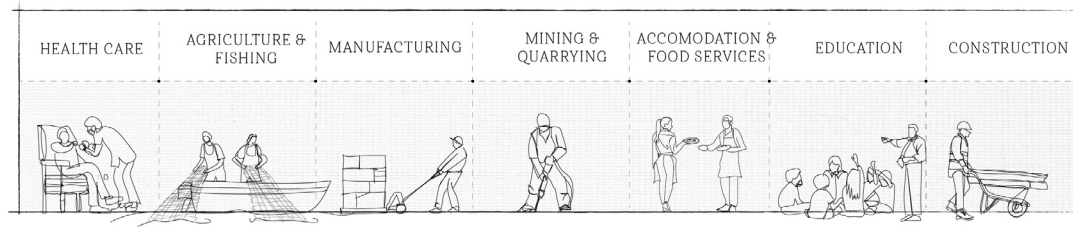
The continuous line drawings previously used to imagine a day in the life of a resident test color with an iterative drawing process that intertwines color, perspective vignettes and emotion.

Chapter 4: Design Response

A Place to Call Home

The proposed design project is a collective approach to housing for the elderly that allows 8-12 residents of varying ages to live together near a community kitchen and flexible Makers-Market Space at the heart of a rural town. Collecting pieces of place together and occupying the centre of Wallace creates a habitus of place for not only the elderly people of Wallace but also seasonal workers, and artists in residence who are engaged in work in town and the adjacent Makers-Market Space. Residential living intertwined with a day centre for the community will engage the elderly in daily living and combat previously isolating practices that were typical of elderly living environments. The proposed collective living and community approach encompasses health, creativity, and care into one design intended to support older adults who have reached a pivotal moment in life where they require additional support from their environments and communities. This thesis positions itself preventatively designing for those who may end up in institutional care without better community-based interventions.

Wallace's population like many other small rural towns is largely agricultural, with long histories of labor, such as mining, quarrying, and fishing. Most of those living in Wallace occupy jobs in the healthcare, agriculture and fishing, manufacturing, mining and quarrying, accommodation and food services, education, and construction. The types of work in Wallace are largely seasonal reflecting the cyclical nature of rural life in Canada.



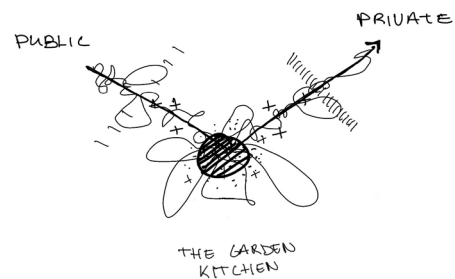
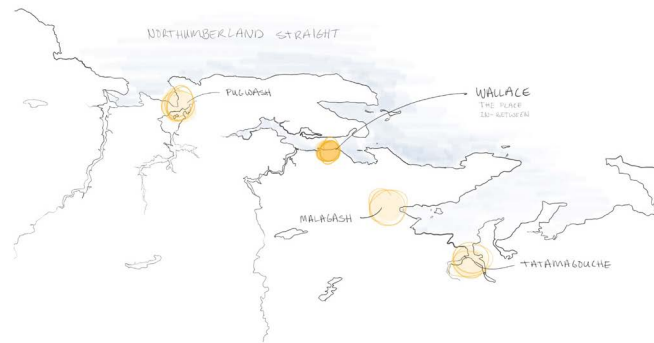
Life in Wallace revolves around the seasonal nature of many of the types of work common in the area like quarrying, fishing, and education. The local labour industries in Wallace form the region's patterns.

Place: A Nova Scotia Kitchen Party

The site and placement of the project was selected based on its proximity to the stone wharf and local fishing wharf as places deeply connected to Wallace's memories, as well as current patterns of daily interaction, paths of movement, and important thresholds between public and private, living and working, nature and human inhabitation. The placement of the project is deeply connected to the town's identity as it activates the space between land and sea.

The project at the regional scale fills a gap that existed in-between a string of coastal communities by adding another option for elderly care that allows the residents of Wallace to pursue a collective living option, instead of institutional care. Wallace, already functioned as a default "place in-between" due to its location between the towns of Malagash, Pugwash, and Tatamagouche. The addition of a community kitchen and Makers-Market Space will intentionally draw people from nearby towns to the heart of Wallace, increasing daily intergenerational interactions between communities. A kitchen within the maritime culture is steeped in tradition, often referred to as a Nova Scotia Kitchen Party. The kitchen is a social space at the centre of domestic life.

This relationship is reproduced in the public building as a community kitchen promotes local traditions of sharing food and stories to forge relationships of care around a kitchen table.



The scales of place are explored as a place between areas, a building between land and sea and a kitchen between public and private.

The community kitchen connects elderly people living in the Intergenerational House with others from the community and beyond. The kitchen collects people together who are engaging in crafting groups and who have come to explore the market, as well as the other programs of a caretaker's lounge, and local day care. The addition of a caretaker's space in the community portion of the program serves as a physical location to exchange knowledge and support between residents and caregivers. The presence of a daycare supports local caregivers, providing them the opportunity to drop off young children before attending an event or simply enjoying a quiet moment at the market. The public building will also serve the local elementary by hosting before and after school programs. The daycare and connection to the nearby school will generate new intergenerational encounters. Again, the kitchen becomes the space where each of these groups safely overlap; by allowing people to run into each other as they prepare a



Wallace from the Water: the fishing wharf is dotted with new reading nooks that lead to the Makers-Market Space, water shed, and Intergenerational House.

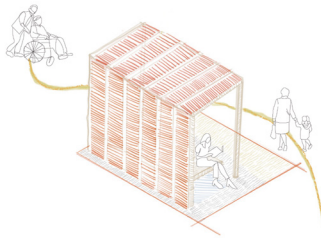
cup of tea, make sandwiches for a meeting, or lead young students in preparing and delivering meal kits to the elderly.

In the Intergenerational house, the kitchen connects people living in two adjacent units in a casual space. Much like the community kitchen, the residential kitchen encourages daily passive interactions between the residents of the home. The kitchen also reaches out to include exterior space as the purposeful placement of windows and glazing connects each kitchen to an outdoor living room.

Path: Along the Sunrise Trail

The placement of the project at the intersections of two major paths; the main road into town and the coastal sunrise trail that connects a string of small coastal Nova Scotia communities is a key consideration when designing the orientation of the project. The main road into town leads directly out onto the public wharf, connecting land and sea, a deeply significant part of the town's identity. The location of the Makers-Market Space along this same wharf transforms the fishing wharf into an extension of the public street. The Intergenerational House is also a place that creates new lines drawn parallel to the wharf, each connecting the top of the hill to the water. The new paths are reminiscent of the old gravity rail that once shipped local sandstone out to sea. The interior paths of the project function like a wharf by reaching out towards the water connecting residents with the natural landscape. Perpendicular lines created by the careful placement of windows and paths along the resulting lines of visibility move a person towards the water and exterior streets to engage with the Makers-Market space as well as the active programming of the Wharf.

The project activates the wharf as a public space sensitive and conscious of its nearby older residents. Reading nooks, intergenerational benches, and handrails through town make walking an accessible routine for the elderly population. The suggested connection to other important buildings in town preserve daily routines that people are used to performing like browsing the hardware store for supplies, picking up mail from the post office, and volunteering as a crossing guard in the morning for the local elementary. Each reading nook shares information and stories collected from the local sites of memory derived from Wallace and its surrounding regions, as well as providing places to post and share local news.



Vignette of reading pavilions along the wharf.



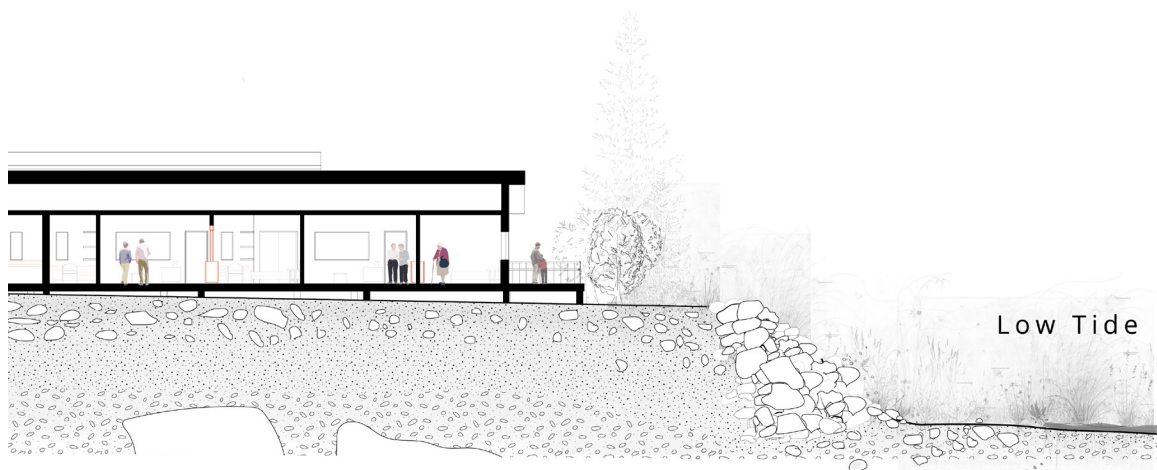
Site plan of the Makers-Market Space, and the Intergenerational House in relation to the reading pavilions and paths through town that ensure everyday life is not contained to the inside of the home.



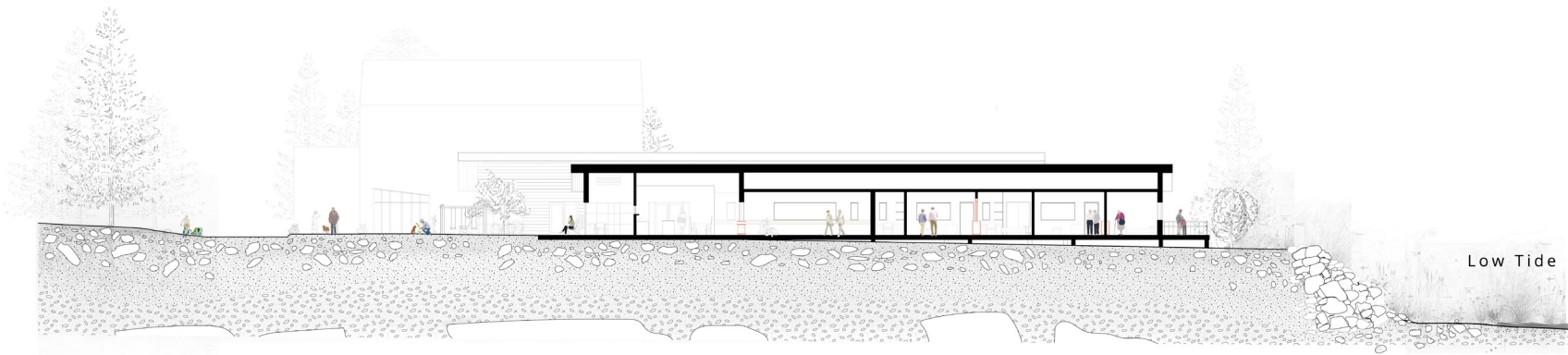
Along the public wharf the new Makers-Market Space focuses activity in close proximity to the Intergenerational House. A second floor hosts a daycare and a caretaker's lounge, creating a place for everyone alongside the elderly.

Edge: A Home for Nostalgic Objects

The paths that move residents through the space and through the town constructs a similar language of rest and memory activation at the edge conditions of the Intergenerational House. The edges of the Intergenerational House lead a person from entry to exit and from public to private, buffering each space with a courteous threshold that creates a home for a person's nostalgic objects. Each courteous threshold makes space for people's nostalgic objects like photos on book shelves, or a favorite hat hung by the door. The resulting personalization and autonomy in shared space initiate feelings of both ownership and connection. Front and back porches, as well as screened-in porches encourage residents to engage with their communities beyond the interior of the home. Porches, again blur the edges of inside and outside, extending the space allotted to elderly living through multiple seasons and engaging in the cyclical nature of time.



Section of bedrooms backing up onto a wrap around back porch. Inviting residents to sit out back and watch the tide roll in. A wall of shelves drawn in red also partitions bedroom and living acting as a courteous threshold.



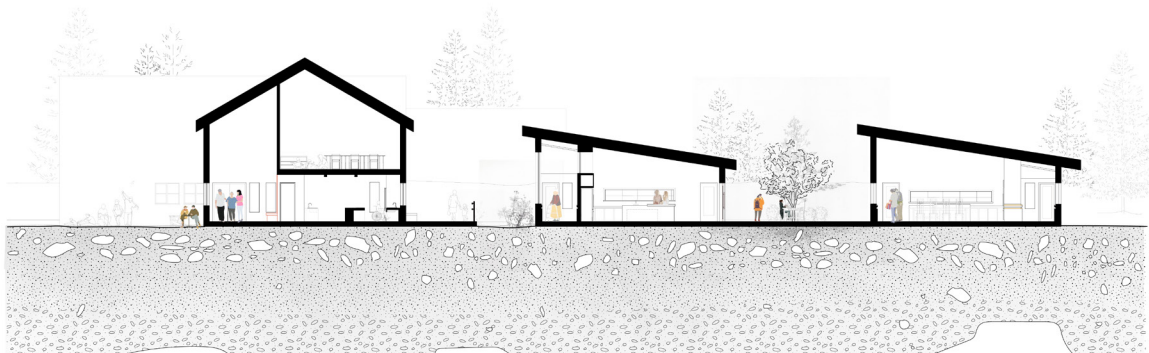
The full section of the Intergenerational House reveals the design's gentle approach to the site as it moves towards the water. Its construction and formal attitude give a nod to the nearby wharf by using one continuous grade to project the project towards the water. Additionally, one continuous floor makes the design fully accessible.



An axonometric reveals a sequence of courteous thresholds from public to private. As well as the design's intention to endure as a new site of memory relating a person the passage of time and Nova Scotia's diverse seasons.

Pattern: Hosting Intergenerational and Creative Care

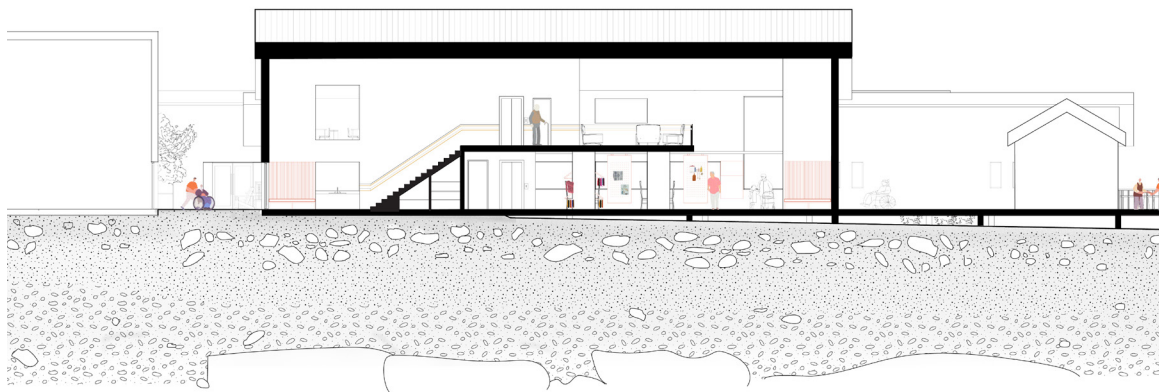
The working methods of this thesis used continuous line drawings to extract programs and stories that would potentially result in intergenerational interactions and improved relationships of care. Paired with research on the benefits of creative care as flexible and imaginative forms of care to promote self-expression. A look into what type of craft might be intimately tied to Wallace's identity revealed an active community of artists and residents who meet weekly to practice rug-hooking and undertake other community projects. Rug hooking is a popular type of craft in the Maritimes, an art that first developed from using old clothing scraps to create rugs to add warmth to a home (Fitzpatrick 2006). Rugs would often be placed at important thresholds of a home to welcome people into new spaces. Crafted rugs are embedded with feeling through the process of making, feelings that can be shared and evoked in others. The Makers-Market space honors this tradition of rug hooking and nods to its utilitarian past as a tool to add warmth and texture to a space, as well as a symbol of



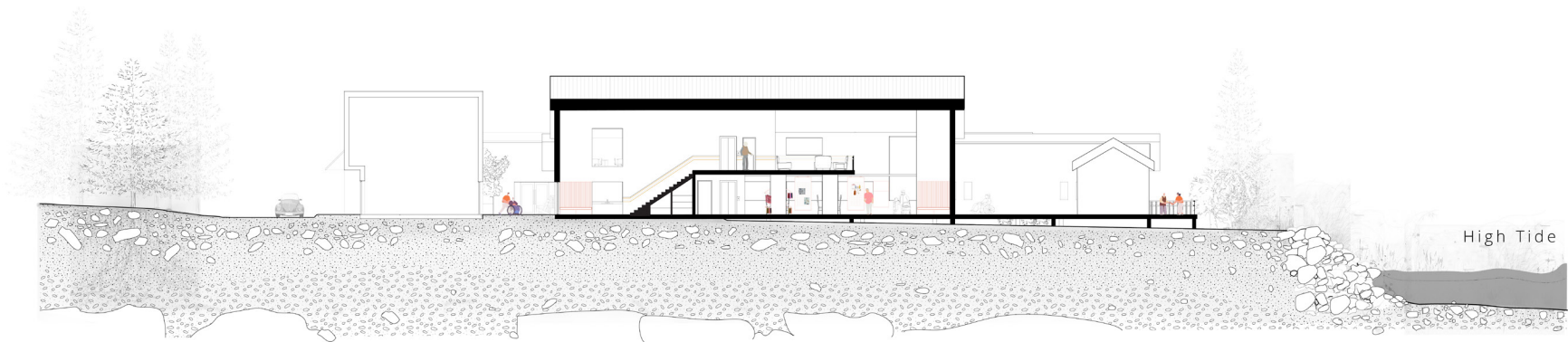
The space in-between the Makers-Market Space and the Intergenerational house has become a series of porches of gardens and porches protected from ocean winds. The section cuts through the kitchens showing how the kitchen are a connective space in the design; a place to create memories and share daily life.

The Makers-Market Space with the addition of hung Rug-hooked art becomes a flexible space that transforms from cozy crafting zones to a lively market, and an open event space. Community members are engaged in the process of making the work that hangs in the Makers-Market Space; the rug becoming a piece of living art. The rug also becomes a primary partition, temporary in time as it ages with the people of Wallace, capable of being replaced seasonally or annually to represent new passions, ideas, and life cycles.

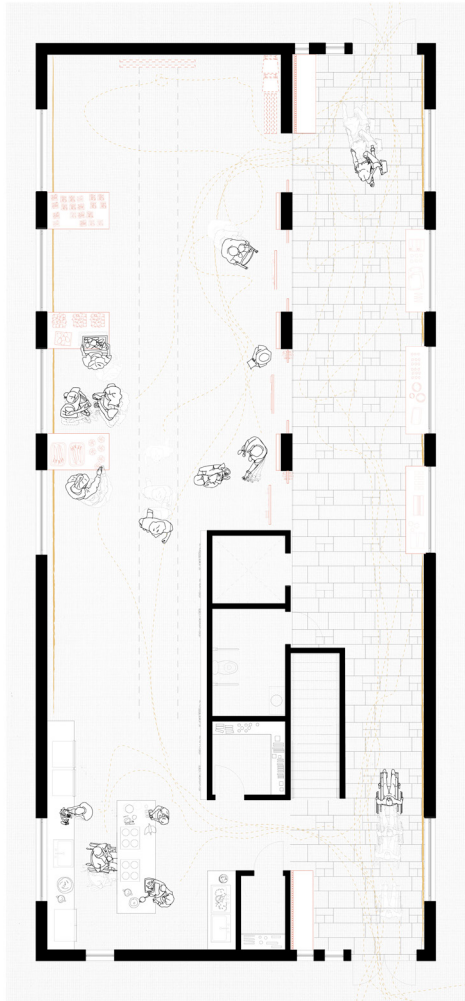
Additional flexible elements help to transform the design from market, to makers space, and into an event space by using other moving partitions that allow artwork to hang for display or to be dried. The secondary partitions function as display space for market vendors, with arms that fold down from wall spaces to hang products and goods. Tables fold down from the walls work in the same way, in the hours when crafting is taking place, they host drawing utensils and spools of yarn but during market hours tables are a place to display local wine and freshly caught seafood.



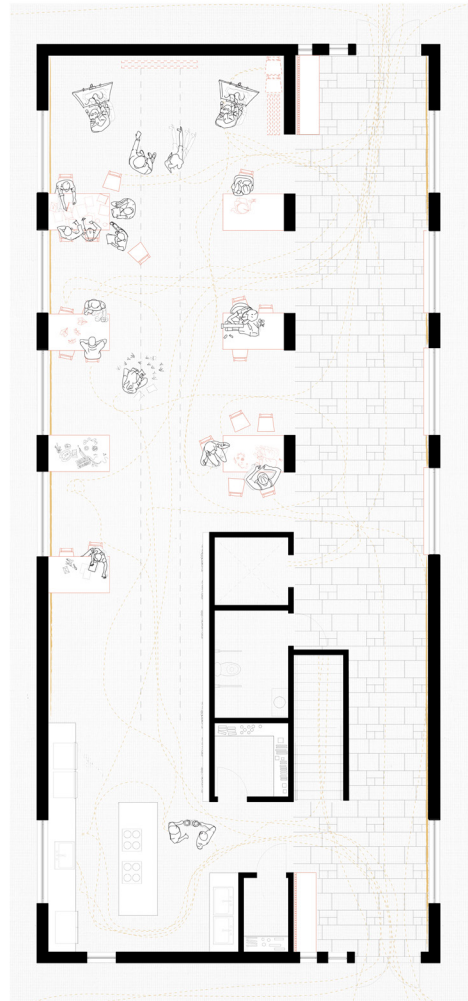
A zoom in of the Makers-Market Space reveals the new street created between the local restaurant and the new public building. Other intimate moments like the movement of the yellow ochre handrail and red partition elements that hold and display artwork constructing the space's flexible attitude.



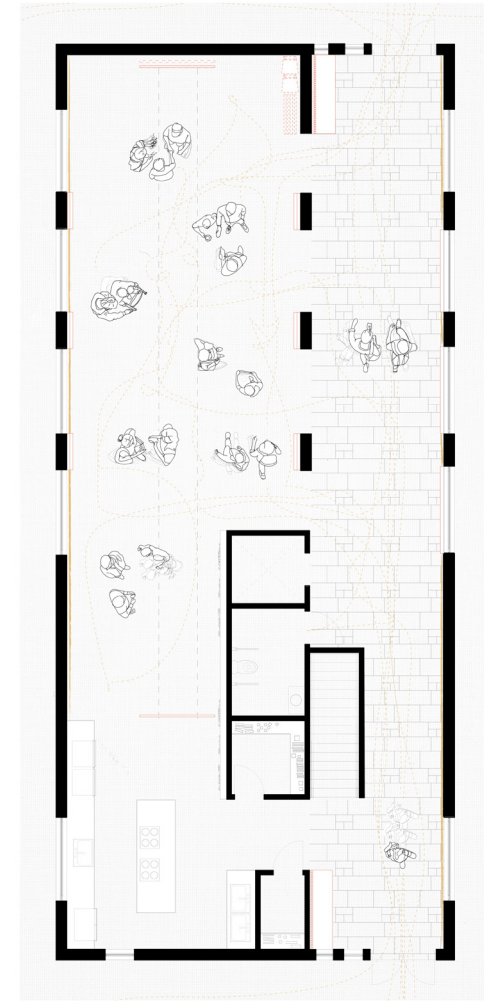
At high tide the inhabitants of Wallace enjoy a wander through the Makers-Market during their Sunday morning exhibition after a visit to the local restaurant for brunch.



A MORNING AT THE MARKET



AN AFTERNOON CRAFTING



AN EVENING EVENT

In the morning the Makers-Market Space holds tables that fold down from the wall and moving partitions that display local wares. The space transforms in the afternoon to a crafting space partitioned by locally rug-hooked art. The same tables as the morning market host creative projects in the afternoon, before being folded back up into the walls to allow for larger groups to host evening events.

Emotional Materials

Throughout the project the senses are engaged subtly to improve the perception of the constructed spaces. The program of a kitchen connected to the sea is a deeply sensory experience producing noises and smells that people are familiar with, such as the aroma of salty seas mingling with the smell of brewed coffee. The connection to the sea through paths and views also offer the constant sound of lapping waves against the sandstone and granite breakwaters that protect the site from storms and rising sea levels. The location of interior courtyards and outdoor spaces along the western side of site protect from prevailing winds ensuring that spaces remain comfortable. The addition of sunrooms, living areas and a greenhouse on the southern face of the project extend a resident's ability to enjoy sunlight and the outdoors beyond the summer and spring seasons. The simple slope of the roof also brings warm rays of morning light into the circulation and kitchen spaces.



Sandstone paths carve through movement spaces leading to stay spaces of warm wood. The wood floor of stay spaces run from interior living to exterior living rooms blurring the boundaries between outside and in.

Areas of rest, movement and encounter are expressed through the flooring underfoot. Wood identifies stay spaces like living and bedrooms, while sandstone identifies movement paths. The spaces of repeated social interaction are the created habitus of the project, like the kitchen that produces a place of memory and social energy. The role of the kitchen as a place to root a person is reflected in the red tones of the floor inspired by the mudflats and red stones of Wallace. Color is also used selectively along the occupied edges of the project to bring attention to certain important elements intended to hold people's memories. A red hook for a favorite hat or the highlight of yellow along an intergenerational handrail captures the impressions of the repeated times a person has walked the length of the hall with their hand trailing across the wood of the rail. Color and materials bring attention and energy to moments of memory, jumping in to add a complexity of experience and emotion to the designed space.



*The front door greets you and
ushers you inside, protecting
you from the rain. There is a
place for your boots and coat.
You hang them to dry and wait
for another wet day.*

In from the rain: It is another rainy Nova Scotia day. The front entry ushers you inside, offering you reprieve. Warm yellows and wood tones chase the chill from your bones. You sit and place you boots and coat back in their place.



*The kitchen often hosts my fondest
recollections of growing up. I
remember learning to make fudge,
melting crayons to create art, and
the smell of fresh bodge, bodge.*

A Nova Scotia Kitchen Party: Inside the smell of fresh baking fills the air, you chat with everyone and offer to lend a hand with the dishes still in the sink. You look out into the screened in deck and consider grabbing your book to read for the rest of the day.

*I remember watching Mom sit with
grandad helping him pen his letters to
friends and family. It had become a weekly
routine. Opening letters and crafting
careful responses together.*



The mail nook: Growing up checking the mail was always your favorite, you remember running to see who might have written. Now you share letters with your grandkids, reading them news from your friends, and getting their help writing responses.



My grandfather and I sit with a photo album open on our laps. He points out good places. He tells me stories about his friends growing up. We spend the afternoon together sharing and discussing special moments, while creating our own.

A wall for memories: It has been a long time since you showed off your friends and family's accomplishments! Was it only yesterday?



*Imagine there was room to
dance, space to feel, and a
place for memories...*

Space to Dance: It is a winter's night, one of those cozy ones where everything is so quiet. Your almost ready for bed, but what's one more dance?



The waves lapped against the vibrant red of the mudflats. We walked slowly to enjoy the salt air and the feeling of the sun on our skin.

The back porch: The waves are lapping softly along the red sandy shores, the sun is shining on your skin, the salty breeze is toying with the edge of your hat. A perfect day for a summer stroll.

Chapter 5: Conclusion

This thesis reframes the elderly as principal participants in cultivating a sense of place at the centre of a community. The working methods are inspired by the emotive design processes of Luis Barragan, Níall McLaughlin and Yeoryia Manolopoulou. The parameters of path, pattern, place, and edge proposed by Kent Bloomer and Charles Moore seek to establish a habitus that supports people as they grow old. The thesis takes a comprehensive approach to designing for those left in-between living independently at home and having to move into institutional care, specifically in rural environments. This thesis sets to work an imaginative approach to architecture rooted in a layering of stories, places, and people. The work uses memory and imagination as tools to construct atmospheres of spatial emotion expressed through diagramming, writing, and drawing.

Wallace, Nova Scotia became a testing site for the thesis to explore an extensive mapping of the identified parameters as well as uncover sites of memories and nodes of history that contribute to the cultural, social, and natural landscape of a place. Narrative work brought the design project to life, infusing locality into the roots of the work and establishing the elderly as the keepers of stories and community leaders at the centre of a place.

The design response is a collective intergenerational living environment and Makers-Market Space that preserves the intimacies of the domestic realm of elderly people to promote daily social interactions. The placement of the project in relation to sites of memory, the activation of the kitchen as a social space, courteous thresholds and sensory elements crafted through careful material selections create

a space where elderly people retain their autonomy, sense of belonging, and sense of self.

This thesis acknowledges and promotes an imaginative design process needed in elderly care architecture to extend beyond the institution into emotional, social, and cultural realms of care. Redefining what it means to grow old through the integration of stories and daily routines into the built environment to foster a place where people can continue to live as they have learned to live, enriched by the little moments of life that make everyday special.

Potential avenues for further development that have been revealed as part of the research of this thesis involve expanding connections and routes from Wallace to neighbouring towns. As well as adding additional healthcare services and programming to improve rural areas' access to care services. The work could grow to serve increased numbers of people by exploring scaling the project up or placing it into an urban setting. Where new studies would be needed to discover where in cities memories hide, and how to share them amongst diverse populations to engage the elderly in daily life.

References

- Bar-Tur, Liora. 2021. "Fostering Well-Being in the Elderly: Translating Theories on Positive Aging to Practical Approaches." *Frontiers in Medicine* 8: 517226–517226. <https://doi.org/10.3389/fmed.2021.517226>.
- Bloomer, Kent C. 1977. *Body, Memory, and Architecture*. Yale Paperbound. New Haven: Yale University Press.
- Boettger, Till. 2014. *Threshold Spaces: Transitions in Architecture. Analysis and Design Tools*. Switzerland: Birkhäuser. https://dal.novanet.ca/discovery/fulldisplay?docid=cdi_askews-holts_vlebooks_9783038214007&context=PC&vid=01NOVA_DAL:DAL&lang=en&search_scope=Everything&adaptor=Primo%20Central&tab=Everything&query=any,contains,Threshold%20Spaces:%20Transitions%20in%20Architecture&offset=0.
- Cohen, Steven A., and Mary L. Greaney. 2023. "Aging in Rural Communities." *Current Epidemiology Reports* 10, no. 1: 1–16. <https://doi.org/10.1007/s40471-022-00313-9>.
- Davies, Megan Jean. 2003. *Into the House of Old a History of Residential Care in British Columbia*. McGill-Queen's/Associated Medical Services (Hannah Institute) Studies in the History of Medicine, Health, and Society; No. 14. Montreal: McGill-Queen's University Press.
- Edgerton, Jason D., and Lance W. Roberts. 2014. "Cultural Capital or Habitus? Bourdieu and Beyond in the Explanation of Enduring Educational Inequality." *Theory and Research in Education* 12, no. 2: 193–220. <https://doi.org/10.1177/1477878514530231>.
- Feddersen, Eckhard, and Insa Lüdtkke. 2014. *Lost in Space: Architecture and Dementia*. Boston: Birkhäuser. <https://doi.org/10.1515/9783038211204>.
- Fitzpatrick, Deanne. 2006. *East Coast Rug-Hooking Designs: New Patterns from an Old Tradition*. Halifax, NS: Nimbus Publishing Limited.
- Giovanazzi, Theodora. 2021. "Senior by Design. A Spatial Genealogy of Old Age." January 1, 2021. https://www.academia.edu/84086984/Senior_by_Design_A_Spatial_Genealogy_of_Old_Age.
- Government of Canada, Statistics Canada. 2022a. "Providing Care in Canada, 2022." 2022. <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2023004-eng.htm>.
- . 2022b. "The Populations of the Atlantic Provinces Are Aging Quickly." April 27, 2022. <https://www150.statcan.gc.ca/n1/daily-quotidien/220427/mc-a004-eng.htm>.
- . 2022c. "The Daily — Home Care Use and Unmet Home Care Needs in Canada, 2021." August 26, 2022. <https://www150.statcan.gc.ca/n1/daily-quotidien/220826/dq220826a-eng.htm>.

- Hanlon, Neil, and Mark W. Skinner. 2022. "On Older Person/Place Transformations: Towards a More-than-representational Geography of Aging in Rural Canada." *The Canadian Geographer* 66, no. 1: 145–55. <https://doi.org/10.1111/cag.12737>.
- Hillier, Jean, and Emma Rooksby. 2005. "Habitus: A Sense of Place." In *Urban Policy and Research*. Aldershot, Hants, England: Ashgate.
- Jencks, Charles, and Edwin Heathcote. 2010. *The Architecture of Hope: Maggie's Cancer Caring Centres*. London: Frances Lincoln.
- Labrie, Yanick. 2021. "rethinking long-term care in canada Lessons on Public-Private Collaboration from Four Countries with Universal Health Care," October. https://researchgate.net/publication/355189478_RETHINKING_LONG-TERM_CARE_IN_CANADA_Lessons_on_Public-Private_Collaboration_from_Four_Countries_with_Universal_Health_Care.
- Mah, Jasmine, and Benjamin Gallup. 2021. "A Short History of Long-Term Care in Nova Scotia." *Canadian Geriatrics Journal* 24, no. 1: 77–81. <https://doi.org/10.5770/cgj.24.464>.
- Menec, Verena H., Louise Hutton, Nancy Newall, Scott Nowicki, John Spina, and Dawn Veselyuk. 2015. "How 'Age-Friendly' Are Rural Communities and What Community Characteristics Are Related to Age-Friendliness? The Case of Rural Manitoba, Canada." *Ageing & Society* 35, no.1: 203–23. <https://doi.org/10.1017/S0144686X13000627>.
- Otero-Pailos, Jorge. 2010. *Architecture's Historical Turn: Phenomenology and the Rise of the Post-modern*. Minneapolis: University of Minnesota Press.
- Pallasmaa, Juhani. 2012. *The Eyes of the Skin Architecture and the Senses*. 3rd ed. Hoboken: John Wiley & Sons.
- Pauly, Danièle. 2008. *Barragán: Space and Shadow, Walls and Colour*. Corr. reprint of original ed. Basel: Birkhäuser.
- Picard, André. 2021. *Neglected No More: The Urgent Need to Improve the Lives of Canada's Elders in the Wake of a Pandemic*. Toronto: Random House Canada.
- Seamon, David. 1979. *A Geography of the Lifeworld: Movement, Rest, and Encounter*. New York: St. Martin's Press.
- Treib, Marc. 2009. *Spatial Recall: Memory in Architecture and Landscape*. 1st ed. Abingdon, Oxon: Routledge.
- Turkle, Sherry. 2007. *Evocative Objects: Things We Think With*. Cambridge, MA: MIT Press.
- Uwajeh, Patrick, and Ikenna Ezennia. 2018. "The Socio-Cultural and Ecological Perspectives on Landscape and Gardening in Urban Environment: A Narrative Review." *Journal of Contemporary Urban Affairs (JCUA)* 2 (January). <https://doi.org/10.25034/ijcua.2018.4673>.
- Yates, Frances A. 1974. *The Art of Memory*. Pbk. ed. Chicago, IL: University of Chicago Press.

Zanco, Federica and Vitra Design Museum. 2001. *Luis Barragán: The Quiet Revolution*. 1st ed. Milano, Italy: Skira.

Zumthor, Peter. 2006. *Atmospheres: Architectural Environments, Surrounding Objects*. Basel: Birkhäuser.