Drifting to Collective: Combatting a Hidden Epidemic Through Urban Housing

by

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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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Abstract

Historically, villages have consisted of people choosing to dwell together out of necessity for survival. This social interaction catalyzes what makes these villages successful, interdependent communities. The current models of urban housing are less treated as a social good, and result in collections of private spaces rather than space that fosters social interaction at the scale of the home, site, and city. Social interaction is a key part of what is missing from modern urban housing, perpetuating the silent crisis of loneliness.

Using the concept of the village as a unit of people living in collaboration, this work synthesizes its basic principles through a layered deconstruction of its social and programmatic structures. This thesis then investigates how this set of principles can be translated into modern developments to propose a model of co-living rather than simply co-existing in urban Halifax.

Acknowledgements

This thesis would not have been possible without the unconditional guidance, support and encouragement that so many have willingly provided along my journey, and for that, I am forever grateful.

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Chapter 1: Introduction

Big City Dream...Capsized
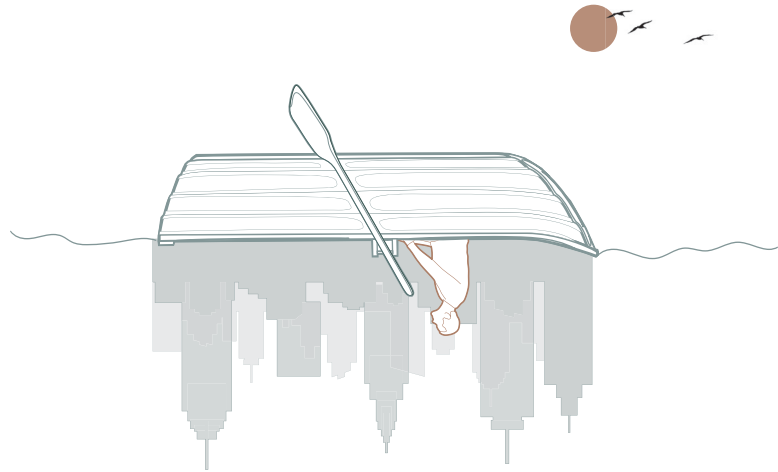
For decades, millions of people have been dreaming about city life: dreaming about walking along bustling streets lined with shops and restaurants, crowded commutes on the metro, and the liveliness of the suspected community that existed around almost every corner. Moving into the city was once considered an upgrade of social status, a symbol of freedom, an escape from your local hometown, a gateway to endless opportunity, and in short, a better way to live envisioned by every city dreamer (Gehl 2010 15). As depicted in literature, film, and media, the city became a glistening front that invisibly promised a better lifestyle ahead. Clinging to this decades-long dream, rural areas emptied, buildings became taller and more plentiful, and urban areas densified in response.

Although the depicted characteristics of city life are true in many respects, the harsh reality of city living lies beyond the public sphere, above the sidewalk, and in the way in which people privately dwell in metropolitan areas.

Last October, I moved into my first solo apartment in a downtown building and have yet to exchange more than a "hello" with those who live on either side of me. Separated by one wall, the only degree of familiarity I have with my neighbor is their love of Fleetwood Mac played loudly on weekends and the hand-painted doormat in the hallway. One might argue that in a building with only 18 units, there would be a sense of proximate acquaintanceship, yet this unfamiliarity is crystallized by the quiet retreat to individual units.

What was once a widely romanticized dream of living amongst others has been diluted to the intimacy of removing a complete stranger's socks from the building washing machine and countless silent elevator rides.

The Issue at Hand

For most of human history, people around the world lived in small, interdependent communities. Over the past few centuries – and particularly in recent decades – this has shifted drastically. Since the industrial revolution, mass migration of populations from rural to urban areas has become the norm. More than half of the world's population currently lives in urban areas, with the UN predicting this figure to increase to 68% by 2050 (Ritchie and Roser 2018, 9). The urban environment is undeniably becoming the stage in which modern life plays out for most people. But at what cost?
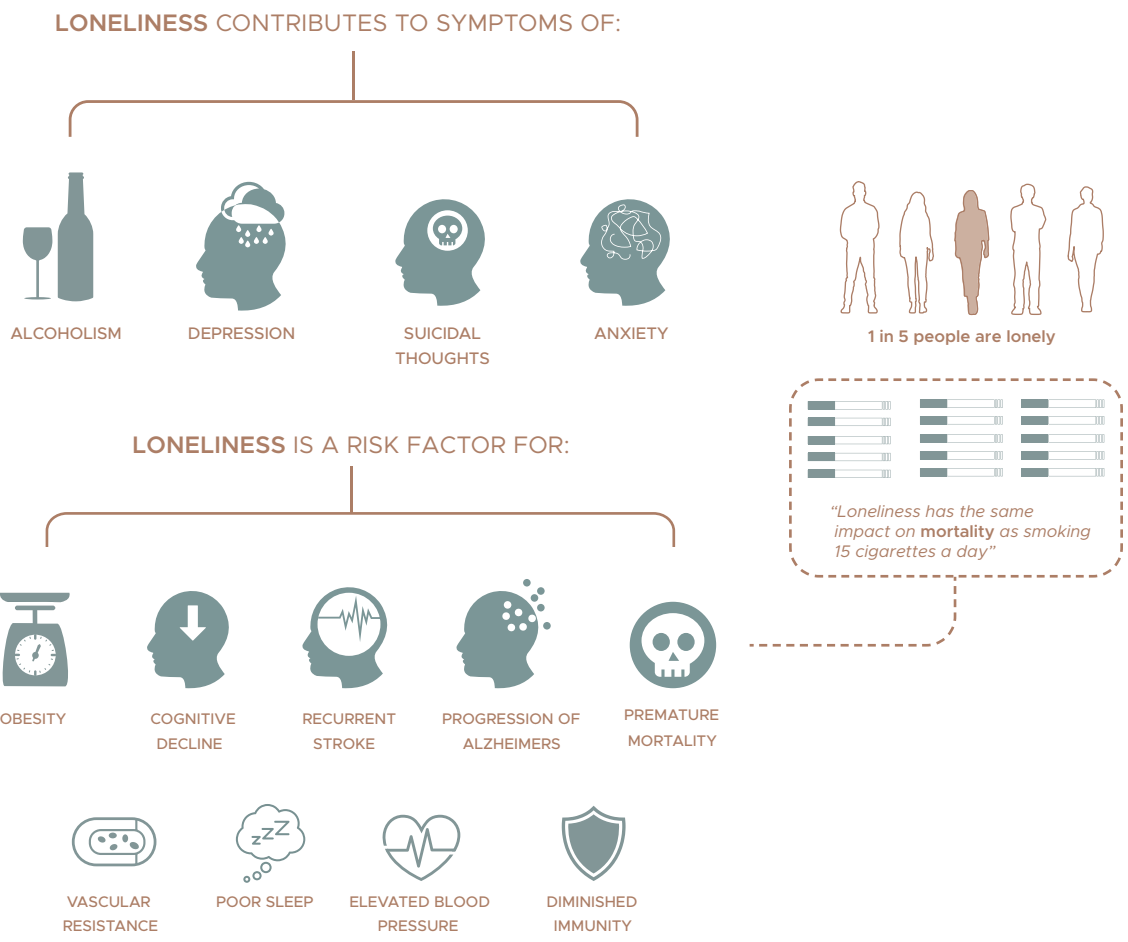
The word "loneliness" barely appears in English literature before the 19th century, but its use has seen a drastic increase in the last hundred years (Alberti 2021,18). The parallel between increased loneliness, urban density, and the socio-structural changes in modern society over this time

period are no coincidence. As argued by Alberti, the notion of privacy follows a similar arc where loneliness is considered the dark offspring of individuality and capitalism. The pursuit of endless growth and the order of consumerism has shifted our attention from social relationships to material ones - from interdependence to independence. Although inevitable given the trajectory of a modernizing world, these intangible ideals have manifested themselves into the tangible realities of urban environments primarily concerning the way people live. The prevailing ideas of functional separation (Jacobs 1993, 5) may have been sensible during an industrial revolution to accommodate density; however, the absent deviance from this method of thinking is only incubating the growing awareness and ironic cycle of loneliness in cities (Jacobs 1993, 5). In 2015, Christine Murray, Editor-in-Chief of *Architectural Review*, asked in her editorial, "Could architecture play a role in curing loneliness?" (Murray 2015). While one may question whether she is taking it too far by conflating the correlation between architecture and loneliness with its causality, it struck a chord. No one can deny the effect of the built environment on the mental health of those who live within it (Whyte 1980, 4).

Urban loneliness is a vague term, and like many vague terms, is a cover for a slew of things people would rather not name or don't know how to fix. Over the last decade, the definition of loneliness has, like cities, evolved to include the tangible aspects of our environment to describe this direct correlation. Loneliness is, however, not limited to cities, but it is this density and proximity of people that, perhaps ironically, can intensify this phenomenon. The question then began to form: why are people who live in cities lonely? And how unhealthy is being lonely? Loneliness does not

travel alone, as ironic as that sounds. There are a number of dangerous physical and psychiatric health problems to which loneliness contributes. Social interaction is the key to longevity. It is not a surprise then that loneliness also contributes to the progression of Alzheimer's, premature mortality, cognitive decline and other harmful ailments such as alcoholism, depression and anxiety. In many reports, loneliness is proven to be more detrimental to health than smoking 15 cigarettes a day, and subsequently increases mortality risk more than obesity, excessive alcohol consumption and air pollution (Holt-Lunstad et al. 2015, 3).

LONELINESS CONTRIBUTES TO SYMPTOMS OF:

ALCOHOLISM   DEPRESSION   SUICIDAL THOUGHTS   ANXIETY

1 in 5 people are lonely

LONELINESS IS A RISK FACTOR FOR:

OBESITY   COGNITIVE DECLINE   RECURRENT STROKE   PROGRESSION OF ALZHEIMERS   PREMATURE MORTALITY

"Loneliness has the same impact on **mortality** *as smoking 15 cigarettes a day"*

VASCULAR RESISTANCE   POOR SLEEP   ELEVATED BLOOD PRESSURE   DIMINISHED IMMUNITY

How unhealthy is being lonely? Data retrieved from Holt-Lunstad et al. 2015.

Ironically, the architectural genre that creates the most tax benefit for municipalities – tall, densely populated, multi-unit buildings – inadvertently creates the most socially dangerous environments for people who live there. And the negative societal and health impacts of loneliness will also need to be addressed and funded by those same governments who rely on that tax base.

The home is arguably the most important environment in our lives. Home is more than a shelter from the elements; it plays an important role in our social, developmental, and cognitive processes (Graham, Samuel et al. 2015, 348). This space is closely related to our senses of trust, safety, and belonging. As argued by Alberti, in the not-too-distant past, our survival was dependent on maintaining close social relationships to fulfill those qualities. However, in most cities today, housing is less treated as a social good, as it is a financial vehicle. While cities are struggling with providing enough housing for their rapidly growing populations, quantity is not the only factor in this housing crisis. We also need to address the elephant in the room by considering housing as a platform that can support, nourish, and enrich our social and cultural identity of diversity.

The Research Question

How can one challenge the prevailing urban housing models to investigate the capacity of residential environments to become interdependent catalysts for social interaction and community - From co-existing to co-living?

Thesis wish image: drifting to collective, layers of inhabitation.

Method

This thesis is divided into sections of research, literary review, theory, case study synthesis, and proposed design directions. The introductory chapter explore the issue of loneliness and the growing disconnect between people in the proliferation of the multi-unit housing typology. Layer A situates the research question within the discourse of architecture and supporting practices - defining the why and what of the problem at hand. Layers B and C begin untangling the concepts of community through tangible and intangible characteristics that have manifested in architectural form: the village. Layer B focuses on introducing the social structures of community and the concept of interdependence in antiquity. Layer C consecutively elaborates on these social structures in a tangible sense, speaking to the spaces or rooms of community that have crystallized these interactions - defining a set of form-making principles. The final section of this work in Layer D proposes the re-composition of layers A-C into built form: an urban housing project that defies standardization and redefines housing as a layered composition of social and built relationships fostering interdependency and connection: a drifted collective.

The Village

Communal living can be traced back to the earliest days of human cohabitation. Historians Karl Marx and Friedrich Engels argued that hunter-gatherer societies were traditionally based on egalitarian social relations, common ownership, and interdependence (Plesner 2021). Villages globally are recognized as the manifestation of these social characteristics in architectural spaces. This crystallization has become the primary unit of study for this thesis as an

architectural typology of community. The relevance of the village typology in contrast to other housing models is the delineation between co-housing and co-living, the creation of place, and the level of social attachment spoken to in Layer B.

Layers

The observation of community, both architecturally and socially, cannot be understood at face value without looking at the intersection between the two that form the composition. The method of research into village communities became the deconstruction of these spaces into layers. This process acknowledges the interwoven and symbiotic relationship between the two spheres. Home is a multi-dimensional concept possessing individualistic meaning rooted in both the tangible and intangible. To fully understand the scales of home and community holistically requires the deconstruction and analysis of each layer that illustrates the composition and how these manifest in tangible inhabitable form.

Drift

In the Merriam Webster Dictionary, 'drift' the noun and 'drift' the verb are defined in a handful of interlocking and overlapping terms. Each time a new meaning is offered, the word drift can attenuate or accumulate. The word comes alive through the accumulation of meanings. As the meanings pile up, the image of drift crystalizes. A series of images of drift appear: drift in the natural world (logs down a tumbling river); drift in our thoughts or speech (the conversation drifted); drift in a geopolitical context (movement from one place to another). In the litany of meanings, there is also: "to move or float smoothly and effortlessly; to move along a line of least resistance." As a process insinuating movement,

the idea of layering these tangible and intangible qualities is not viable without considering the concept of Drift: the act of moving from one place to another, and the inherent social and architectural meaning added in this process. The act of drifted layering implies dimensionality and brings inhabitation, movement, and areas of intersection to reality by illustrating the complexity of these implicit and explicit relationships. This method of research also seeks to inform the proposed composition of the community spoken to in Layer D.

Objective: The Space Between Privacy and Possibility

After more fully exploring the concept of loneliness, the next step will be to examine current urban housing models through the lens of sociology, anthropology, and psychology to understand the extent to which urban loneliness manifests itself in perpetuating architectural form, - defining the why: the typology of non-community. Using the model of the village as a unit of people living collaboratively together, this thesis will investigate how this set of principles can be translated into modern developments to foster community…

to re-define and propose a model of co-living rather than simply co-existing.

Village ;

noun
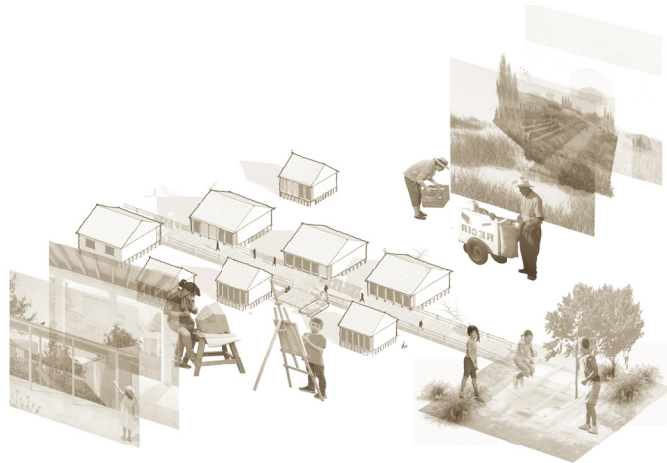
A group of people and spaces that participate in a purpose driven lifestyle valuing openness, sharing, and collaboration.
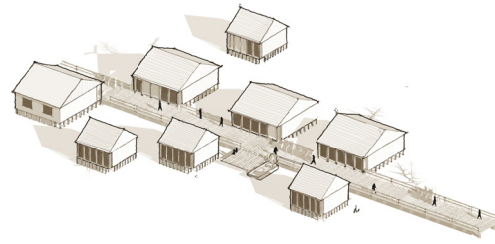
Layer ;

noun
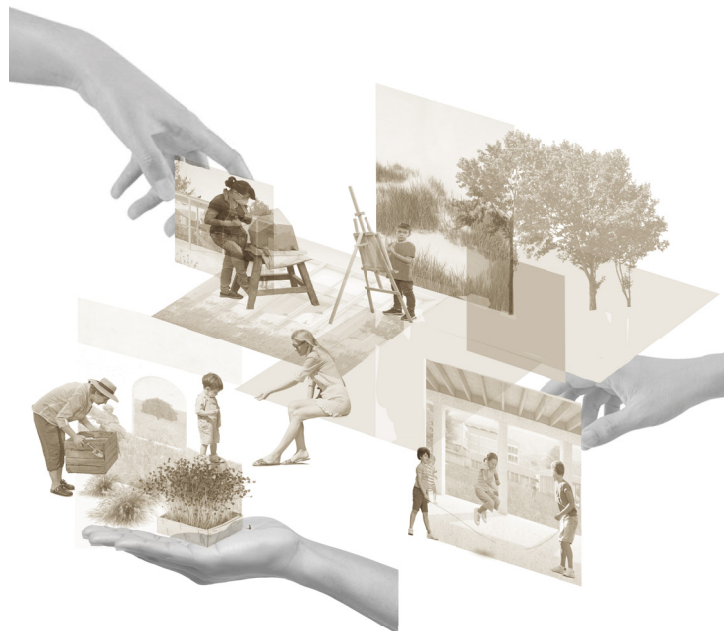
The organization and interplay between different levels within a system. A particular level of depth or complexity in a composition, structure, or process.

Drift ;

Verb

The continuous movement from one place to another. The transposition, accumulation, and arangment of different pieces.

Thesis methods diagram: village, layer and drift as a way to approach housing and community.

Chapter 2: A Growing Disconnect: the Silent Crisis of Loneliness

The Evolution of Loneliness

The modern notions of 'loneliness' and 'aloneness' date from the nineteenth century, arising in parallel with the emergence of the ideology of the metropolis (ironically the city) and, with it, with the rise of the 'individual'; the 'modern, rational and secular versions of 'identity'; and changes in states such as 'sociability', 'community', 'belonging', and the 'self' (Harries 1997,84). Prior to that, the word did not carry today's emotional and psychological connotations. 'Oneliness' (today an obsolete word) was the term that conveyed a sense of 'physical or geographical isolation'. Historian Dr. Fay Bound Alberti supports this argument by referring to the early 18th century writer Daniel Defoe's *Life and Adventures of Robinson Crusoe*. Being lonely is often compared to the feeling of 'being on an island'; bounded by impassable limits between oneself and the rest of the world (Alberti 2021, 20). Considering that dwelling comes to existence through interactions with others, Harries states that "the problem of architecture is inevitably also the problem of community".

In her book, *A Biography of Loneliness*, Dr. Fay Bound Alberti argues that chronic loneliness is a relatively new condition. In the not-too-distant past, our survival was dependent on maintaining close social relationships. The word "loneliness" barely appears in English literature before the 19th century but has seen a drastic increase in the last hundred years, in parallel with the many socio-structural changes of modern society (Alberti 2021, 31). Further elaborated upon by

Winston, we have moved away from multi-generational living towards independence and autonomy, creating a self-sufficiency that is isolating (Winston 2019).

Humans are the most socially dependent species on the planet. Our need for connection and belonging is part of our genetic code, making social interaction an essential part of our wellbeing (Harris 2015). Following Harris' argument, the act of existing as humans is synonymous with dwelling and that modern dwelling perpetuates these silent issues of loneliness. Harris argues that there is a distinction between genuine dwelling from mere residing in a building. This idea of dwelling can then be understood as simply the physical space wherein meanings take place - the social space. Dwelling has different meanings to individuals and communities. It means to have a private world: to be oneself. It also involves meeting others, interacting, exchanging ideas, or feelings: to participate. Furthermore, it includes accepting a set of common values in the public sphere: to share (King 2004, 59). Dwelling then can be recognized as an important connection between the public and private realms, since "it identifies the individual with the community".

The idea of loneliness and the inherent connection to the space in which we dwell is relatively new. Arguably it has always existed, yet rarely talked about or addressed. This correlation crystallized when looking at a recent survey in Vancouver. The survey found that people living in buildings higher than five stories reported significantly higher difficulty in making friends; they felt less welcome in their neighborhood, were less likely to know their neighbors, and were more likely to avoid interaction with strangers, as compared to other building types (McCart 2017). Loneliness is an unfortunate reality of modern life and it is something that

most people experience at least once in their life (Cacioppo and Patrick 2008). A study carried out by Berguno, Leroux McAinsh, Shaikh (2004), showed that 80% of young people and over 40% of adults over the age of 65 experienced loneliness during their life.
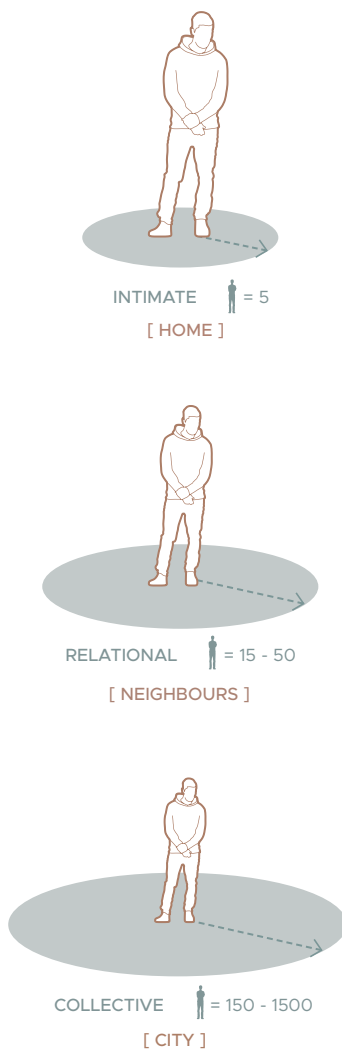
It has been hypothesized that greater loneliness should be expected in countries with more individualistic tendencies; however, studies find that the incidence of loneliness is greater in countries where living alone is less common (Goodwin, Cook and Yung 2001; Jylha and Jokela, 1990, as cited in Jylha, 2004).

The design of our living accommodations has created everyday individual routines and practices which are devoid of any social interaction or connection with others. This has become common practice and is prevalent not only in our cities but also across many different cultures. Charles Montgomery in *Happy City* (Montgomery 2013, 75), has observed that the common activities in which people generally participate- activities essential to everyday living and which are either of necessity or for leisure- can now be done within the confines of an individual's home. This situation eliminates any requirement for people to venture outside their homes. This creates a 'social deficit', where most social engagements, communication and connection with others happen predominantly amongst family members only. Ray Oldenburg argues that "The essential group experience is being replaced by the exaggerated self-consciousness of individuals" (Oldenburg 1989, 11). In Canada, four million people lived alone in 2016 (Tang, Galbraith, and Truong 2019) and an estimated 3 in 10 households were single person occupied (Statistics Canada 2016). Single person households tend to be more isolated,

which further contributes to social isolation, a reduction in both social interaction and the development of meaningful relationships. As demonstrated in a Canadian study, "because such a significant proportion of Canadians' social stimulation comes from within their own home, those who live alone are generally more isolated" (Angus Reid Institute 2019).

The Three Dimensions of Loneliness

Edward Hall explored the multi-faceted issue of the loneliness epidemic in correlation to space both social and architectural, and described loneliness as having three dimensions. These dimensions or spaces are known as 1) intimate space (the lack of intimate connections with individuals who can offer emotional support; 2) relational space (the lack of friendships and connections); and 3) collective space (rarely part of a larger group) (Hall 1966, 14). The three spaces of loneliness give loneliness a sense of dimension. They refer to relationships held by people, and ironically, reference the physical distance associated with those spheres. They unintentionally associate loneliness to dimensions of the space we inhabit … to architecture.

In his seminal 1966 book *The Hidden Dimension*, Edward T. Hall crosses his disciplinary lines as an anthropologist to trace a framework for architectural space and city planning as a system of communication. The objective was to trace not a verbal but a basic 'underlying organizational system' that would 'increase self-knowledge and decrease alienation' among people (Hall 1966).

INTIMATE ♦ = 5
[HOME]

RELATIONAL ♦ = 15 - 50
[NEIGHBOURS]

COLLECTIVE ♦ = 150 - 1500
[CITY]

The three dimensions of loneliness in connection to our habitable spaces.

The Need For a Sense of Belonging

'Belongingness' is a term that speaks to the basic need to belong in a social connection to people and the desire for interpersonal attachment as a fundamental human motivation. A sense of belonging is the need for positive, pleasant, and desirable social relationships; the absence of feeling like one belongs leads to feelings of social isolation, alienation, and loneliness (Yadegari et al. 2020, 85). A sense of belonging is also regarded as a relationship between the individual and a particular environment that encompasses a shared feeling, emotion, and culture (Yadegari et al. 2020, 87).

Objective isolation does not necessarily lead to loneliness, but it is subjective isolation, where one perceives that they do not belong or they lack confidants, which leads to loneliness (Perlman et al.1981, 31). Whether or not one is surrounded by others, they may still feel lonely and socially isolated. On the other hand, someone who is alone, quite literally, or in a state of solitude can be perfectly content (Griffin 2010, 3).

SOCIAL ISOLATION /
SOLITUDE
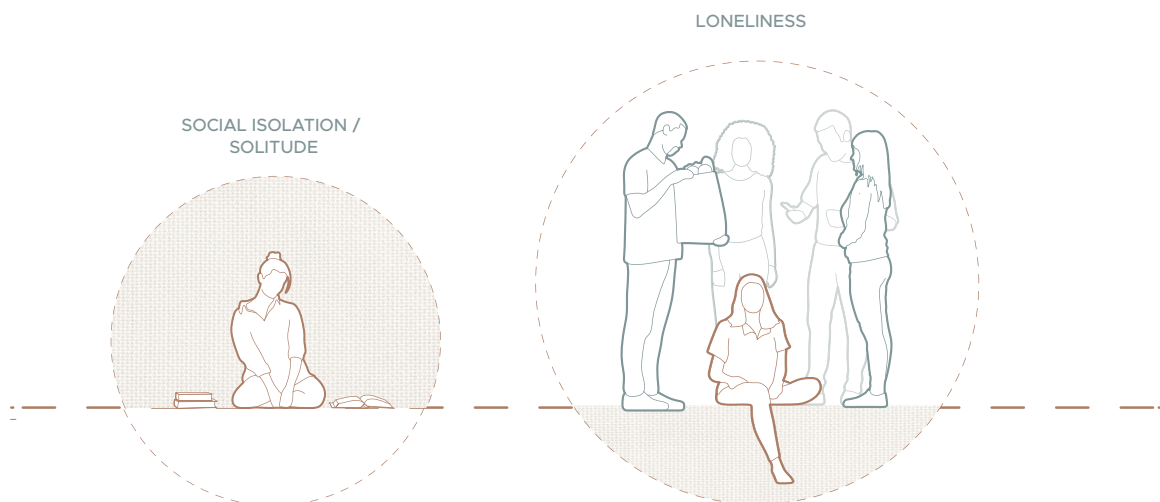
LONELINESS

The difference between social isolation/ solitude and loneliness.

Communities create a sense of belonging for their members. Everyone feels like they are a part of something important. It is arguably as important as the need for survival. The 'feeling of belonging' which we get from being part of a community, this sense of belonging, is the very fabric which holds together our perception as human beings. The notion that any single individual endeavor could exist in isolation from others is still relatively new and a fundamentally flawed concept. Contexts across the centuries have taught us something different: that individuals are integrally connected to everyone around us.

Why the Village as a Concept to Rethink Urban Dwelling?
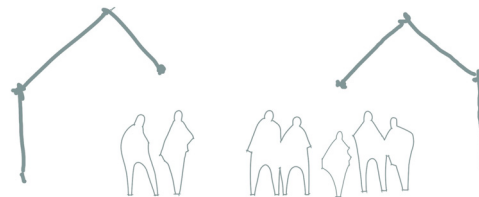
Concept sketch imagining a new way of living together within the conventions of the home.

The village is the manifestation of these social fulfillments in tangible form. Through further research into village communities, I will explore the social and architectural structures that make villages successful, interdependent communities. These characteristics will be further elaborated upon in Layers B-C of this document.

Architectural space is an important carrier of traditional village memory and culture, carrying various material and intangible functions (Schmid et al. 2019, 11). Villages are the tangible manifestation of community encompassing housing, program and interdependence. All village spaces possess

social function that together creates an interdependent and socially connected whole. To understand living as a shared experience stands in direct contradiction to the notion of living being the highest form of privacy spoken to above. Rather, these scales of privacy exist within a greater collective whole.

The 'village', along with the 'parish' and the 'family' was the most widespread unit of social organization throughout the early modern period. These communities manifested into scattered buildings, program, social spaces, and amenities. Rather than looking at the village as a series of spaces and forms, this work delves into the village as a layered composition of relationships between intangible and tangible - the concept of the village as opposed to the village itself.

Chapter 3: Layer A: The Typology of Non-Community

Toward The Spatial Manifestation

To further explore a solution to the silent crisis of loneliness in urban settings, and to better understand how a solution may be found in the interdependence fostered by the concept of a village, it is helpful to understand why cities have developed the way they have - the collateral damage of cities and the ideals of modernity perpetuated in architectural form. We need to understand the socio-spatial qualities of cities.

Throughout history, people have been drawn to cities as centers of trade, culture, education, and economic opportunity. Urbanization is a relatively recent phenomenon, which has consequently allowed the terms of capitalism, individuality, and consumerism to flourish as a result (Debord 1977, 19).

Fundamentally, cities are composed of four basic elements: the natural environment, people and their culture, buildings, and infrastructure. These four were melded together in many ways during the evolution of individual urban places and are even more apparent in viewing a modern city today. Three major stages - subdivision, construction, and marketing - characterize urban residential land development. These stages may be followed in an orderly and rapid sequence, as is usually the case today, or they may be pursued in the disjointed, haphazard fashion typical of earlier times. The urban land-development cycle begins whenever someone recognizes urban potential, no matter how prematurely, in a parcel of non-urban land. Subdivision, the first stage in the process, entails the partitioning, by means of a survey,

of some large blocks of land into smaller parcels. This immediately intensifies the use of the land.

The foundations for today's loneliness epidemic were laid in the 19th century with the advent of mass urban immigration thanks to industrialization. Thousands of people left their families and friends, relocating to places filled with other individuals instead of collective, social units. As cities evolved into major economic hubs, this trend accelerated over time, and the rise of loneliness has been aided by poor urban planning and an ideological shift towards individualism.

Mass migration into New York City, Mulberry Street (Library of Congress 1900).

Understanding Urban Density and Dwelling

How have the ideals birthed by modernity and industrialization translated into housing and what does that mean for urban dwellers?

The 20th century, with its conflicts, innovations, and paradigm shifts, gave rise to significant movements in the realms of philosophy, art, architecture, and culture. The architectural practice itself experienced the conception of a wide range of movements. Most of these movements attempted to search for meaning, perspective, and identity following the events of the first world war. The modern movement is arguably the one that has and continues to shape modern urban society. The modern movement was characterized by the pursuit of new ways of capturing experience and claiming identity, all while rejecting traditional structures of 19th century: religion, state, and collective culture. While key modernist figures like Walter Gropius, Ludwig Mies van der Rohe, and Frank Lloyd Wright experimented and interpreted these ideals at the international scale, one may have underestimated the lasting impact of Le Corbusier's proposed principles on urban high-rise housing, embodied in *The Radiant City*

(Corbusier 1967). This was Le Corbusier's vision for the utopian urban center – where culture, ornament, and other "frivolous" elements came to die and efficiency in function was the catalyst for success. The architects of the 20th century, amidst global conflicts and paradigm shifts, laid the groundwork for the development of our modern-day urban centers (Cheng 2022).

Le Corbusier's functionalist plan for a utopian 'Radiant City' (Le Corbusier 1967).

In addition to the rise of functionalism, the modern movement in architecture witnessed the emergence of a cultural shift towards luxury and consumer culture in the Western world. Modernism's evolution over the years led to the development of iconic and avant-garde buildings, including high-rise condominium buildings and apartment towers which became the new way to live within large urban centers.

The dilemma of modernity in relation to the condition of the urban dweller can be analyzed when considering the separation that architecture has caused of the individual from the community in present culture and society. This can be understood both socially - the rise of individualism and consumer culture - and physically - the act of building upward

creating a literal detachment. Consumerism became the principal mode of self-expression, turning into a common language expressing a desire for commodities not just out of pure necessity (Harries 2000, 26). In today's modern society, spectacle is in fact "the social relation among people that is mediated by images", argues Debord. The public is no longer unified; rather, they are divided by spectacle. Social life is entirely dominated by commodities, and lifestyle has become a mode of consumption (Debord 1977, 5).

Within the context of Canada, for most its history, cities have grown outward as waves of immigrants and the baby boom generation sought homes in the ever-expanding suburbs. Today, urban growth is not so much moving outward as it is upward, as multi-family dwelling units, especially apartments and apartment condominiums, have transformed the skylines of Canadian cities. The emergence of apartments and apartment-condominiums in Canada's largest urban centers not only reflects a lifestyle choice, but also important demographic, economic and societal changes: increasing immigration, declining household size, changing household characteristics, an aging population, high prices of single-family homes in some areas, land shortages and development policies in Canada's major cities.
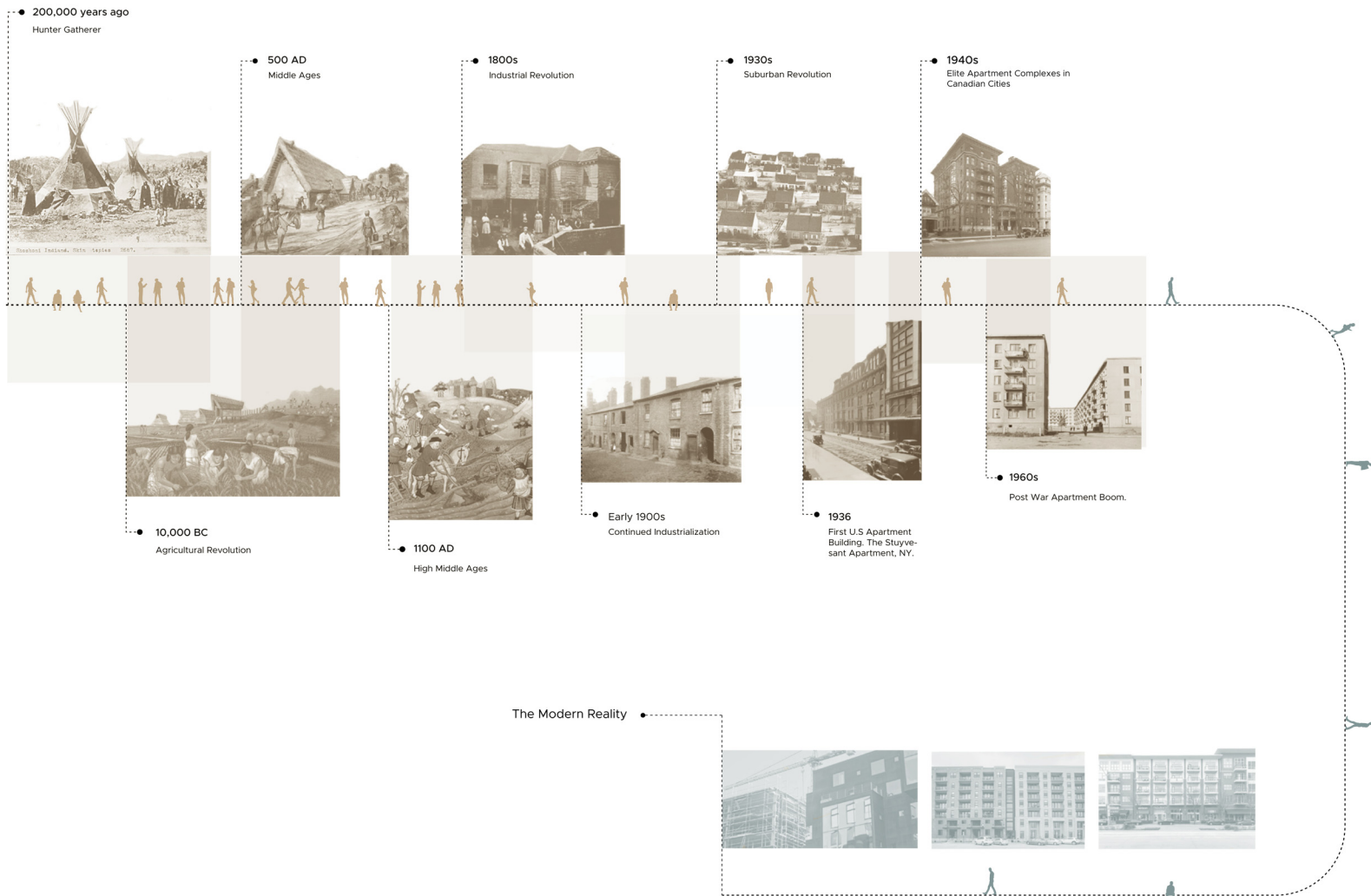
The Significance of Home

House, home, and homestead are of much interest to sociologists and development experts. 'House' signifies the physical structure, whereas 'home' and 'homestead' signify the warmth, love, hearth, and space required around the house to generate social and economic activities for livelihoods. The house is an architectural thing, but it also has a deep meaning to everyone. Most of us call our houses

'home', and alternatively, sometimes we find home in other places. What makes a house a home? Is it the memories of social interactions associated with a place that makes it a home?

The house is arguably the place where we spend most of our time. Housing is inherently private. We live in highly privatized boxes that although, proximate in location to one another, do not interact with one another. What capacity does the house have in being a social catalyst? The house is a private architectural construct that, when combined with social interaction, becomes a home.

Living Together, Apart

The secrets of modern architecture are like those of a family, where everyone knows about things that are never acknowledged. It is perhaps because of this current fascination with the intimate that its consequences are becoming unveiled (Colomina 1998, 463). The act of dwelling is taken for granted, yet it is subject to consumption. Everybody must live somewhere; it is a human necessity and a basic need. The requirement is not only physical, arising from our need for a living space and a roof over our heads, it fulfills psychological and emotional needs and important social functions as well. How we live is an expression of lifestyle and attitude and is reflected in our choice of residence, surroundings, type of dwelling, and furnishings. Through our experiences with the everyday practice of dwelling within a home, we think we know exactly what dwelling entails. However, this commonplace knowledge is the result of prior social processes that are influenced and controlled by several factors (Schmid et al. 2019, 145).

200,000 years ago
Hunter Gatherer

500 AD
Middle Ages

1800s
Industrial Revolution

1930s
Suburban Revolution

1940s
Elite Apartment Complexes in
Canadian Cities

10,000 BC
Agricultural Revolution

1100 AD
High Middle Ages

Early 1900s
Continued Industrialization

1936
First U.S Apartment
Building. The Stuyve-
sant Apartment, NY.

1960s
Post War Apartment Boom.

The Modern Reality

Timeline capture on the history of human dwelling—the phenomenon of living apart as a relatively new trend influenced by the socio-structural changes of modernity.

Single-Family Home

The single-family home is both a physical thing and an idea. The physical thing is, of course, a house with four walls that do not touch the neighbor's walls, usually with a yard in the back, and sometimes a garage in the front. But it is also a vision people have of what a neighborhood should look like, what a neighborhood should feel like, what a community should be (Dougherty 2022).

The single-family home as a housing symbol.

In the 1950s, single-family homes dominated the housing landscape. From 1957 to 1959, they accounted for 60% of new construction. The introduction of the Canada Mortgage and Housing Corporation's mortgage loan insurance model in 1954 made single-family homes more attainable, which increased demand for new suburban neighborhoods (Statistics Canada 2018). The rise of the single-family home - in tandem with the ideal of the nuclear family, manifested in tangible form this new culture of individualism.
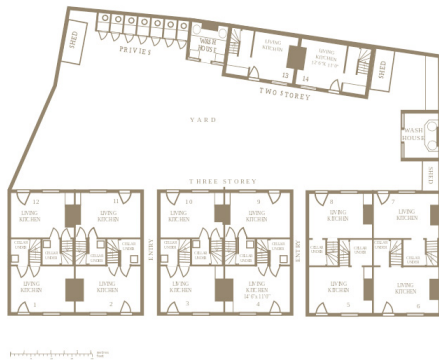
Apart-Ment

A Community Solution

The original templates for most multi-unit urban housing come from workers' living quarters in the Industrial Revolution. By the 19th century, factory owners needed to rapidly house hundreds or thousands of their workers in small parcels of urban land. In Birmingham, England, they built back-to-back row housing with long courtyards at right angles to the street. Largely occupied by the wives and children of workers, the space multi-tasked as a laundry room and playground, with a narrow passage to the street. The multi-unit building type was largely created and evolved

The apart-ment building as a housing symbol.

to serve workers and represented a community of shared dependence on space and each other (Chey 2017, 3).

19th century Birmingham workers' quarter communities in industrial England (BirminghamLive, n.d.).

A Density Solution

In a seminal paper "The Apartment House in Urban America," John Hancock identified booms in apartment-house building between 1890 and 1917 and during the 1920s (Hancock 1980, 158). The second of these applies to Canadian as much as to U.S. cities, but the first boom started rather later in Canada wedded to "cities of homes" and where, until the 1900s, most cities were too small in population to need apartment houses in order to restrict their physical expansion. The only exceptions were Montreal, where the first apartment building (as distinct from a three- or six-unit complex) dates from 1889, and Winnipeg, which boasted the four-story Westminster Block as early as 1884 (Choko 1993, 19).

From 1962 to 1973, most building permits in Canadian cities were being issued for multi-family dwellings. The shift reflected the large population growth of the post-war

economic boom. Increased demand for housing came from the baby boom generation, born in the late 1940s to the mid-1960s, as well as two groups of new immigrants: European immigrants in the 1950s, and the subsequent large inflow of immigrants from elsewhere (Statistics Canada 2018). The affordability of multi-family properties such as apartment hotels made them an attractive alternative to single-family dwellings.

Apartment houses fit uncomfortably into a scenario of housing history built around the growth of home ownership and the centrality of single-family dwelling. In fact, their introduction provoked considerable opposition, on moral, sanitary and economic grounds, because of the challenge they presented to the current orthodoxy on property ownership and lifestyle, and it is in this context that they have more frequently appeared in Canadian urban histories (Dennis 1998, 17).

A Luxury

Before 1899, there were no purpose-built apartment buildings in Toronto, now the city of skyscrapers. The first building in Toronto purpose-built for multiple private occupancy was the St. George Mansions at 1 Harbord Street 1904. Shortly after it was finished, it contained 34 apartments and was home to 99 people, most of them wealthy middle- aged couples. Three barristers, two professors, two bank managers, and a director of an insurance company appeared on the occupancy list (TO, 2018). This living concept had already appeared in Detroit, Cleveland, Buffalo, and other nearby cities, and was established in the form of "apartment hotels" in Boston and New York City in the 1850s and 1860s. Apartment hotels were similarly marketed at single, wealthy

businessmen (Dennis 1998, 18). In the later decades of the 1800s the living concept became less communal and more exclusively privatized. Apartment buildings that were constructed around this time were private and self-contained and became more accessible to middle- and high-class families.
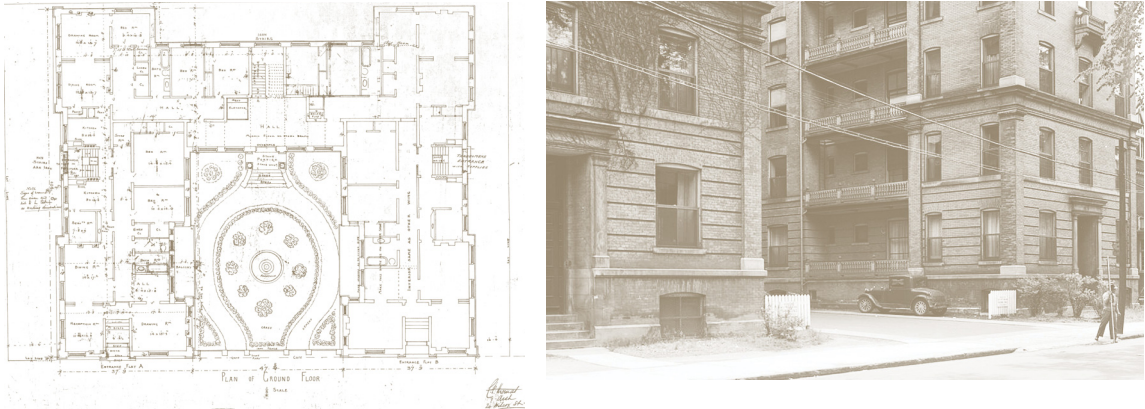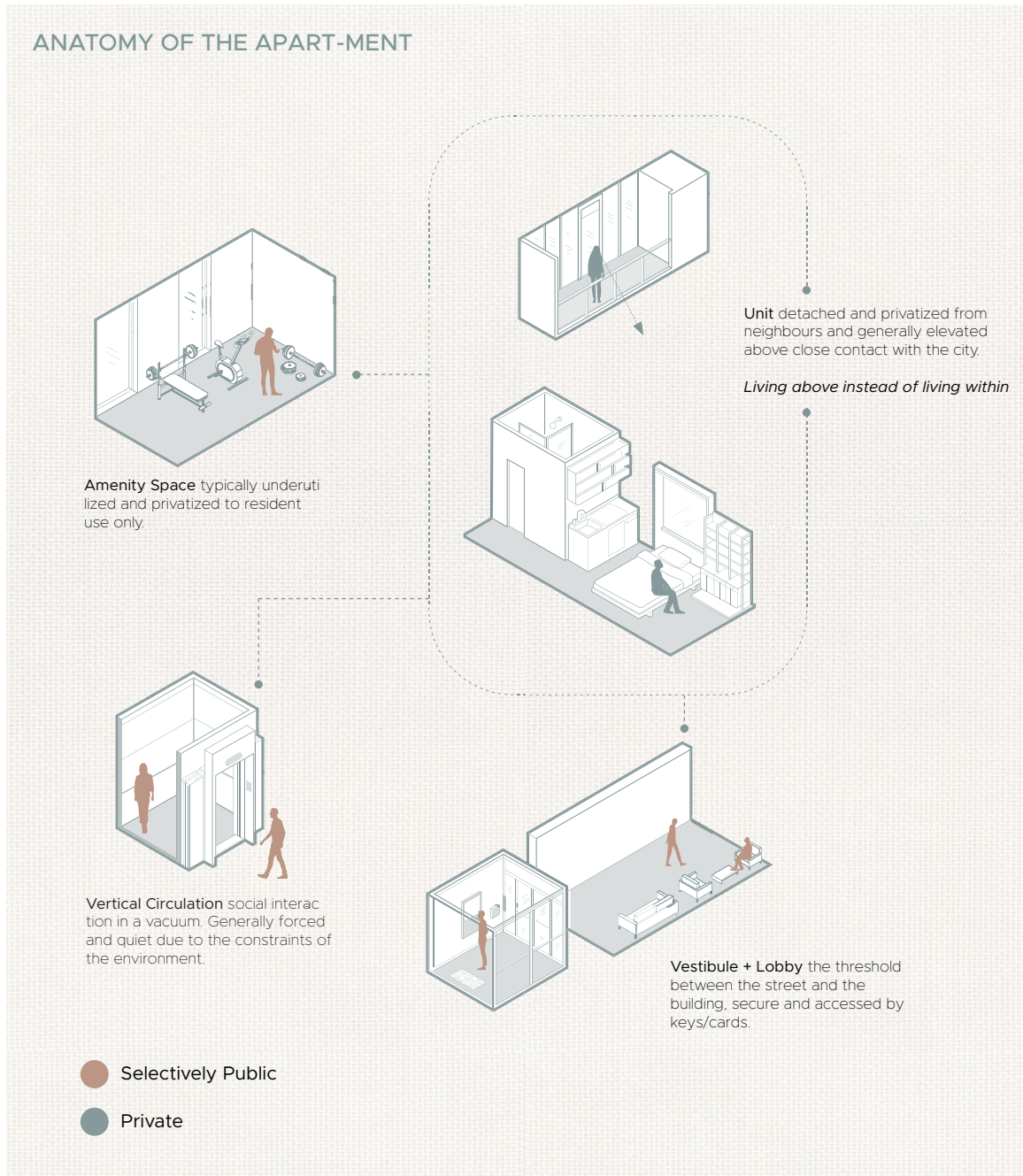

Toronto's first purpose built apartment: St. George Mansions at 1 Harbord Street, Toronto, 1904 (City of Toronto Archives, n.d.)

The Modern Reality

It is arguably the confluence of the latter two responses - density and luxury of multi-unit dwelling - that has shaped the modern city. Since 2012, apartments, including apartment condominiums, have had the highest construction rates in Canada. Over the past 40 years, apartments and single-family homes have accounted for the vast majority: 85% on average, of new construction (Statistics Canada 2018). Modern apartment housing in the form of multi-unit residential is treated less as a social good as it is a band-aid to density and a financial vehicle. The modern apartment typology follows the ideas forged by the history of functionalist separation and results in stacked private spaces. Community and collective spaces are ambiguous,

under-utilized and privatized for those that live within the complex. Although apartments have existed for as long as we all can remember, one might question: why, in the age of innovation does this typology continue to be perpetuated, and what are the consequences?

ANATOMY OF THE APART-MENT

Unit detached and privatized from neighbours and generally elevated above close contact with the city.

Living above instead of living within

Amenity Space typically underutilized and privatized to resident use only.

Vertical Circulation social interaction in a vacuum. Generally forced and quiet due to the constraints of the environment.

Vestibule + Lobby the threshold between the street and the building, secure and accessed by keys/cards.

● Selectively Public

● Private

The anatomy of the apart-ment as a series of individualistic and privatized spaces.

Chapter 4: Layer B: Why Don't We Live Together?

Cohabitation in Antiquity

Cohabitation is a long-established way of living and acting collectively. Using the research method of layering, I will investigate the social structures of community, interdependence, and collective identity, present in the village typology, and explore the intangible structure of co-living.

We have become more individualistic and non-nomadic only since the agricultural revolution and the introduction of capitalism. If one zooms out on the entire timeline of human history, we have always lived together for various reasons. It's only recently that living apart has become the trend.

It was not always this way. Living arrangements have been shifting for thousands of years in history, and the concept of the nuclear family originated only recently. Even though the economy has moved away from the kind of agricultural labor that would encourage the development of larger supportive households, people still have an innate need for the support of friends, family, and neighbors (Mccamant, Durrett, and Hertzman 1994, 9). Communal living is hardly a deviation from tradition; it was not invented. It is not a response to the challenge of rootless modernity; it is how humans have been living and homemaking for thousands of years. The act of sharing spaces and resources while benefiting from community support is a recurring human trend. People were hunter-gatherers for most of known history living, in large settlements, depending on other community members

for food, childcare, and security (Mccamant, Durrett, and Hertzman 1994, 13).

Influential Minds Who Shaped the Concepts of Co-Living

Plato (380 BCE)

Plato describes a utopian state where the nuclear family is abolished. Men, women and children live communally, and children soon after birth are raised collectively. The city replaces parents, and their contemporaries become their brothers and sisters. The purpose is to eliminate competition and to create a single extended family: the city itself (Plesner 2021).

Thomas Moore (1506)

In his book *Utopia*, Moore imagines a complex, self-contained community set on an island in which people share common culture, dining rooms, and various shared leisure facilities (Plesner 2021).

Community in Hunter-Gatherer Societies

There was no division between social and private life. You just could not survive as a single-family household, so we made it part of our biology to give and receive support from others. Gathering around a single fire and under one roof, therefore, became the most ancient way people organized community and ensured survival.

Hunter-gatherer communities (Harlin 2001).

Community in the Middle Ages

During the Middle Ages, communal living remained the typical household structure across most of Europe. Homes were essentially gathering places for small groups of revolving residents, representing a conceptual midpoint

between hunter-gatherers' living arrangements and those common today.

Historian John Gillis claims that medieval homes consisted of a mix of friends and extended family, and that single-family households were uncommon in most of the world. It was not until the 12th century that households became organized around monogamous couples and their children in Western Europe. However, they were far from the nuclear family, with various townspeople, poor married couples, other children, orphans, widows, elderly people, and tenants often living alongside one another in communal housing. Not until the 1800s were divisions drawn between who would live with whom, and towards the end of the 19th century the so-called "godly family" started to take shape, that of single families living in individual homes. Industrialization made extended communities less necessary and communal living was mostly lost (Gillis 1997, 20).

Medieval communities (The J. Paul Getty Museum, Los Angeles).

Community in the 1970s

Despite what one might think about the summer of love and the hippie movement driving communal living in the 1970s, the desire to revolt against the now-popularized nuclear home and to live alternative lifestyles swept across America and Europe. The movements we saw in the 1970s were epitomized by Bodil Graae's 1967 article, "Every child should have 100 parents" (Graae 1967). These communities in the 1970s were more in keeping with a 'social protest', and not about survival. Those who lived in these communities depended on one another for multiple reasons, but they were largely focused on politics and war and an anti-government agenda.

Hippie communities of the 1970s (Simon 1973).

The Concept of Co-living

Co-living in its definition presents a sizable gray area. It is often synonymous with co-housing, co-op housing and hostel living. What differentiates co-living from all of these other examples of people living together is arguably that co-living is a 'social' response, rather than an 'architectural' response. People live together because they have shared intentions, rather than out of necessity because of the constraints of architectural space.

Co-living takes the form of community-hosted living spaces for people who are determined to learn and grow from each other. Residents live, work, socialize, network, eat, play and create together in units that have both private and shared rooms, communal spaces, and sometimes even coworking spaces. Dolores Hayden, in 1979, explored seven utopian communities to observe their use of space and document the built environment. Her findings identified the role of architecture not only to organize physical space, but as a way of representing a community attitude and collective identity (Hayden 1979).

Co-living differs from conventional housing in the ways that space within and around the home is allocated and used. Many self-organized intentional communities go further, challenging social norms around privacy, the ownership of goods, and the division between private and community tasks. Not only are spaces shared, but homemaking functions such as food preparation, childcare, and cleaning are undertaken communally (Schmid et al. 2019, 34).

For a brief time in the second half of the 20th century, structured co-living models re-emerged in Denmark as a way of challenging social norms and actively living out a

political agenda. These spaces were created as utopias, built upon the egalitarian principles of sharing, equality, and participation. These utopian communities referenced the ancient co-living model but with a unique focus on sociopolitical needs and ecological sustainability (Horelli and Vestbro 2012, 325).

The Village

The village represents a manifestation of social layers into architectural spaces. These social layers are what catergorize the village as a unit of people co-living and acting collectively. Unlike co-housing models where architectural space influences the social actions, villages have developed architectural space around the notion of interdependence - the intangible. The village is viewed as co-living.

The village represented as a collection of the social and architectural spaces that comprise it - defining the principles of overlap between the two: making, growing, living, and sharing.
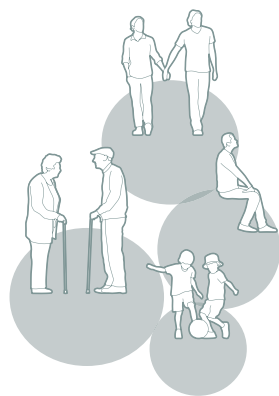
The concept of generational, social, and economic mixing within the village.

Typology of Inhabitation

Villages are for everyone who chooses to live in housing arrangements that suit the circumstances. Because of the deep and lasting relationships between family members and between community members, villagers grow up and raise their own children in the place they know best. Villagers are of all ages and demographics. They include single adults, one- or two-parent families, and extended families, since many families care for their elders in the home. Unrelated villagers can live together where a family houses a friend in need, or a family houses a worker who helps with the business or the farm. Families can co-exist in large homesteads where that arrangement makes sense.

These socially rich village settings bring people together of all ages and stages, and contrast with modern, multi-unit developments found in cities where the social needs of the people who live there are already defined and limited by the architecture: a studio apartment; 1-2-3-bedroom units. Housing in villages is very diverse and reflects the community. Urban living gets stratified: the elderly move into nursing homes, the lower socio-economic populations live in public housing or outside the city, and the higher income populations congregate in certain pockets. The social environment in the urban is diluted by the stratification, and in stark contrast to the socially rich village where all these populations co-live together.

The Social Nature of Program

'Program' is a 'plural' word and implies that multiple people are partaking collectively in the same activity for the same reasons. There are certain activities that take place in a village that naturally bring people together. People have a
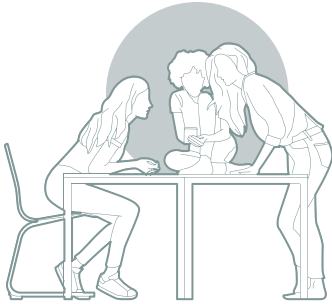
The concept of program as a social catalyst by nature.

The concept of collective identity.

shared motivation to create things that sustain the whole or benefit most people in the community. The act of 'making' not only takes place as a collective activity; the output of the making activity also sustains the village. For example, growing vegetables, herbs, and produce in communal gardens is a communal activity, consumed by the community. And the making doesn't need an architectural solution to make it happen. The people coming together with a shared vision and intention make the program, not the architectural space that enables the activity. It's the classic argument of what came first: the chicken or the egg? For example, the kitchen is a relatively recent phenomenon, whereas the acts of hunting, gathering, cooking, and eating have taken place since humans existed on earth. If there isn't a readily available cooking space anywhere, people will build a fire and prepare whatever needs preparation, with or without a kitchen. People coming together make 'the thing' or the program. Programming is an inherently social concept. The interdependence of life in a village creates a deep social experience for its residents.

Collective Identity

Collective identity encompasses both an individual's self-definition and affiliation with a specific group or collective (Franco-Zamudio and Dorton 2014, 256). It is a shared social identity that associates people with a particular set of interests and/ or beliefs. It is a system of knowing one another deeply, and of caring about one another because they are 'of the same belief system'. Villages have a strong social identity that comes from a shared interdependence with one another inherent in village life. There is a compassion held for one's neighbor because they are a collective, working together, and the collective is only as healthy as the sum

of its constituent parts. When one member of a community suffers, everyone rallies. Because they care.

Social Capital

This kind of social cohesion, where neighbors act like family, is an asset as valuable as money. Often referred to as 'social capital', these human connections within small communities operate as an alternate economy. Social capital exists everywhere there are relationships between people. Long before the language of "asset mapping" was coined, such inventories were known and held in the social fabric of small communities, to be drawn upon when someone required help. For many this is a historical phenomenon, but for numerous others this is the reality of present-day community life. In small communities, everyone knows your business—but they also know and can help meet your needs in ways that will never be captured by measurements like the Gross Domestic Product. Even if we cannot quantify or estimate the worth of informal economies on a spreadsheet, to those living in rural communities, their effect is priceless and palpable. As they say, 'not everything that matters can be measured, and not everything that can be measured matters' (Brynne and Wall 2020).

One Universal Language of Social Connection

In modern housing, we have lost our interdependence on one another. We can only foster interdependence with those who we know and trust. And we can only know and trust those people with whom we interact on a regular basis. Over time, interdependence is created with those we know, and with whom we connect in the rhythm of our lives. Our lives need to intersect to make this happen. In a village, this local language of social connection and interdependence

The concept of social capital developed through forming meaninful social connections.
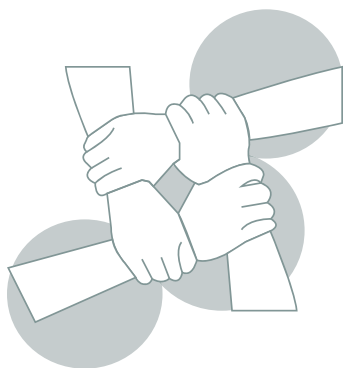
Social connection as an inherent part of being human.

is localized. In urban areas, we often don't live with the people we depend on, and we don't depend on the people closest to where we live. Architecture has created the divide amongst us, both physically, and in causality, also socially.

Chapter 5: Layer C: Against the One-Size-Fits-All Narrative

The Rooms of Community

The social structure of village communities has manifested into a collection of architectural spaces. A series of case studies explores the significance and arrangement of dwelling, liminal, and fragmented spaces in the formation of interdependent social connections. We can define a set of form-making principles that will be applied in the design portion of the thesis and elaborated upon in Layer D: developing the tangible structure of co-living.

Spaces of Formal Interaction

Spaces of Dwelling
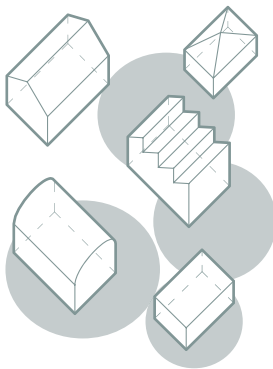
The village as a collection of diverse tenure and form.

Villages form around the people and their needs. Architecture facilitates social connection and interaction. Dwellings or houses in villages are, in more ways than one, connected to the social spaces of villages. Housing is the center of everything that happens around it. Houses themselves are social spaces. The houses in villages are not just connected to each other physically. They are socially connected by the activities of those who live within, and those who live outside them. The gradient of what is private and what is public in the housing makes it a social thing. The dwelling in a village is never a static structure; it is always changing by the social needs of those who live there.

Spaces of Making

To craft is to create with a specific form, objective, or goal in mind. Crafting is a quintessential human activity, involving premeditative thought and deliberate, design-directed

action. If we accept the notion that regular tool use made us "human", we can acknowledge that crafting makes us 'human' (Costin 2008, 5).
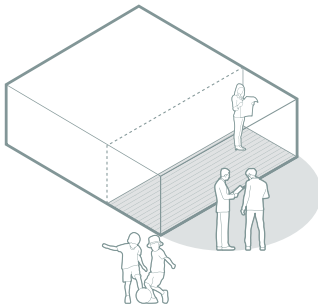
Craft-based textile activities such as knitting, crocheting, tatting and lacemaking have provided challenges, physical and mental stimulation, creative outlets, and social interaction for generations. The role of craft and the relationship between craft and maker vary across cultures, geographic groups, and gender. However, a common thread is that craft practitioners are often emotionally invested in these activities, and many continue to make through all stages of life and into old age (Kenning 2015).

The act of making as a means of social cohesion and community forming within the village.

Spaces of Informal Interaction

The Porch

The very setup and orientation of the front porch is that of being ordered outside itself. In this way, the porch is not simply a medium for drawing those outside from the interior dwelling of the home. More than this, it is a catalyst for helping you to get to know your neighbors and those infrequent passersby. The porch is an opportunity to invite a neighbor over to your house to join you for coffee or to encourage your children to play with their children. The more frequently your neighbors see you on the porch, the greater the chance of them wanting to socially interact. The porch is an enabler for being able to observe the activities that are going on in one's neighborhood. Whether it be the joy of watching children play games of tag or capture the flag, or to deter suspicious activity of someone simply 'up to no good', the habit of observing the streets from the front porch fosters care. When we know what is going on in our

The porch as the blurred social space between public and private.

communities and others know this about us, then a certain type of trust coalesces (Jones 2018).

The Kitchen

The kitchen is the chameleon of the home. It transforms into whatever homeowners and families need it to be. It has many uses for the family, but one certainty is that it's the home's hub of activity. Some congregate in the kitchen for a celebratory party or friendly gathering; they use it for completing home business or education-related tasks; or they simply use it for dining.

Food is clearly important for nutrition, but it's also meaningful to humans in other ways. Think about it: we're the only mammals that cook our food. The kitchen has become a social space rather than a space only with utilitarian properties.

> The world begins at a kitchen table. No matter what, we must eat to live.
>
> The gifts of earth are brought and prepared, set on the table. So it has been since creation, and it will go on.
>
> We chase chickens or dogs away from it. Babies teethe at the corners. They scrape their knees under it.
>
> It is here that children are given instructions on what it means to be human. We make men at it, we make women.
>
> At this table we gossip, recall enemies and the ghosts of lovers.
>
> Our dreams drink coffee with us as they put their arms around our children. They laugh with us at our poor falling-down selves and as we put ourselves back together once again at the table.
>
> This table has been a house in the rain, an umbrella in the sun.
>
> Wars have begun and ended at this table. It is a place to hide in the shadow of terror. A place to celebrate the terrible victory.
>
> We have given birth on this table, and have prepared our parents for burial here.
>
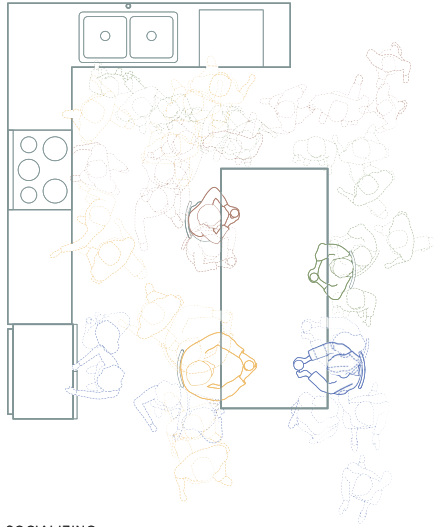> At this table we sing with joy, with sorrow. We pray of suffering

and remorse. We give thanks.

Perhaps the world will end at the kitchen table, while we are laughing and crying, eating of the last sweet bite.
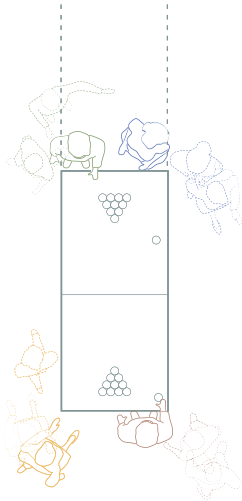
(Harjo 1994, 67)

COOKING + EATING

WORKING
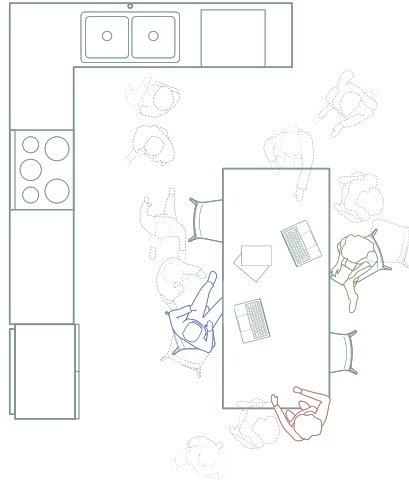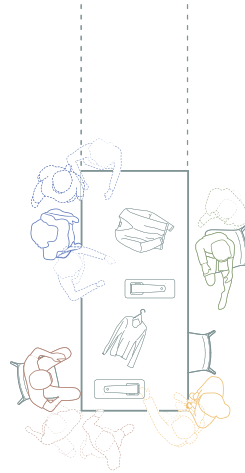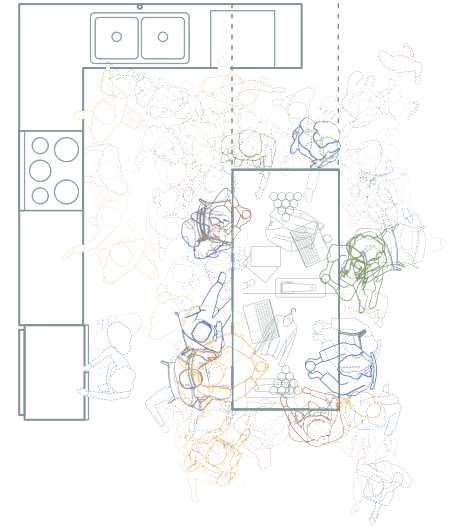
ALL

SOCIALIZING

MAKING
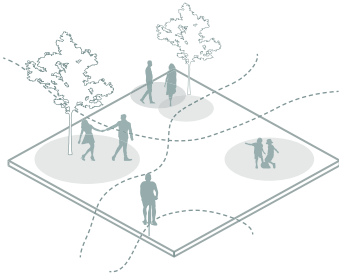
The practical and social functions of the kitchen - architectural space facilitated by social interaction and program.

Shared Community Space

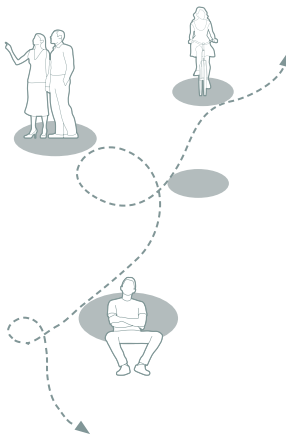### *The Garden: 'The Common Ground'*

The landscape synonymous with the garden is inherently a public space. It is enjoyed and shared by all. The public and residents who live nearby can do whatever they want on it. That includes cultivating it to some capacity, and in the case of the examples of villages set out below, the garden is an architectural space that has been molded by social activity. The garden connects all the architectural and social pieces together. In the examples below, gardens are used for religious purposes, for ceremonial reasons, to produce food for the village, and in one study, to grow the means of sustaining their architectural dwellings.

The garden is the common ground between everything and everyone.

The garden as the idea of a common ground molded by social activity.

Circulation - 'The Common Path'

Circulation can be thought of as the space between spaces. It inherently has a connective function of connecting people to a space, building or functional area. But it has a capacity greater than simply connecting buildings or places. Circulation can be thought of as the concept that captures the experience of moving our bodies through space, both three-dimensionally and through time (Ching 2014, 255).

When we leave places or move from one place to another – when we 'circulate' – we meet people. Everyone circulates in some capacity. Circulation is the choreography of human movement. And circulation is both when and where informal interaction between people takes place. Circulation creates social interaction opportunities so important to a village.

Circulation as the connection between all forms of space and inhabitation.

In contrast, circulation within urban housing is primarily designed with fire safety in mind, rather than being designed as places of collective dwelling with interaction in mind. Hall corridors are often long and monotonous with a series of private spaces surrounding them.

The Built Open Relationship - 'The Common Intention'

The village builds outward to the community, rather than containing all things within a defined space, like one sees with an apartment building or to some capacity, a single-family home. This concept is why villages continue to expand and build outwards, and not upwards. The architecture is defined by those who live in it, rather than 'living within a defined space'. This idea of building 'open' encourages people to come within it. These open relationships vary by context but can be generally understood as: cluster, nucleated, and linear formations.

CLUSTER	NUCLEATED	LINEAR
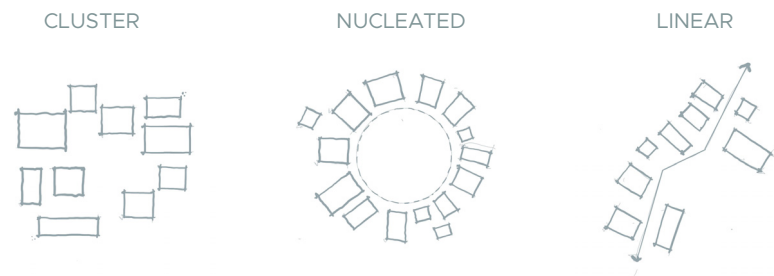
Built-open formation and growth patterns of villages.

Creation of Place - 'The Common Everything'

All these architectural elements combined with the social elements create an identity for the village. The village as a place becomes a whole, instead of being composed of disparate parts.

The idea of place creation has a social capacity because it has a group identity distinguishable from its surroundings. A place becomes one civic address for hundreds of people. An example of place-making includes the Hydrostones in the north end of Halifax, Nova Scotia. People associate themselves with that large community because of a collective identity created by both architectural and social spaces. The Hydrostones have a sense of 'place', contrary to the civic address of a stand-alone multi-unit urban dwelling, or an apartment. That latter building is privatized for those who live within it, leaving little ability for anyone to engage, share, or interact with that form of housing.

Case Studies

The following three case studies synthesize the previous two chapters of the thesis - the tangible and intangible characteristics of villages. These case studies investigate the organization of informal manifestations of interdependence through the overrlap of social and architectural spaces.

A Village of Spaces

Pok Fu Lam Village, HK

ocated on the hillside beside Chi Fu Fa Yuen on Hong Kong Island, is one of the oldest historical villages in Hong Kong. Its history can be traced back to the seventeenth century where Hong Kong still did not officially exist. Hence, the village has a great significance on the city's historical values.

After the Second World War, the massive refugee influx seeking asylum from mainland China reached Hong Kong, resulting in the village population increasing from 20-odd households to more than 100 households.

INDIVIDUALITY.

The letterboxes are made up of different materials, including plastic, wood, paper and mostly galvanized steel. Villagers even made and decorated some letterboxes themselves rather than purchasing one.

GEOGRAPHY.
[LIVING ON THE SLOPE].

ECONOMIC/SOCIAL.
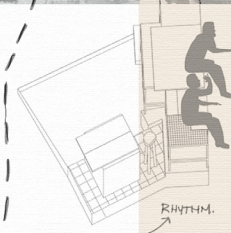
CLUSTER.
[organized chaos].

there are a lot of informal gathering spaces, despite the presence of formal parks built by the government, they still decided to create their own small and impermanent gathering space, and most of them attract more people and are better used than the formal ones.
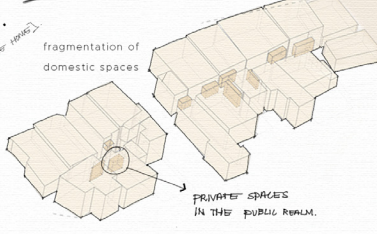
[DRAGON FIRE PARADE].
CULTURAL.

ECONOMIC.

RHYTHM.

Before 12pm

After 12pm

CIRCULATION.
[AS PARTS OF THEIR HOMES].

fragmentation of domestic spaces

PRIVATE SPACES
IN THE PUBLIC REALM.

Pok Fu Lam village: Layers of social and architectural inhabitation - a village of spaces.

Overview

Pokfulam Village is one of the existing traditional settlements on the highly urbanized Hong Kong Island. The history of the village can be traced back to 1973. Surrounded by high rise buildings, the village has witnessed important historical moments of Hong Kong, the arrival of Missions étrangères de Paris in the 1870s, and the establishment of the largest dairy farm in Hong Kong in the 19th century. Today, the village is home to 3,000 residents with different family names (Dewolf 2017). Pok Fu Lam was home to the first dairy farm in the territory, playing an important role in the history of Hong Kong. No longer surrounded by farmland, the village atmosphere and tight-knit community have remained amidst the high-rise developments surrounding the village.

In its heyday, Pok Fu Lam Village was surrounded by acres of fertile farmland, feeding over 80 cattle and producing fresh milk on the property. Although the agricultural function has fallen to urbanization along its peripheries, the village lifestyle and its rich cultural traditions have been maintained through generations. Pok Fu Lam is the only remaining original village in the urban core of the city (Dewolf 2017).

Pok Fu Lam village, Hong Kong (World Monuments Fund, 2012)

Organization

The village is divided into three parts: the middle is "Wai Chai", the northern portion is "the vegetable garden", and the village tail is "Long Tzutu". The village takes the form of a densely clustered settlement with footpaths weaving between markets, housing, community gardens, and gathering spaces. As the village is perched on a mountainside, vehicular circulation is limited to the peripheries, allowing the circulation throughout to become an inhabited landscape. The village at surface level presents itself as an urban slum slated for redevelopment, as most of the structures are squatter residences; however, the components that create the organized chaos are what create the community.

Figure-ground diagram of Pok Fu Lam village organization.

Dwelling

As an informal settlement, there is no distinct house typology for Pok Fu Lam village. Rather, many of the houses are arranged similarly to townhouses, sharing walls in between them and, in some cases, a common entry. The wall dividing individual houses is often partitioned rather than fixed, allowing the dwelling spaces to become joined, increasing harmony between family members and neighbors. Some describe houses in Pok Fu Lam Village as "living beings". As they grow organically across the valley, these houses reflect inhabitants' needs across time, echo the relationship between neighbors, and embody the owners' sense of belonging. The four pillars of people, house, community, and land intertwine with one another (Sin et al. 2021).

Due to the limited space within dwellings, many of the homes domestic spaces are fragmented from living spaces, including the kitchen, laundry and bathroom. With this fragmentation

of domestic spaces, the public pathway becomes blurred with the space for domestic activity, such that if we define a boundary of a house by activities, the border is extended. The boundaries of houses are redefined and expanding with activity, rhythm and time. This fragmentation encourages the usage of the pathway by villagers, boosting human interaction within and the pathway eventually becoming a communal space. The notion of 'space stealing' is also a common characteristic of the housing typology in Pok Fu Lam village. Spoken to in recent work from the Pok Fu Lam Village Studio. The ground floor of the house is open to the public realm forming a semi-public space.
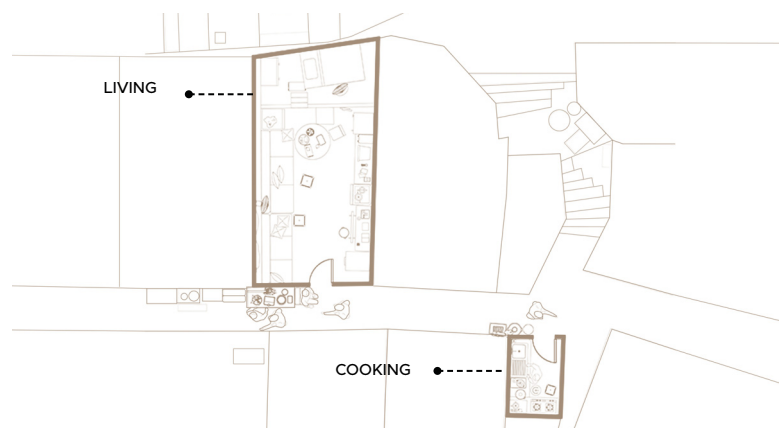
Housing typology in Pok Fu Lam village - fragmentation of domestic space.

In this connotation the ground floor of the entire village seems to link up to become a large plot of public space. The expansion of private spaces can be sorted into three different categories: sundries, additional structures, and gardens. Everyday items such as clothes and trolleys are placed beside their front and back doors and additional or temporary structures such as work areas are constructed around the peripheries of their home to occupy dead spaces

along the circulation path. Gardens are often scattered along the edges of circulation paths and utilized by multiple families.

Community Systems

Letterboxes

Letter boxes as a social system (Pok Fu Lam Village Studio, n.d)

In the past, writing letters was the only way to communicate long distance, letterboxes - as the receiver of letters - play an important role in the maintenance of connections and relationships. The system of letterboxes is made up of different materials, including plastic, wood, paper and mostly galvanized steel. Villagers tend to make and decorate some letterboxes themselves rather than purchasing one. Beside the differences in appearances, the ways they are attached to different places is diverse. Some are attached to the wall of the house, to a wire net, to a metal bar and even to a tree trunk. By looking at something like a village's letterboxes, we can start to see the complexity of Pok Fu Lam village. Letterboxes are not only the receiver of letters; rather, they start to become traces of locations, communities and time (Pokfulam Village Studio, n.d).

Markets / Growing

Informal markets and spaces of growing (Pok Fu Lam Village Studio, 2019)

Scattered throughout the village are series of market/ grocery structures. These are often closely integrated within the culture of growing, both independently and collectively. Agricultural production in Pok Fu Lam village falls into three categories of garden farming, family farming, and organized farming, with farm systems varying by each category, ranging from informal plantings to constructed vegetation areas. Often these farming initiatives are created out of leisure or to provide supplementary food for community

Community garden (Sin and Cheung, 2020).

groups. The northern tip of Pok Fu Lam village primarily consists of organized community farming, an initiative revitalized in 2013 by a community development project (Sin et al. 2021). Spoken to by Sin and Cheung, this garden quickly became the heart of the community. With the revival of the community garden and associated activities, villagers gather more frequently, encourage each other to practice their culture and start to realize their communal spirit and lifestyle are something to be proud of (Sin et al. 2021).

Circulation Platforms / Gathering

Circulation through Pok Fu Lam village is comprised by a series of platforms and stairs. Perched on a mountain side, the path of circulation often becomes part of many private spheres through the fragmentation of domestic spaces and the notion of space stealing. This path of circulation also houses numerous informal gathering spaces. Despite the presence of formal parks built by the government, villagers still decided to create their own small and impermanent gathering spaces, and most of them attract more people and are better utilized than the formal ones. These spaces are often defined by flat tile platforms along sloped circulation corridors serving as an extension of the home. This kind of integrated space give us a sense that the whole village is united by the individuals, and that the relationships between the villagers are very intimate so that they can give out their private property to offer a better environment and quality of living to other community members (Pokfulam Village Studio, n.d).
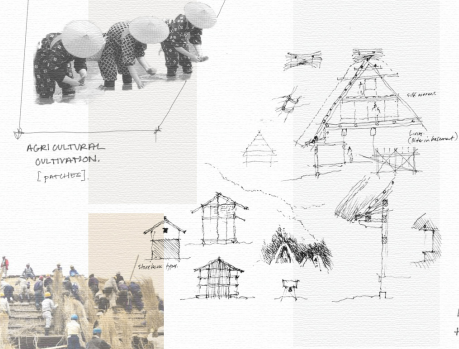
A Village of Buildings

Shirakawa-go Village, Japan

The mountainous villages of Shirakawagō and Gokayama are well known for the unique architecture of their "Gassho" farmhouses and were enlisted in the UNESCO World Heritage List in 1995. These villages with their Gasshostyle houses subsisted on the cultivation of mulberry trees and the rearing of silkworms. Shirakawa-go is located in the north-western part of Gifu Prefecture, in the approximate center of Japan. The name "Shirakawa-go" is taken from the traditional Japanese name for the region used in ancient times. It equates to the modern administrative area of "Shirakawa Village". Additionally the village is situated in a wider historical region known as "Hida".

LINEAR + BRANCHING SETTLEMENT.

[DESIGNED CATHER AROUND COMMUNITY RESOURCES, PRODUCTION, + INFRASTRUCTURE]

AGRICULTURAL CULTIVATION. [PATCHES]

NATURAL ECOSYSTEMS.

IMPORTANCE OF NUCLEAR + EXTENDED FAMILY.
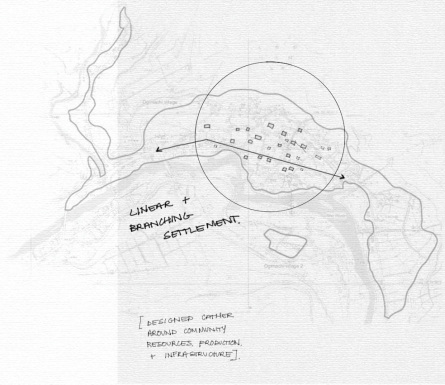
The distinctive large roofed gassho style houses, named in Japanese for their resemblance to hands joined in prayer, are a characteristic feature of Shirakawa-go today. Early prototypes were built from around 1700, as silk and gunpowder production in the village flourished during the Edo era.

The thatched roofs of gassho-style houses gradually wear down and must be replaced once every 20 to 30 years. In Shirakawa-go, thatching has traditionally been a cooperative effort that can involve up to 200 villagers. The spirit of such cooperation, in which strict reciprocity is assumed, is referred to as yui.

COMMUNITY CONSTRUCTION.

CIRCULATION
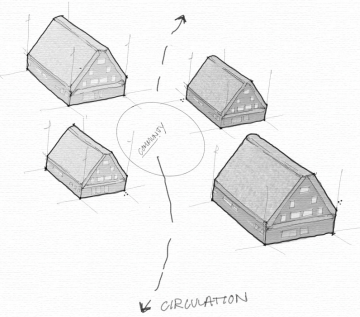
Shirakawa-go Village: Layers of social and architectural inhabitation - a village of buildings.

Overview

The Shirakawa Village, also known as Ogimachi, is settled in Gifu Prefecture, which is part of the central region in Japan mainland. Settled at 500 meters above sea level, this village is surrounded by a vast mountainous range shrouded with forests. Due to the lack of archeological artifacts, it is difficult to hypothesize the daily lifestyle in Shirakawa Village before the 12th century. However, excavated earthenware pots and stone tools reveal that the earliest settlement possibly dated back to the late Jōmon Period (8000 B.C. – 200 B.C.). Before the 1600s, there were approximately 50 houses in Ogimachi. By mid-Meiji era (1868-1912), the number increased to over 100 houses in the area. This enlargement of the village was partly because of the development of sericulture. Silk became the main commodity, which supported the economy of the village. As business prospered, small footpaths within the community later broadened into narrow roads for transporting heavy loads. In 1890, the government completed a national highway that coursed through the village, exposing modern building methods to the community (UNESCO World Heritage, n.d.).

Shirakawa-go village, Japan (UNESCO World Heritage, n.d.)

Figure-ground diagram
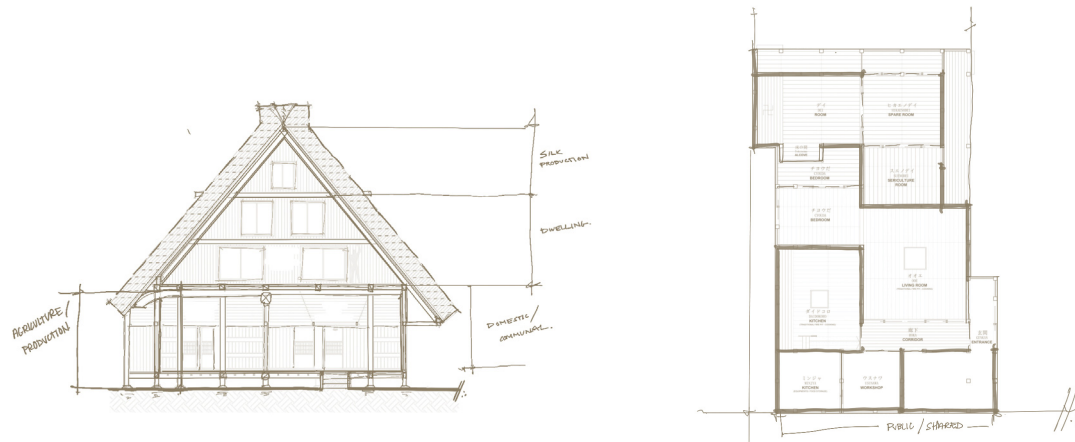of Shirakawa-go village
organization.

Organization

The arrangement of the *gassho-zukuri* houses mimics the course of the river. Originally, these houses were built far apart from each other to prevent the spread of fire incidents. However, modern houses are now built between these pre-existing structures, so it is difficult to recognize the village's attempt at compartmentation (UNESCO World Heritage, n.d.). The village takes the form of a clustered/linear settlement of various gassho-style buildings organized around communal agricultural space and circulation paths. Community agricultural spaces in the village are arranged both interior and exterior, where in summer months, the landscape becomes spotted with rice and tall grass fields, whereas in winter months, agricultural processes move indoors, focused on the production of silk.

Dwelling

Shirakawa-go is characteristic of its gassho-style houses. Gassho houses are residences built from wooden beams that support their characteristic, steeply sloped, thatched roofs that meet at a high peak and are said to resemble hands meeting in prayer. One of the ways in which gassho-style houses differ from other traditional Japanese houses is that the attics are employed as workspaces (Ishikawa 2018, 6). From the Edo to the early-Showa era, sericulture (silk production) was the foundation industry supporting the people of the village. The large attic spaces under the eaves were usually divided into 2 to 4 layers and put to effective use in the rearing of silkworm. These workspaces within the home were utilized by multiple community members to share the labor process of silk production (Fujioka 1958, 89).

It was common in Shirakawa-go that multiple families resided in one house, sharing the communal activities associated with the production of silk and meal preparation. Each Gassho house is organized around a central hearth, fire being a primitive language of gathering, granting residents safety and warmth as well as the opportunity to cook.

Gassho houses of Shirakawa-go in plan and section illustrating the multiple programs and functions within the structure of the home.

Community

The Shirakawa-go villagers had only themselves to work to overcome obstacles, which was how the labor sharing system called *yui*, or bonding, was established. These approaches to sharing the work are similar to the typical Japanese social characteristic of being dependent on one another.

The *gassho-zukuri* style houses are not only known for their massively thatched roof, but also for the communal effort involved in maintaining the roof. The thatched roofs of gassho-style houses gradually wear down and must be replaced once every 20 to 30 years. In Shirakawa-go, thatching has traditionally been a cooperative effort that can

involve up to 200 villagers. The spirit of such cooperation, in which strict reciprocity is assumed, is referred to as *yui* (Uchiumi et al. 2009).

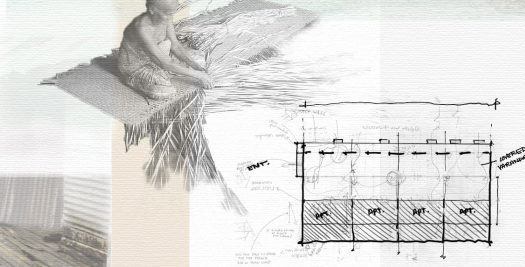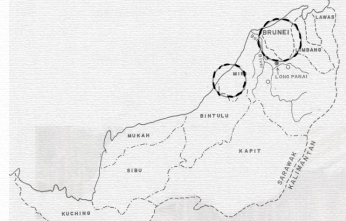Community roof thatching (UNESCO World Heritage, n.d.).

Yui participants are accorded different roles, depending on their skills and experience. The most senior usually supervises the work, while younger villagers are tasked with handing bundles of grass to the thatchers on the roof or cleaning up after them. Members of the house owner's family serve refreshments during the day, and together with other villagers prepare a feast locally called *naorai* for all participants once the roof has been thatched (Ishikawa 2018, 33).

The contributions of each participant, from work performed and thatching materials arranged to the number of sake bottles provided for the feast, are recorded in a booklet called a *yui-cho*. Such record keeping helps ensure fairness and reciprocity, which are two of the key values of the *yui* tradition. The oldest *yui-cho* still in existence is from 1792, proving that roof thatching has been a cooperative undertaking in Shirakawa-go for more than two centuries.
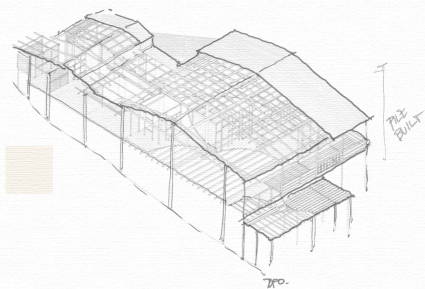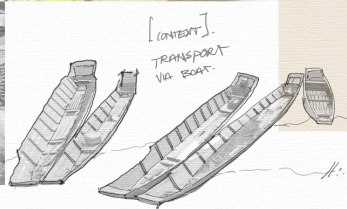
A Village Within a Building

Borneo Longhouse

Borneo is the third largest non-continental island in the world located in Southeast Asia, straddling the equator . .Longhouse communties in Borneo differ from more traditional defintions of a village as they are contained within a single building. Communities in the Heart of Borneo have long used zoning as a land management tool, where the forest territory of each village or settlement is divided into areas for non-timber forest product (NTFP) collection, hunting, agriculture (rice paddies and swiddens), gardens, old settlements and sacred sites.he longhouse is one of the oldest architectural forms in Sarawak and is the embodiment of communal living made from individual spaces. Various forms of longhouses can be found all over Borneo but generally they all follow a basic design. Known as a "village under one roof,"

WEAVING/ MAKING

[CONTEXT]. TRANSPORT VIA BOAT.

Each apartment is connected to a communal gallery space on the side. The gallery is an open, common living area used for meetings, rituals and dances and various group activities like weaving, milling rice and entertaining visitors. A long verandah along the exterior edge of the structure, known as a tanju, serves as a place of gathering or an area for inhabitants to work in shade.

PILE BUILT.

Borneo Longhouse: Layers of social and architectural inhabitation - a village within a building.

Overview

Borneo is the third largest non-continental island in the world located in southeast Asia, straddling the equator. It is sparsely populated and famous for ancient rainforests filled with wildlife, including several primates and various rare and endangered species. Batang Ai is the area known as being one of the oldest Iban settlements in Sarawak and Batang Ai National Park is part of the Sarawak region's largest protected areas for tropical rainforest conservation. The Iban are one of many groups of indigenous people still living in Borneo and unlike the Penan tribe, who hunt and move around every few days, the Iban are 'settlers' who live in a communal longhouse (Lee 1962, 232).

Sarawak Longhouse in Borneo, Malaysia (Dillon 2015)

Organization

Longhouse communities in Borneo differ from more traditional definitions of a village as they are contained within a single building. Communities in the heart of Borneo have long used zoning as a land management tool, where the forest territory of each village or settlement is divided into areas for non-timber forest product (NTFP) collection, hunting, agriculture (rice paddies and swiddens), gardens,

old settlements and sacred sites (World Wildlife Foundation, 2020). Longhouse village communities are often comprised of one large structure connected to peripheral structures of elevated terraces, animal pens, outhouses, and auxiliary buildings, some of which are single-family homes. The formal organizations of longhouse communities in Borneo differ, depending on the indigenous group and geographic context (jungle, riverbed, etc.).

Dwelling

The longhouse is one of the oldest architectural forms in Sarawak and is the embodiment of communal living made from individual spaces. Various forms of longhouses can be found all over Borneo but generally they all follow a basic design. Known as a "village under one roof," the longhouse is a type of elevated communal dwelling comprising a series of interconnected apartments arranged linearly. Each apartment is connected to a communal gallery space on the side. The gallery is an open, common living area used for meetings, rituals and dances and various group activities like weaving, milling rice and entertaining visitors. A long verandah along the exterior edge of the structure, known as a *tanju*, serves as a place of gathering or an area for inhabitants to work in shade. On the other side of the apartments are kitchens and bathrooms. Longhouses in Borneo, although differing by indigenous groups, are traditionally constructed of wood with a thatch roof, but more recently, many have tin roofs (World Wildlife Foundation, 2020).

The longhouse itself is constructed and maintained by the community who resides within it. Split timbers, leaves, bamboo, and tree bark for the compartment walls are sought

collectively from the environment, requiring rituals and community participation in erecting the house (Bahauddin et al. 2015, 4). As well as living in proximity under the same roof, every important moment in the residents' lifecycle, such as a birth, death and marriage, are celebrated together by residents. When one member of the house has a successful hunt, the meat is shared with all members of the longhouse. The close physical proximity and constant interaction in the gallery allow small groups of residents, relatives and non-relatives to join together for a wide range of activities. The longhouses foster a spirit of solidarity (World Wildlife Foundation, 2020).
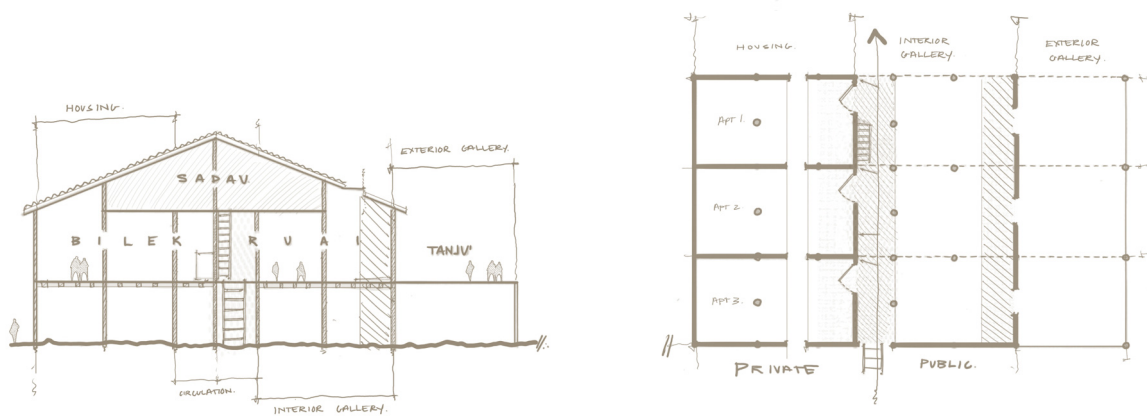
Borneo longhouse in plan and section illustrating the gradient of privacy and function within the structure of the home.
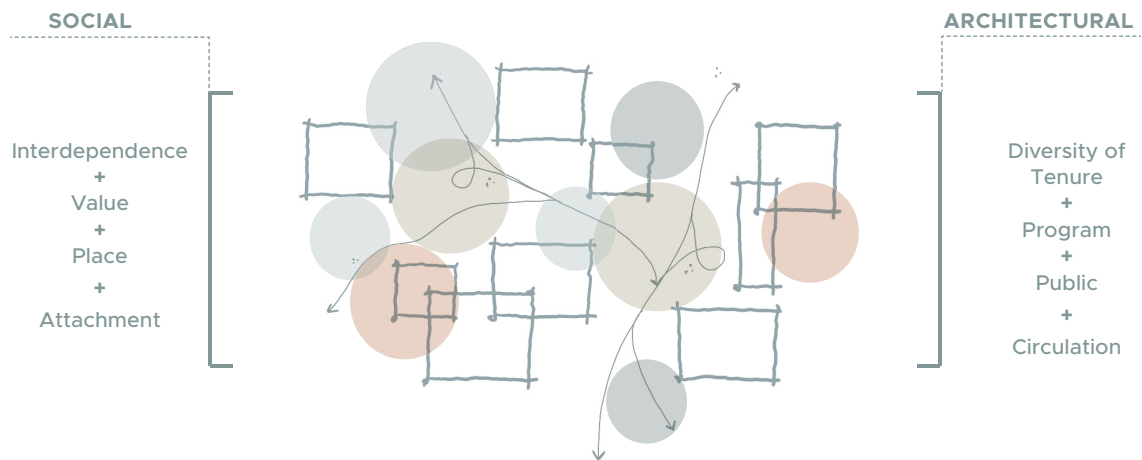
Synthesis

I have dissected these villages into a series of social and physical layers of the intangible and tangible to inform my project and how community is not only organized by these layers, but also organized into these layers. When one looks at the village at face value, one can distill a series of spaces. But it is the composition of both the intangible and tangible spaces that makes the village a successful community.

All the villages are very different in terms of their form and their location, and how they are organized in terms of these layers. But what they have in common is that they all possess the same kind of tools that make a community. They all have layers, but in different arrangements.
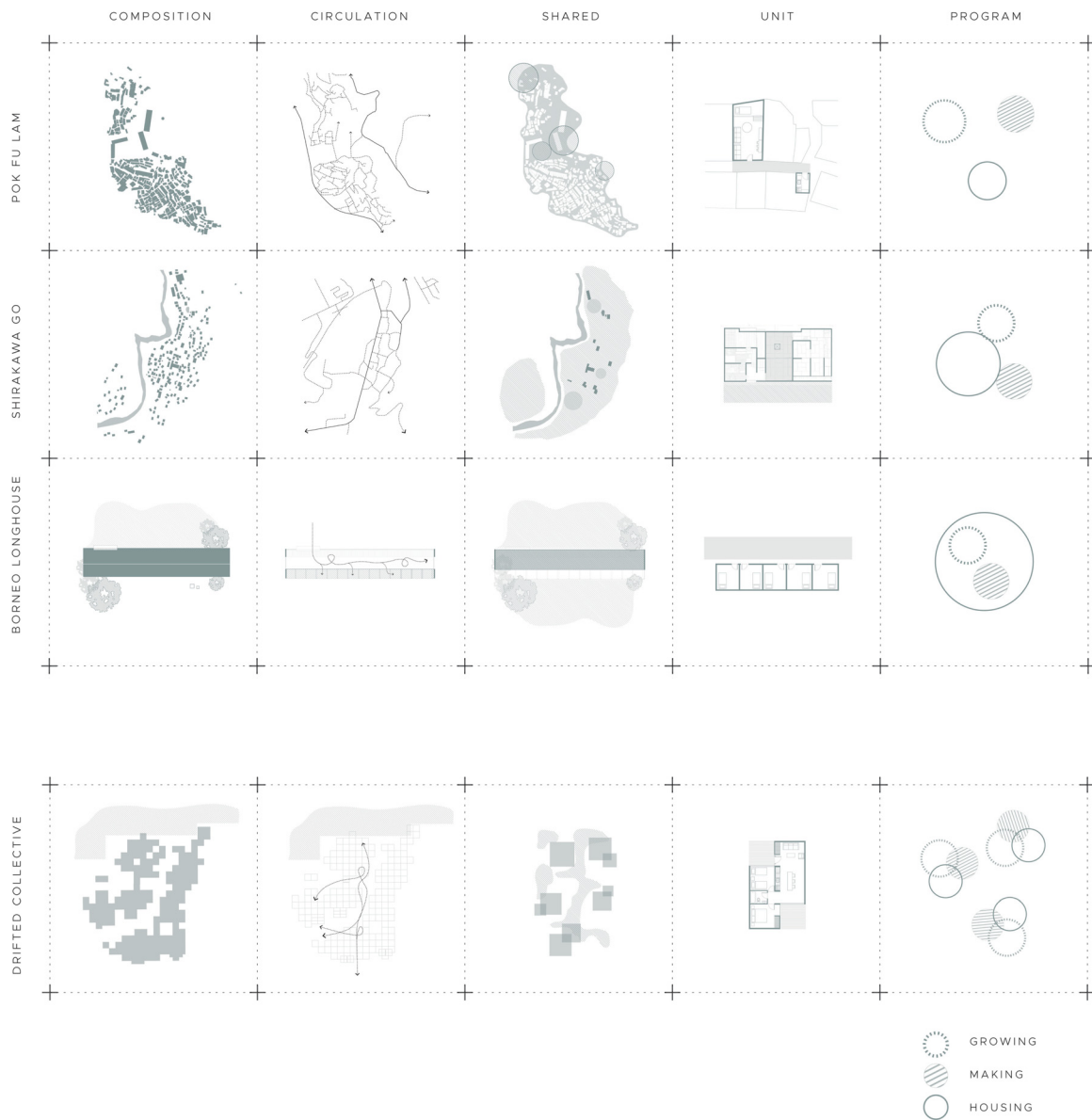
Case study synthesis: defining the design principles of community and comparison with my proposed project.

My project involves taking these social and physical spaces and layers from these villages and recomposing them in an urban context. This is not a copy and paste exercise, as these communities have developed over centuries. That is where the concept of 'drift' comes in: my method is to change and rearrange these things to fit into a completely different context, while still understanding the interconnected nature of the spaces, as a foundational principle. The key is to understand the village as a concept comprised of relationships and spaces, rather than as a physical typology.

SOCIAL

Interdependence
+
Value
+
Place
+
Attachment

ARCHITECTURAL

Diversity of
Tenure
+
Program
+
Public
+
Circulation

The concept of the village both socially and architecturally used to form the principles for defining the proposed project.

Chapter 6: Layer D: Layers in Drift

A Drifted Collective

Using both the concept of the village and the distilled principles of social and architectural space, the method of drift comes into play. The process of drift insinuates movement, change, transposition, and re-assembly. Following the methods outlined in the thesis, this chapter reassembles and transposes the social and architectural layers of the village into an urban housing project within the context of Halifax. In opposition to new and existing urban housing developments in Halifax, a drifted collective redefines housing as a layered composition of social and architectural relationships. Rejecting the one-size-fits-all narrative, this project seeks to re-humanize multi-unit housing as a collection of diverse tenure and programmatic spaces for social interaction within the housing and the urban community. It redefines housing as habitable, public, and community space.

Contextualizing Halifax

In establishing the grounds for this thesis, Halifax appeared as an ideal subject, in that it has shown a considerable expansion in recent years, seen through important alterations to its existing landscape and its more recent population growth rate which was amongst the highest in Canada during the 2018-2019 period (Statistics Canada 2020). Not only is it Atlantic Canada's largest urban area and center of activities (Young 2019), but its main economic activities have also been attracting newcomers to the city, and mobility and immigration account for a considerable portion of the population growth. In fact, the 2016 Halifax

Index highlights that 3/4 of the population growth results from migration to Halifax, from interprovincial and international provenance (Macleod, 2016). From this growth have also emerged new housing developments, several of which have taken the place of existing properties and buildings in the city.
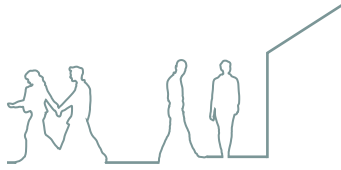
The Housing Landscape

Urban housing as a landscape within the city.

The housing landscape within Halifax presents a very mixed picture. Once considered a city of homes, the vernacular of housing remains partially the same due to its old growth characteristics. Various parts of the North, South, and West Ends of the city remain suburbs comprised of single-family detached homes in areas of established residential status. Focusing on the downtown core, the dilemma of housing within Halifax becomes the carrying capacity of the peninsula itself. As an area constrained by the harbour edges, the consensus as a density solution has been developer-led high-density apartment complexes. The apartment boom of the 1960s and 70s within Halifax followed a similar arc as many other developing cities, crystallizing the functionality of the relationship between limited footprint and density. Fenwick Tower (1971), Park Victoria (1969), and Summer Gardens (1990) are representative of the realization of these principles within the Halifax context. Once and still considered the tallest buildings in the city, these examples largely set the precedent for the many new housing developments. Spoken to in earlier chapters of the thesis, these housing models can be understood as part of a larger cultural obsession with privacy and the delineation between the spheres of public and private, home and city.

Housing and The Public Landscape

The public landscape as something separate from housing within the city.

The public landscape of Halifax at the surface level can be understood as the space left over, un-privatized and unoccupied by development. Except for historically planned spaces such as the Halifax Common, Public Gardens, Point Pleasant Park, and other planned urban spaces, the public realm in the city remains limited to and bordered by existing housing and commercial infrastructure. In this connotation, housing infrastructure silently conveys, facilitates and meditates the dichotomy between the spheres of public and private, home and city.

The landscape is the truest form of the collective and the stage in which public life plays out for many, the common ground. Streets become basketball courts, sidewalks become learning how to ride a bike without training wheels, and paths become spaces of celebration. This conventional division between public and private continues to be perpetuated by new housing development most evident in the downtown core of Halifax.

Situating The Collective

Of particular significance to this project is the downtown core of Halifax. Housing downtown is primarily high-density multi-unit apartment complexes. In comparison to other adjacent areas of urban sprawl, the peninsular core has the highest concentration of existing multi-unit apartment buildings over five stories and developer-led housing projects slated for construction. The highest density of both new development and existing multi-unit residential with greater than five floors is found in the blocks between Sackville and Inglis Streets and bordered by South Park Street and the Halifax Harbour.

EXISTING RESIDENTIAL >5 STOREYS
**1971 - 2015**
HALIFAX PENINSULA | HRM SUBURB
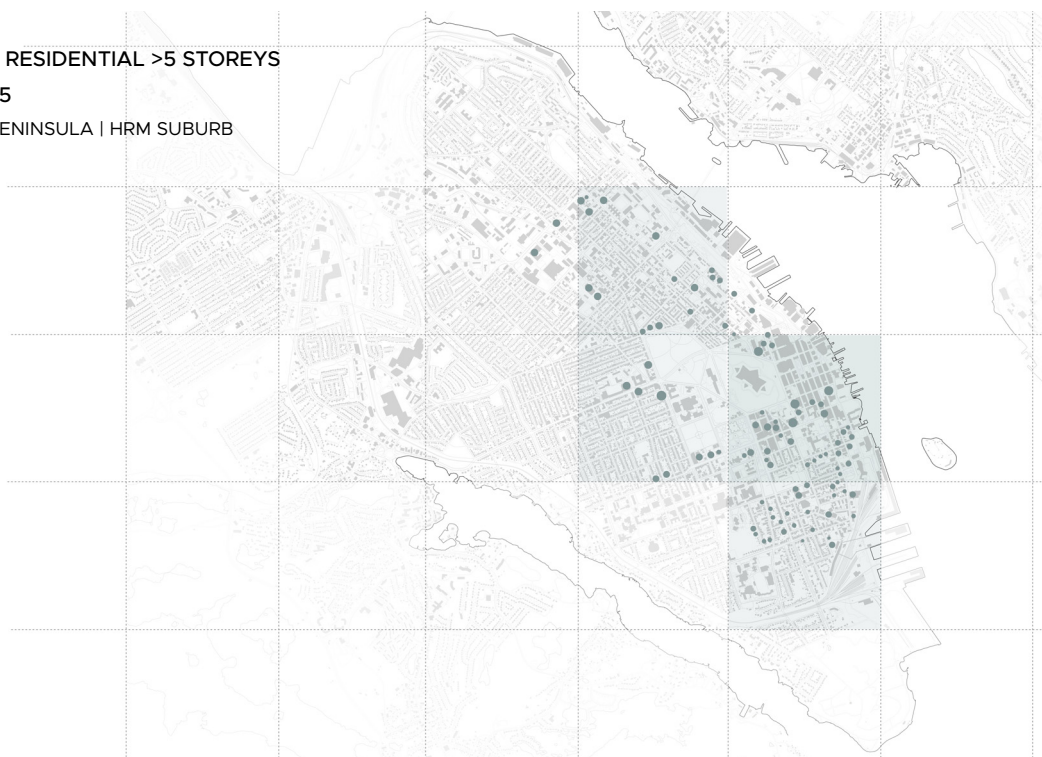
RESIDENTIAL DEVELOPMENT >5 STOREYS
2015 - PRESENT
HALIFAX PENINSULA | HRM SUBURB
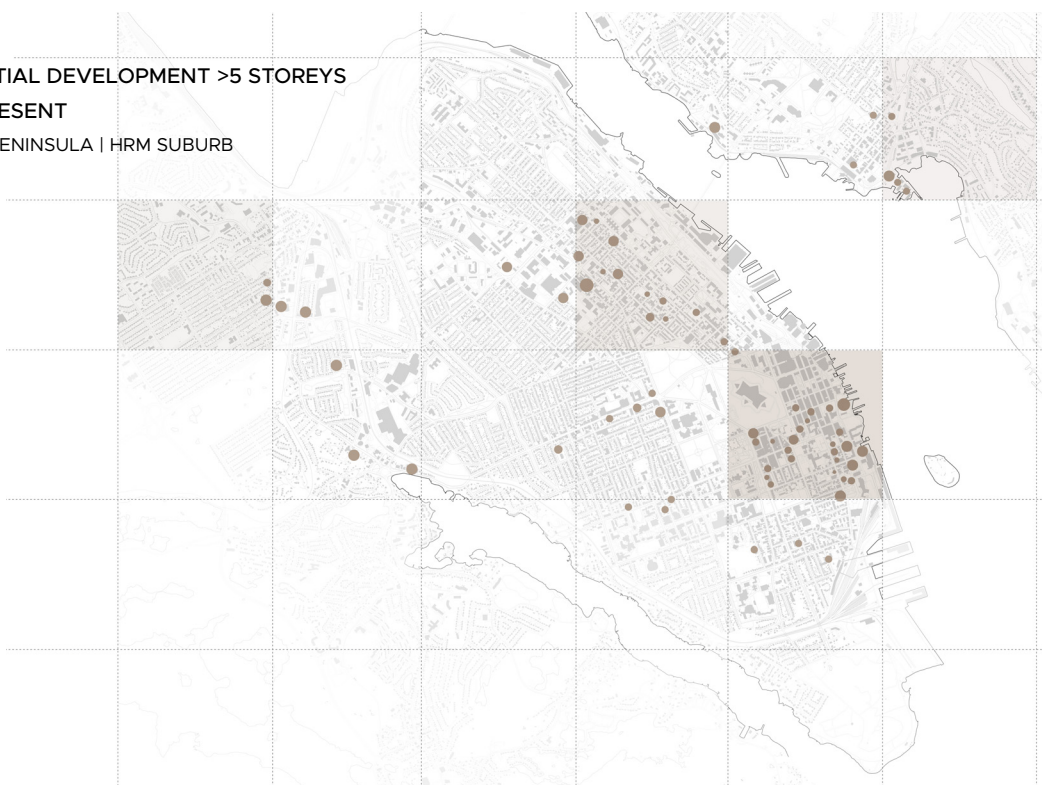
Contextualizing housing in Halifax: new and existing multi-unit housing development over 5 storeys.

Of interest, this area of overlap between existing and new housing development also contains the highest percentage of 1- and 2-person households in all of Halifax per square kilometre. With the limited footprint available for construction, combined with the developer-driven agenda for Halifax, new housing developments are vertical in nature, highly privatized, and single occupancy.
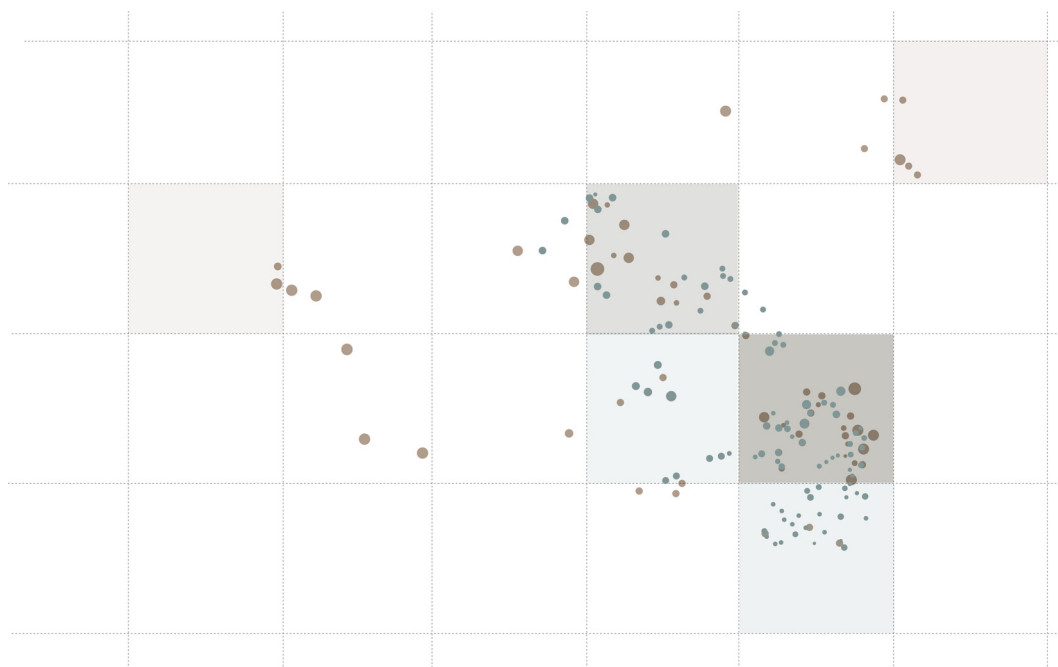
Composite map illustrating areas of significance based on multi-unit housing concentration, both existing and new.

Cunard: The Argument Against Normality

These principles of housing development concerning privacy, typology, occupancy, and public landscape concentrate on the site of significance for this project, the Cunard Block. Situated at the foot of Morris Street, the site is currently under development with a mixed-use design amounting to 18 floors and 231 housing units. This project will be the tallest and most dense residential building on the Halifax waterfront to date. The design of the Cunard project follows the developer-led functionalist method of multi-unit housing
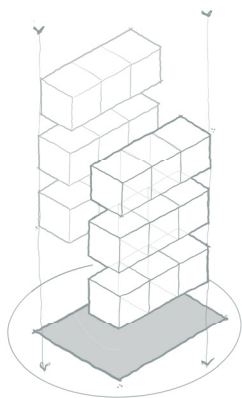
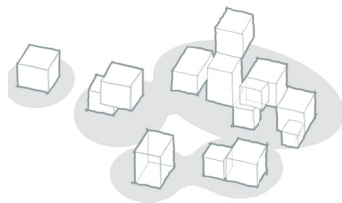The developer model: housing within a defined footprint.

within the agenda of density. The design of the project neglects to deviate from the apartment typology that has withstood the span of time characterized by double-loaded corridors, minimal and privatized community space, and the division between the public and private spheres of its context. Similar to comparable housing projects along the waterfront, the use of amenity spaces is limited to residents, and public interaction with the building is restricted to commercial space.
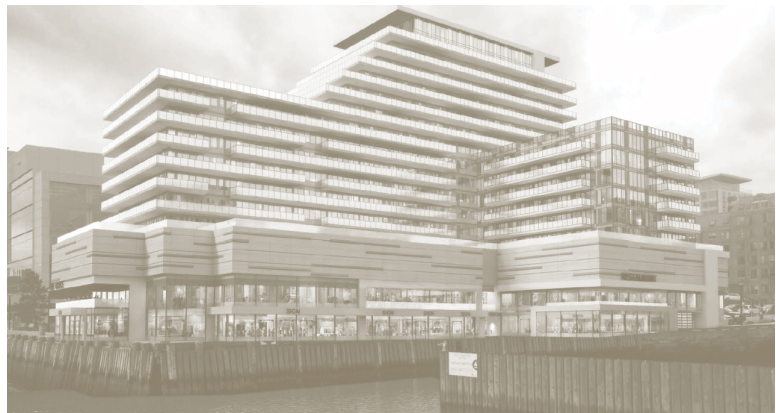
The Cunard project currently under development on the site of interest for my proposed project, Halifax Waterfront (Southwest Properties, 2018)

Situated between the Halifax Boardwalk and Lower Water Street, the site becomes charged by its intersection with arguably the largest piece of public infrastructure and landscape within the city. With the opportunity to change the existing narrative on the relationship between housing and public landscape, private and public, the building does not interact or engage with the public space and boardwalk on which it is situated. Rather, the design proposes a separate constructed public space from the housing itself. This idea of the public realm as a periphery is evident within the design of the Cunard project and a common thread with existing housing projects along the boardwalk. This division between the public and private spheres is facilitated by the

design of urban housing in Halifax furthering loneliness at the scales of home and city. My proposed project: Drifted Collective intends to change that narrative by challenging the ideas of separation evident within the Cunard Project.

The Argument for a New Typology

The title of this thesis 'Drifting to Collective' and layers A-C use the term 'drift' in the present tense - a process insinuating the movement of individual pieces: notions of interdependence, social spaces, architectural forms, and the components that make village communities. This section of the thesis and the proposed project use the term *'Drift'* in the past tense representing the accumulation of these tangible and intangible characteristics into a proposed project: a *Drifted* Collective.

Working within the same parameters as the Cunard Project - site, density, and program - Drifted Collective argues in opposition, seeking to define a new interdependent multi-unit housing typology. In contrast to the developer-led model of achieving maximum density within a pre-defined footprint, this project proposes an alternative form finding technique. Similar to the development of villages distilled from the case study material, this proposed project uses the inhabitation of spaces to define building footprint and form. This new typology of co-living operates using the social and architectural principles of the village to counter loneliness present in current housing models. By utilizing public infrastructure as the basis of collective inhabitation, Drifted Collective argues to redefine the narrative of creating home within the city.
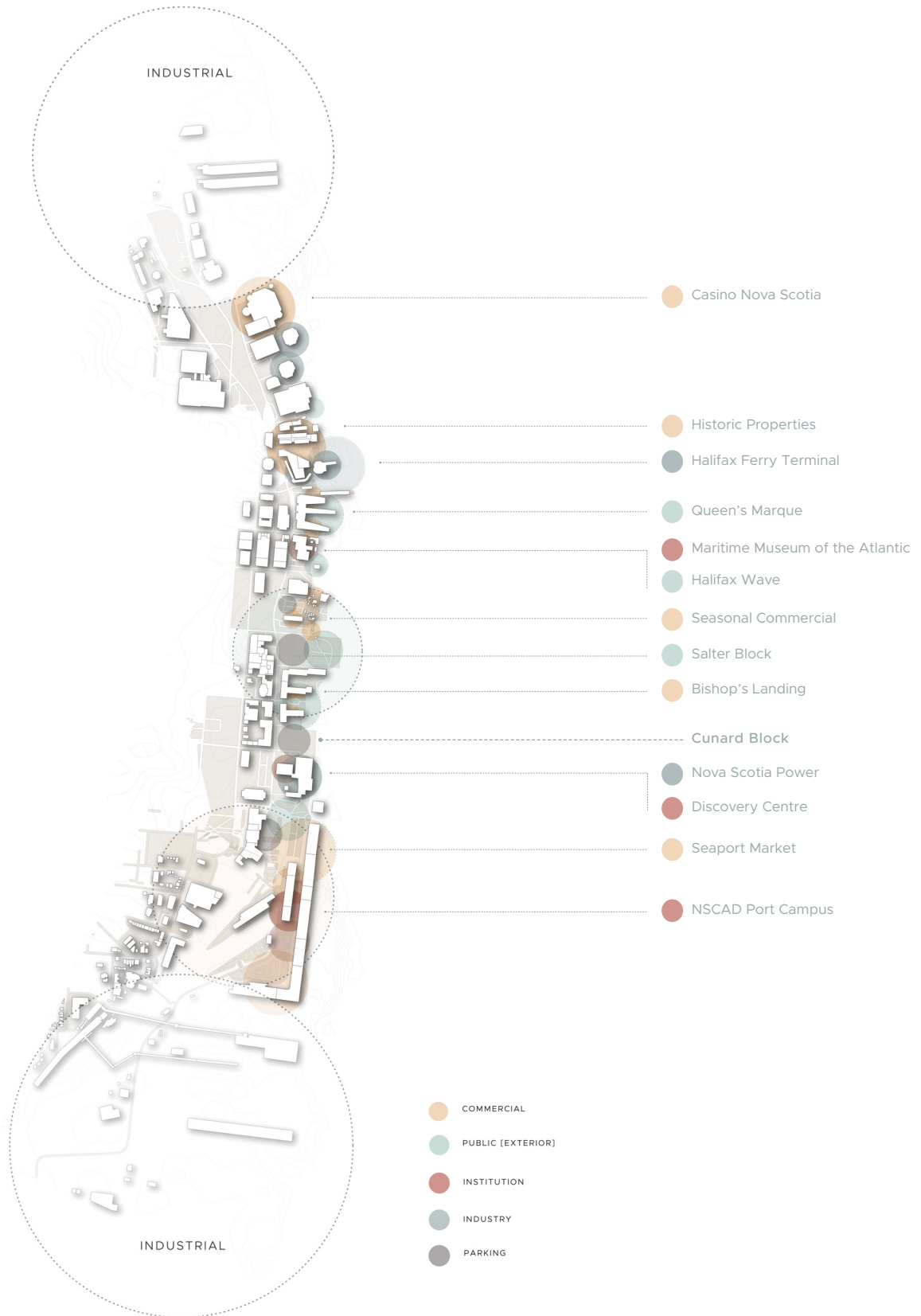
Challenging the developer model: housing as a means to define footprint.

The Boardwalk

The Halifax boardwalk has always been the historical core of commercial and naval Halifax: a bustling working harbour in a growing city. Now used as a space for socializing, roaming, and gathering, the boardwalk is an inherently public landscape within the city.
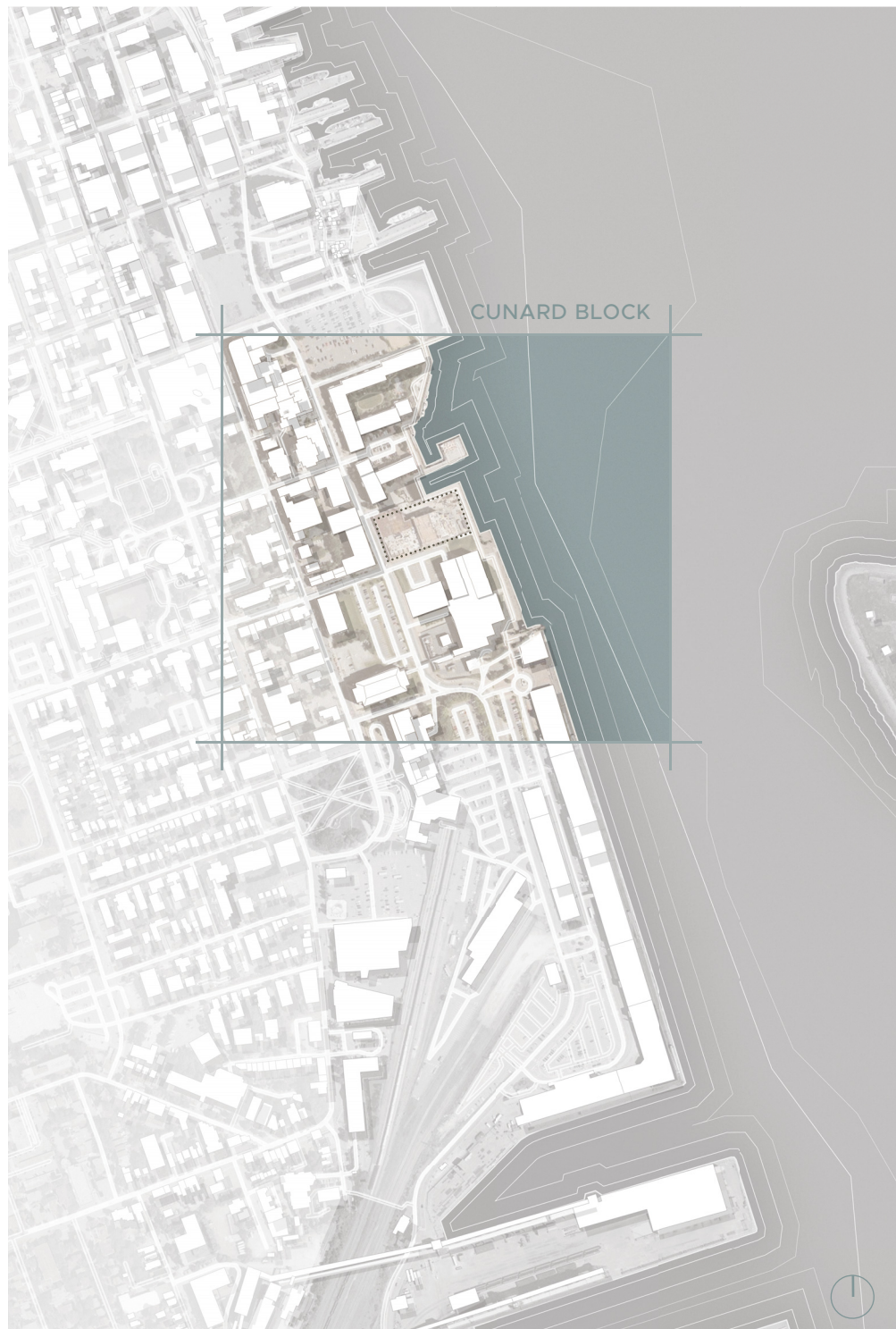

The public landscape of the Halifax boardwalk (Silas Brown, 2018).

The boardwalk at face value can often be overlooked as an 'easy-out' for creating public infrastructure, arguably the most compelling aspects of the Halifax boardwalk are both its composition of the adjacent program and its unsuspecting way of facilitating inhabitation around these privitized programmatic anchors. The site of significance situates itself in the centre of this program gradient.

INDUSTRIAL

Casino Nova Scotia

Historic Properties
Halifax Ferry Terminal

Queen's Marque
Maritime Museum of the Atlantic
Halifax Wave
Seasonal Commercial
Salter Block
Bishop's Landing

Cunard Block
Nova Scotia Power
Discovery Centre

Seaport Market

NSCAD Port Campus

INDUSTRIAL

COMMERCIAL

PUBLIC [EXTERIOR]

INSTITUTION

INDUSTRY

PARKING

Context of the boardwalk, situating the site within its program adjacencies.

CUNARD BLOCK

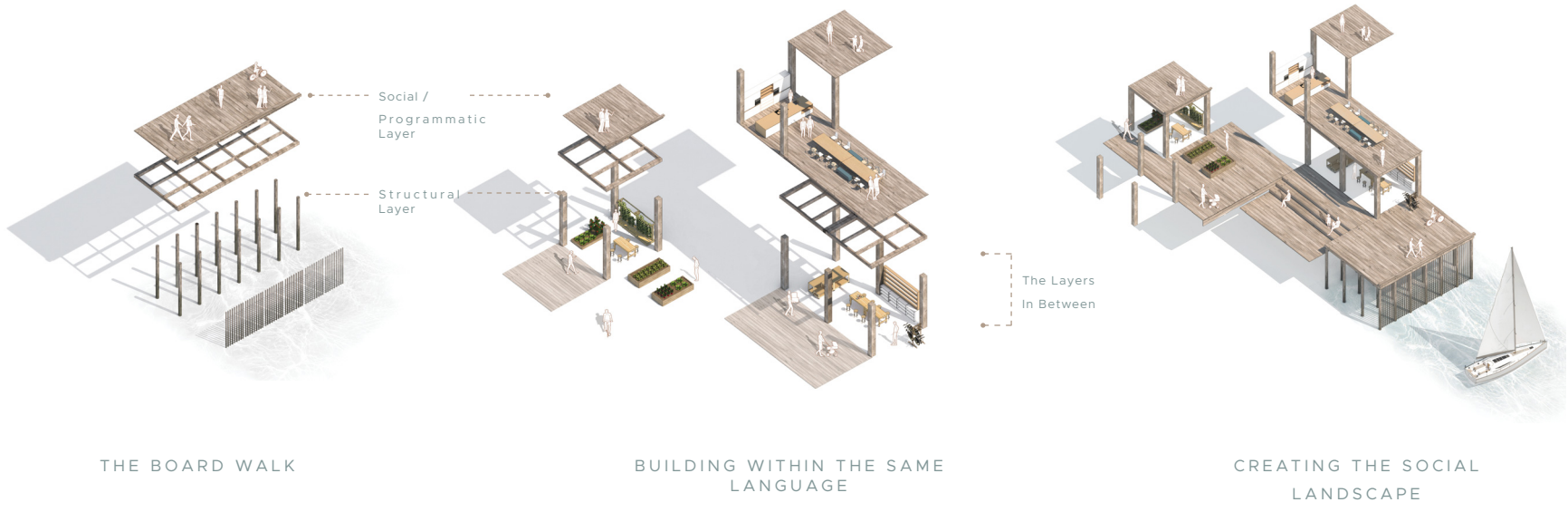Site plan illustrating context of the boardwalk and immediate site adjacencies.

Similar to that of a village, the landscape is the catalyzing element that facilitates inhabitation in various forms. The notion of a common ground blurs the boundary between indoor and outdoor, and between collective and individual. Using the Halifax boardwalk as the common ground both socially and structurally, this project begins to form using a similar language. Through the process of extruding, depressing, and peeling areas of this system, the boardwalk becomes more than just an unprogrammed piece of public infrastructure. Rather, a collection of social and public spaces within this common ground.
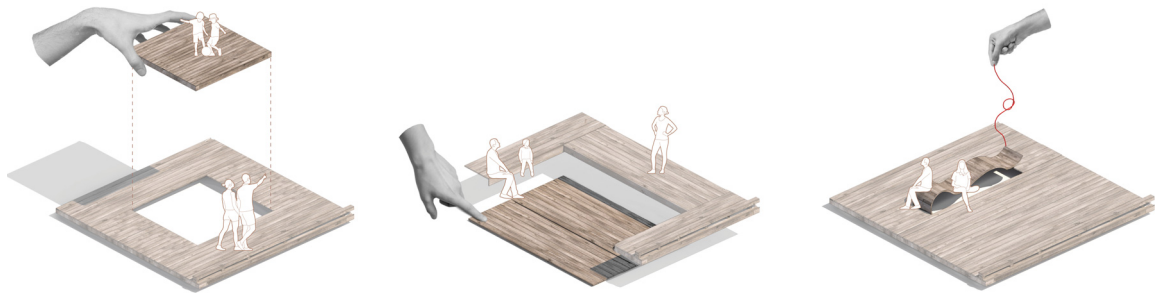
The methods of creating social space within the public landscape of the Halifax boardwalk: extruding, depressing, and peeling.

Furthering this idea of creating a landscape of spaces, the program of housing becomes the centre of focus. By integrating housing: an entity dominated by privacy, into the structure of an inherently public space, the existing narrative of a divide between public and private, home and city, becomes a gradient of inhabited scales. Where housing becomes part of the public city structure itself, not just a private entity along its peripheries.

The proposed project builds within the same language of the landscape it is situated in by using the 6-meter by 6-meter

Social / Programmatic Layer

Structural Layer

The Layers In Between

THE BOARD WALK

BUILDING WITHIN THE SAME LANGUAGE

CREATING THE SOCIAL LANDSCAPE

The language of creating form within the landscape of the Halifax boardwalk.

post and platform grid of the boardwalk. Rather than building upward like the Cunard project, this design adopts the 'built-open' relationship of the village by extending outward. This method re-acquaints multi-unit housing with its inhabitants and context refusing to accept the notions of 'live above instead of within.'

At the scale of the site, the form of the project defines the building footprint by program and inhabitation, drawing inspiration from the village cluster. The cluster represents separate parts that comprise one collective whole, each dependent on the other structurally and socially. In working with the existing structural grid of the boardwalk, fragments of the project collect in points of concentration - not unlike the language of a drift. These peaks in this new landscape define pockets of programmed spaces both interior and exterior. The inhabited landscape.
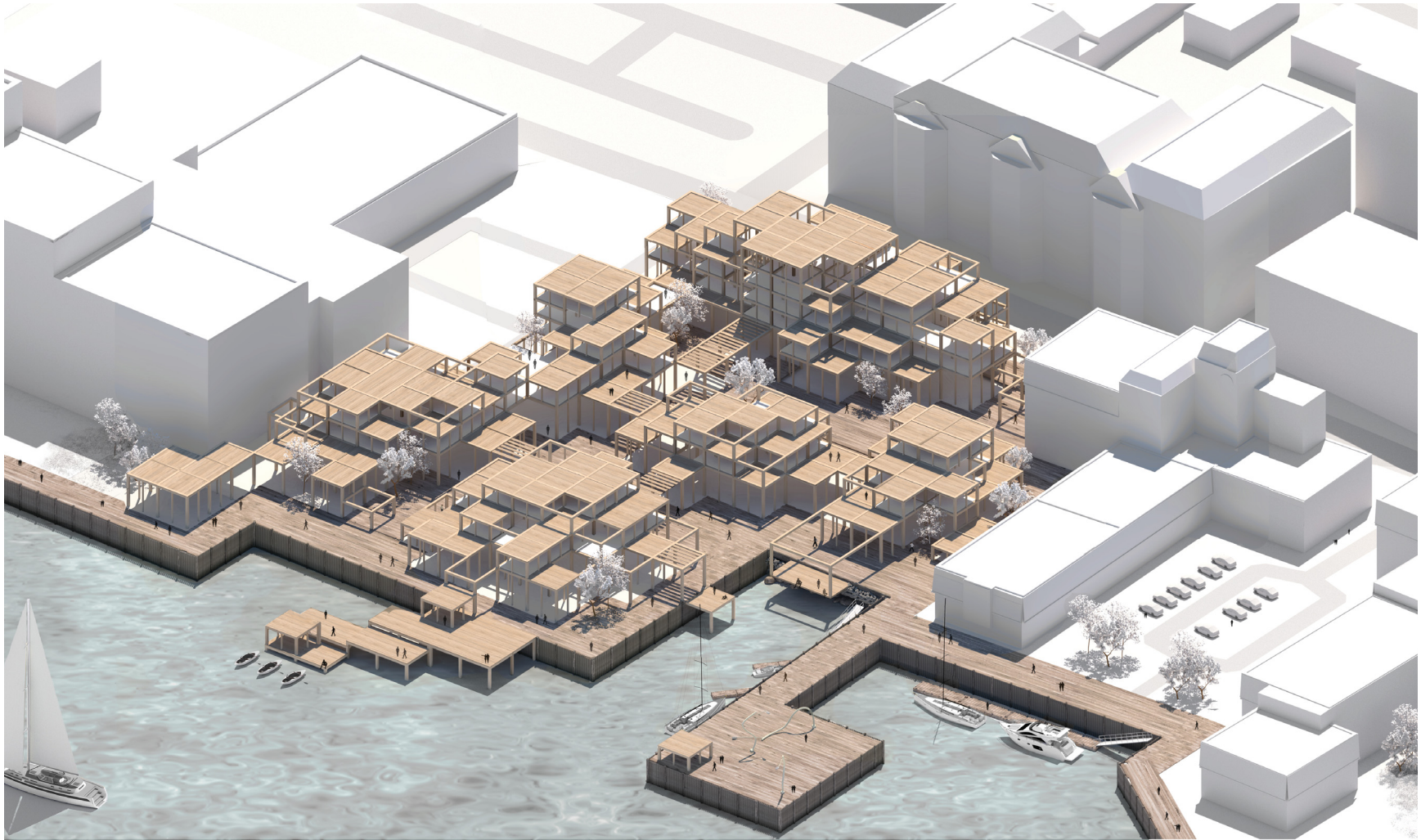
Isometric of Drifted Collective in context: The creation of an inhabited public landscape within the infrastructure of the Halifax boardwalk.

The Public

This project can be understood through the mentality that all housing is public housing. Going against the grain of urban housing within Halifax, this project serves as a social catalyst for the city within the confines of what one would consider home. As the project is an extension of an existing social landscape, the program situates itself within the connected housing clusters. These spaces and programs are intended to resemble shared 'fragments of home.' Using this narrative, this project becomes a space, amenity, and social incubator for everyone, whether they reside there or not. In doing so, people from different backgrounds and demographics come together for a shared purpose.

Program

Distilled from the principles of the village, programmed space has intention. Rather than ambiguous spaces found with in conventional apartment typologies such as games rooms, lounges, and fitness centres, program concentrates around the idea of the intersection between social and architectural space.

The acts of living, growing, making, and sharing all contain social functions facilitated by architectural program. Although these programs carry vertically throughout the unit floors of the project, they are primarily housed on the ground floor.

The ground floor of the project is organized around the sequence of spaces and their function. All of the programs within the project contain the four guiding principles in different capacities: living, growing, making, and sharing.
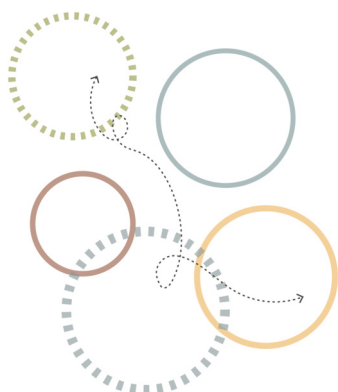
The concept of connected and overlapped program: living, growing, making, and sharing.
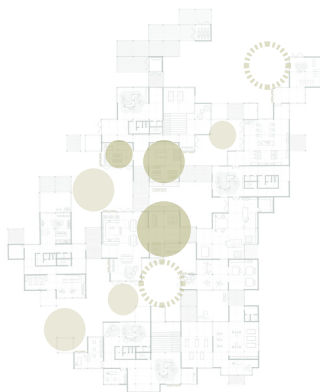
Maker Spaces

Community maker spaces are arranged sequentially based on the media of creativity: wood, earthware, and craft. These maker spaces are intended to bring people of all ages together for a shared intention - the act of creating. These workshops open up to the boardwalk and interior greenspaces to encourage use by everyone. As the project is situated adjacent to the NSCAD port campus, these spaces include residence studios and proximate commercial space for the sale of collectively created wares. The act of making, as demonstrated through the village, forms a sense of community, security, and belonging.

Ground floor: spaces of making.

Growing Spaces

Spaces of growing are situated on various upper platforms of the project as well as in the centre of most clusters. Similar to the village, these spaces serve as a social catalyst as well as a means of sustenance. Growing spaces open up to the adjacent exterior for raised vegetable garden beds as well as indoor hydroponic systems.
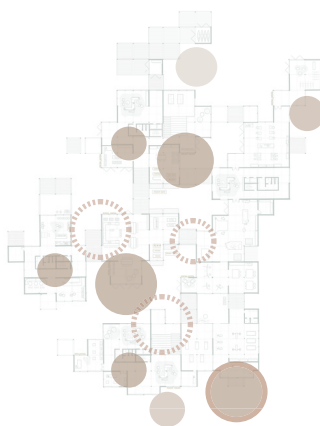
The sustenance that is collectively grown in this project is used in the community kitchen as well as sold in the commercial spaces as a means to fund the maintenance and upkeep of the project.

Ground floor: spaces of growing.

Community Spaces

Various additional community spaces are located sequentially around the main program spaces of making and growing. These include; a community kitchen, bicycle rental and storage, cafe, community living rooms, and a fitness centre.

Ground floor: spaces for community.

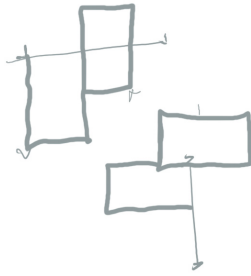| 1 | Growing Spaces | 5 | Commercial |
2	Maker Space - Earthware	6	Health Centre
3	Maker Space - Wood	7	Community Kitchen
4	Maker Space - Craft	8	Bicycle Storage

Ground floor plan: programming the landscape.

Spaces of making - ceramic: the collective act of creation.

Spaces of growing: the collective act of growing.

The Home

The concept of composing housing units.

At the scale of the home, the composition rejects the notion of a corridor and, rather, takes inspiration from the informal spaces of gathering in the village. The composition of dwelling units echoes the cluster form of the project. Leaning into the concept of a front porch as the main interface of the home and the space in which people come informally come together, units are composed around a central core sharing one collective space or front porch. By eliminating the corridor, the circulation in and out of the units themselves becomes inhabited—a collective extension of the home. The hallway, in comparison, is transient and an active means of transportation from point A to point B. By creating a collective porch, one can get to know and form a relationship with their neighbour. All of these factors are missing from modern urban housing and are necessary to form a sense of community, security, and belonging.

These unit floors are connected to rooftop gardens, program spaces and public amenities.

1   Collective Porches   4   Garden Prep Area

2   Flex Spaces   5   Exterior Courtyards

3   Rooftop Gardens

Unit floor plan: the creation of collective porches.
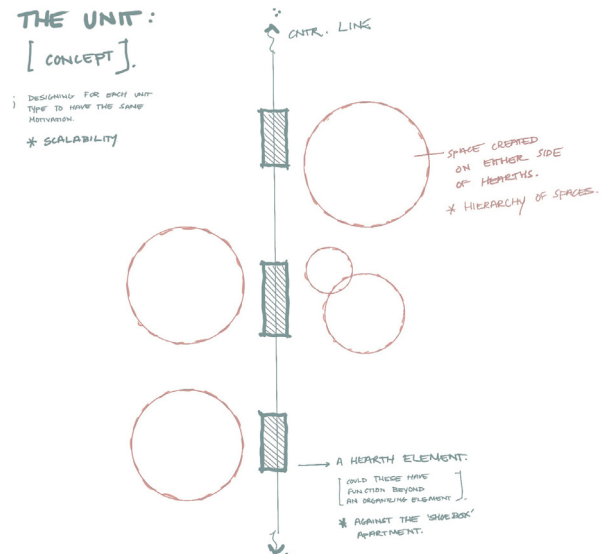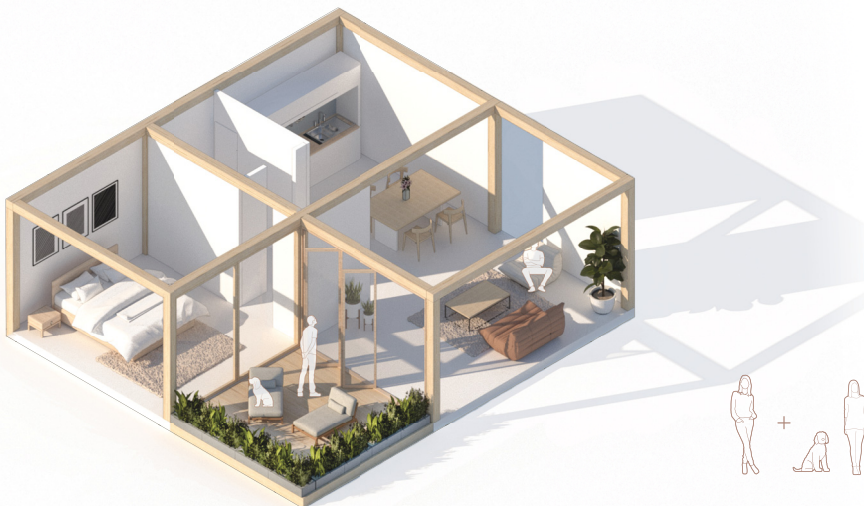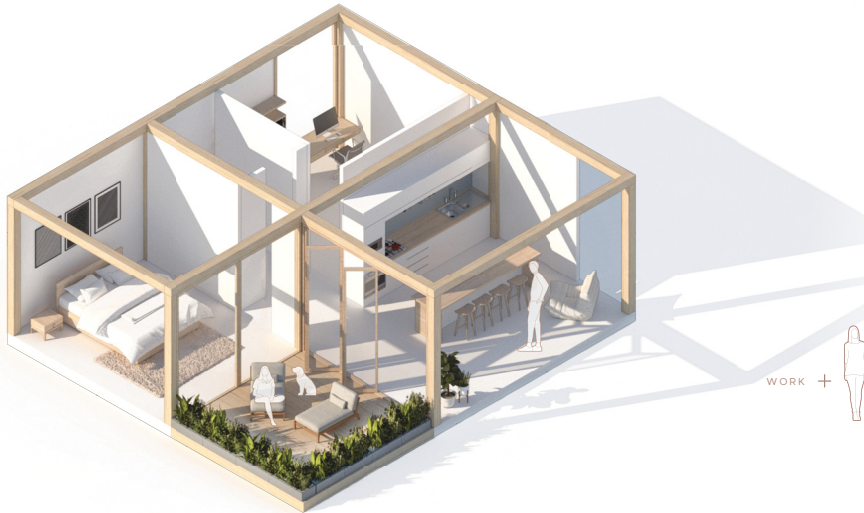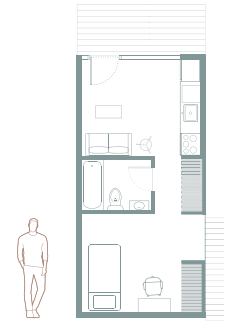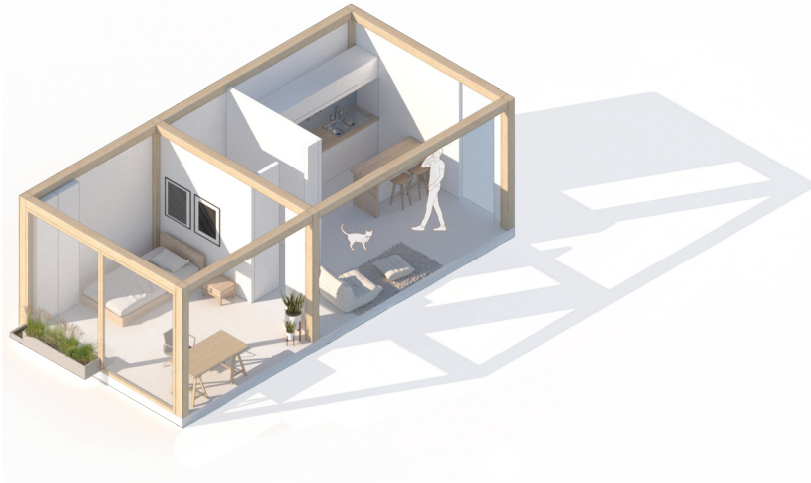
Tenure

In tandem with the village, the proposed project rejects the one-size-fits-all narrative of housing tenure. The modern apartment typology resorts to fixed configurations of 1-3 bedroom units. These limitations are evident in the accessibility for the elderly, family, single, co-parent, roommate, and other unique yet apparent housing scenarios. It is arguably these barriers that inhibit loved ones, families, and relatives from residing together. Halifax presents an interesting case for housing tenure as apartment complexes in the downtown core are predominately one and two-person occupancies. Rejecting the idea of the apartment as an impersonal 'shoebox' that you settle for, this project rethinks demographics, family, and occupancy through the lens of the village.

The tenure of the project is comprised of six housing types geared towards lifestyles of live-work, family, unrelated roommates, singles, and those offering care to a loved one. The intention of each is to provide greater accessibility for people with unique, non-textbook living situations to reside either together or in proximity. Particularly in the context of Halifax, given its aging population, many older adults express a desire to "age in place." In a society of care facilities for family members, the ability to introduce a tenure that accommodates elderly individuals to maintain their independence and sense of autonomy is paramount. The idea of multi-generational and cross-situational dwelling in collaboration reduces the stratification of housing to one particular demographic. This, in turn, increases the richness of the living environment for collective identity and belonging. Similar to the concept of the village, housing is for everyone.

The design of the unit draws inspiration from the unit types analyzed through the village case studies. Rather than viewed as a series of rooms, spaces are organized around a central datum. This pattern of organization facilitates the ability for the unit to be scaled either up or down but possess the same intention.

THE UNIT:
[CONCEPT].

DESIGNING FOR EACH UNIT TYPE TO HAVE THE SAME MOTIVATION.

* SCALABILITY

CNTR. LINE

SPACE CREATED ON EITHER SIDE OF HEARTHS.

* HIERARCHY OF SPACES.

A HEARTH ELEMENT:
[COULD THESE HAVE FUNCTION BEYOND AN ORGANIZING ELEMENT]

* AGAINST THE 'SHOE BOX' APARTMENT.

The concept of the unit sketch. Organizing space around a central datum.

Tenure type, lifestyle, and demographic. Providing greater accessibility for people with unique, non-textbook living situations to reside either together or in proximity.
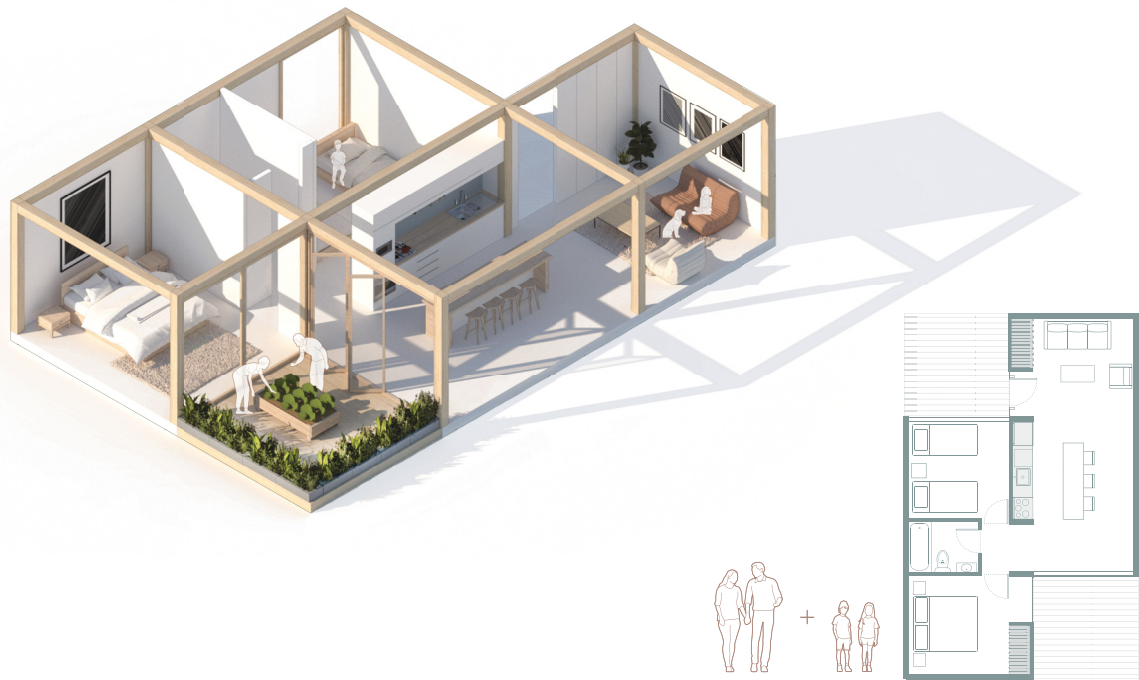
Tenure type, lifestyle, and demographic. Providing greater accessibility for people with unique, non-textbook living situations to reside either together or in proximity.
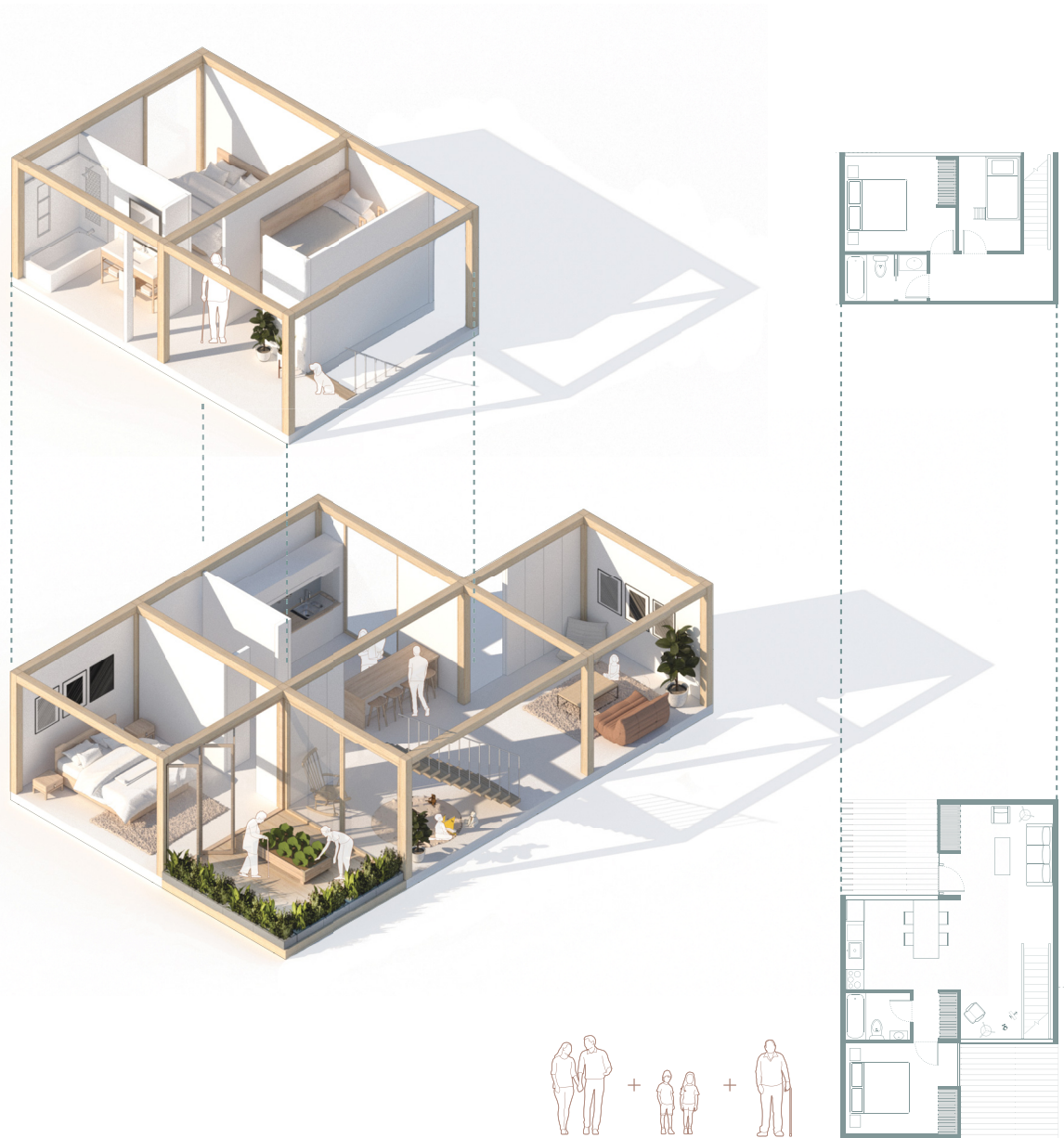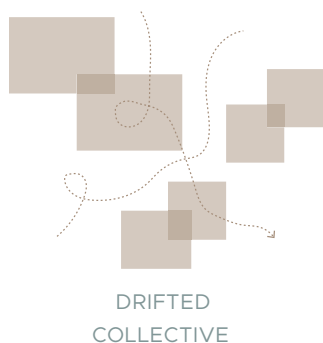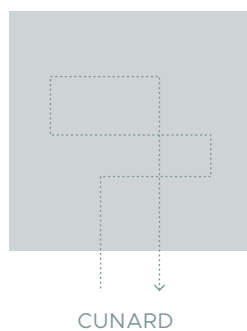
Tenure type, lifestyle, and demographic. Providing greater accessibility for people with unique, non-textbook living situations to reside either together or in proximity.

An Old Idea - A Contemporary Approach

By disassembling the conventions of home, Drifted Collective challenges what urban housing 'is' in Halifax today. It challenges the large, one-size-fits-all multi-unit high-rise as the only architectural response to the need for density. By intentionally working within the same parameters as the Cunard project: site, density, and general programming, this project introduces a new typology of modern housing that operates in direct opposition to that used in the Cunard project.

Both projects are rental properties, a business model that makes sense given the high demand for apartment units, the low vacancy rates that will likely continue given the proximity of nearby universities, and the relatively high rents that can be charged in a city of this size. Both have high density in terms of the number of units on the site. But that is where the similarity ends. Drifted Collective proposes a very different experience of renting within the city.

Where the Cunard project as private space is adjacent to the boardwalk's public space, drifted collective is the boardwalk itself. It is a blending of both private space with public space and house with city. The boardwalk as public infrastructure is integrated into the urban design and both the residential units and shared spaces. Where residents of the Cunard project will live in a private multi-unit high rise, they will live in isolation from one another, proximate yet alone. Unless the interior design of the Cunard high-rise fosters interaction and engagement between residents who live there, the connection and socialization of residents will be limited to chance encounters in the elevators, in the hallways, and at the mailboxes. And there will be no interaction with members

CUNARD

DRIFTED
COLLECTIVE

The concept of normality vs. curiosity: contrasting the two appraoches to urban housing.

of the public unless one steps foot outside the building. The Cunard project will be the most current example of how architecture enables people to live together, alone, a recipe for loneliness.

Composite drawing illustrating two typologies operating within the same parameters: challenging the status-quo.

In contrast, Drifted Collective introduces into modern housing the elements of what makes a village a village -- making, growing, and living, all within a sharing bubble. The private spheres of residential units, combined with the shared making and growing spaces, are integrated into the public boardwalk, blurring the lines between private and public so that they become 'one', woven together like a tapestry.

The impact creates a co-living environment where people connect as they live and carry out their hobbies and passions in shared spaces. Where residents interact with members of the public as they wander and stroll in, around, on top of and through the public spaces of the boardwalk that are integrated with the urban design of the project. Where this design-enabled interdependence fosters meaningful connections between people: amongst unit residents and, again, with members of the public. Where the living and sharing spaces foster socialization, meaning, purpose and friendship, all of which are antidotes to loneliness.

Drifted Collective doesn't just challenge what urban housing is today in Halifax. Drifted Collective also demonstrates how high-density modern housing can be designed with 'heart', leveraging and embracing the public infrastructure on which it sits and creating a co-living model of housing in which its residents thrive.

Drifted Collective section (left half) Lower Water streetwall condition.

Drifted Collective section (right half) waterfront condition.

LIVING   SHARING   GROWING   MAKING

Drifted Collective compiled section Lower Water St. to Halifax harbour.

View from housing unit: the inhabitable landscape.

View under elevated platform walkways: differing scales of social space within the landscape.

Chapter 7: Conclusion

This thesis does not strive to solve the multi-faceted issue of loneliness in housing – an issue that is intertwined with deeper, structural issues of modern society which over time have reprogrammed social identities, family structures, and sociocultural norms. Rather, this work provides a deeper understanding of the issues at hand, provides new intelligence on how our spatial environments shape our social behaviour within the private realm, and challenges the status quo by reimagining a new way of living together.

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