Reimagining Fragmented Cities Using Public Space as a Unifier

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.

Contents

Abstract

Urban expansion in major Canadian cities often diminishes social value as privatization and economic interests overshadow public spaces. This thesis investigates how monolithic structures with singular motivations and auto-centric design lead to fragmented urban density. The architectural proposal aims to enhance social value by integrating communal amenities and fostering connections through cohesive architectural design systems. Concepts of carving a figure, puncturing boundaries, intertwining programs and dynamic structures are employed to repair a disjointed block with varied urban types. By proposing integrated urban greenbelts, a dual frontage commercial corridor, a multifunctional community plaza, and mixed urban housing, this thesis prioritizes public space as vibrant community hubs. It advocates for these spaces to serve as unifying elements, bridging diverse urban typologies, fostering community connections, and enriching the urban landscape with cohesive architectural designs.

Acknowledgements

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Thank you to my family for constantly believing in me and encouraging me throughout my many years of school. There were moments when I struggled to believe in myself, but you were always there when I needed a reminder to keep going.

Thank you to all of the friends I have made during my studies at Dalhousie. From the depths of my heart I will never forget all of the debriefs, lunch meetings, encouraging words, and sense of community. This epic adventure would not have been possible without you and this shared experience has offered friendships I will endeavor to continue.

I appreciate you all eternally.

Chapter 1: Introduction

Objective

This thesis explores the relationship between urban forms and social cohesion in growing cities like Halifax, Canada. Urban architectural landscapes are shaped by complex interactions between forms, spaces, and the people who inhabit them, reflected by evolving societal needs, economic drivers, and political assertions. This project aims to prioritize human-centric design by establishing public spatial cores within mixed-use urban sites, serving as cohesive hubs that unify communities while seamlessly integrating residential and commercial interventions into the city's fabric.

Urban Fragmentation and Social Isolation

> The rigid, isolated object… is of no use whatsoever. It must be inserted into the context of living social relations. (Benjamin 2008, 80)

Halifax's urban landscape is an example of increased density, evolved continually through time. With each new development, or iteration of urban architecture, major Canadian cities like Halifax risk eroding social relationships and exacerbate social isolation. Wade Graham, a landscape designer, historian and author, having analysed the disjointed nature of cities, describes how architectural competition undermines community cohesion. He sees urban developments as a battle ground featuring differing goals based in economic or political values. Understanding programmatic elements of one typology can be discordant with the values in other, Graham argues "Some divide and alienate us from other people, from shared life communities" (2016, 5).
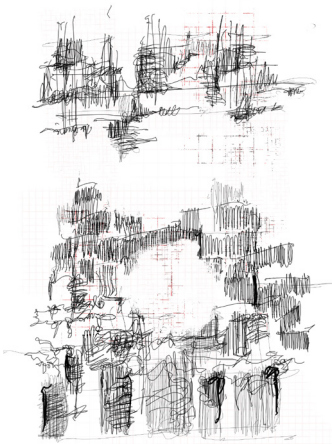
Figure above, Urban Fragmented Sketch implying frantic, dispersed, fragments of a city as a unit, each neither connected, or disconnected yet have some assemblage.

As public spaces become privatized, social and cultural differences are homogenized, leading to diminished community vitality. A 2024 report predicts that "loneliness will reach epidemic proportions by 2030 unless action is taken" (Hill and Macgillvary 2024). The prevalence of social isolation underscores the urgency for action in urban design.

Addressing Urban Fragmentation Through Cohesive Public Spaces

Halifax's present urban configuration is a by-product of the impacts of urbanization and suburban expansion, reshaping traditional structures and altering delineations between public and private spaces. Developments are compounded by zoning practices and socio-economic forces, resulting in fragmented cities where physical and social isolation prevails. Auto-centric suburbs continue to expand, while neglected public spaces fail to foster social engagement. Overcoming urban fragmentation requires addressing both physical and social disjointedness, revitalizing community bonds and identities.

Combating social isolation posed by urban fragmentation,where city blocks often represent multifaceted mixed use urban types, the concept of a public core space is a compelling solution rooted in, Swedish American architect, Lars Lerup's (2011) theories of porous cities. His idea of porosity highlights the interconnectedness of diverse urban elements and the need for fluidity. In this framework, the public core could emerge as an integration and cohesive force, unifying residential, commercial, and public spaces within the city block. Embracing Lerup's vision, architects could conceptualize the public core as a dynamic hub that fosters interaction and connectivity among different

urbanisms, potentially enhancing the vibrancy and resilience of urban neighborhoods.

Thesis Question

Can synchronistic architectural interventions, integrating public-focused spaces, mend fragmented urban areas characterized by diverse typologies to cultivate socially conscious communities?

Outline

Section 2 delves into a theoretical framework for this project, exploring concepts of urban design through its evolution of key elements in form and function, while situating its theories in relationship to city context.

Section 3 examines the urban challenges of a singular block, in Halifax, that has an intersection of typologies with incongruence. A methodology begins based in a evolutionary examination of past versus present, case study analysis, and dissection of key typologies.

Section 4 delineates the compositional strategies, framework, and architectural narrative, emphasizing the integration of porosity grids, axes, and figure-ground relationships. By establishing clear circulation paths, incorporating permeable design principles, and developing dynamic public spaces, the project seeks to transform fragmented urban blocks into cohesive environments.

Section 5 presents the design response, aiming to mend fragmentation using cohesive typological urban strategies that carve figures, puncture boundaries, intertwine programs, and incorporate dynamic structures. The design integrates urban greenbelts, dual frontage commercial corridors,

multifunctional community plaza, and mixed urban housing to create unified and connected spaces. This approach emphasizes the importance of public spaces as catalysts for community interaction, addressing urban fragmentation and promoting a cohesive, inclusive urban environment.

Section 6 summarizes key theories in the development of public spaces as binders of various urban typologies, while discussing the implications this could have in practice.
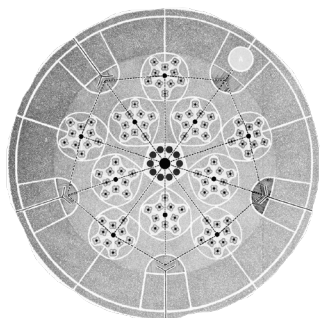
Chapter 2: Urban Theory

Utopian City Challenges

In the urban realm, theorists have grappled with a myriad of challenges, often presenting conflicting ideas but united in their pursuit of a 'Utopian City". Each emerging framework reflects as evolution of societal needs, with some emphasizing density while others prioritize socio-economic concerns or spatial policies. As our cities evolve, so does our understanding of urban typological study and design. Recognizing that cities are constructed upon foundational ideals, grounded in theory and responsive to evolutionary forces, it becomes important to determine the origins of these principles and their impact on urban typologies. By exploring urban ideologies, we gain insight into the development of urban landscapes, creating a deeper understanding of the cities we inhabit and intend to shape.

Urbanization models such as Ebenezer Howard's Garden City addressed challenges stemming from a mass migration of rural residents to city centers (Boseman and Dolley, 2019, 4). Howard's vision involved planning a self-contained and self-governing urban center by creating a city that offered urban accessibility and sociability while embracing the health aspects of rural living. 1898: Diagram ' Garden City To-morrow' (1898) the ideal city plan concentrically organized zones, with an arcade of shopping as the central ring. While his concepts were based on the ideals of community as civil, moral and good, they inevitability lead to zoning segregation.

In comparison, Victor Gruen firmly believed that the urban core represented the 'heart, brain, and soul' of the city. He searched for ways to cure the urban core decay and insure

1898: Diagram ' Garden City To-morrow' (Howard 1902, 46)

Victor Gruen's Metropolis Urban design.(Gruen 1960, 273)
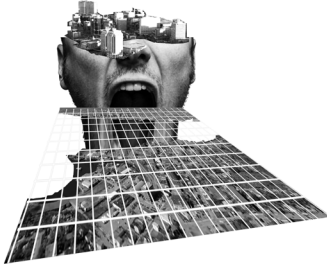
Figure above; Swallowed Whole, is a collage of urbanity and its growth exponentially swallowing and spreading, beyond grids and zones.

the survival of city centers (Koolhaas et al. 2001, 386). At the heart of his urban strategy was the creation of multiple nodes featuring commercial or retail establishments, around which neighborhoods were arranged into a star-shaped layout. His conceptual plan was based on a post industrialized world war II reality with automobiles as necessary components to the clarity of his suburban sprawl styled design. His auto-fueled commercial nodes became super centers, mega malls, and to the North American strip mall.

In contrast to Howard and Gruen, who incorporated commercial activities into the heart of their urban designs, Robert Moses, recognized as a 'master builder' in New York during the 1950's, embarked on remaking the metropolitan region in the likeness of Le Corbusier's Radiant City. (Graham 2016). Graham describes his urban plan involved the construction of towers-in-parks aimed at revitalizing troubled districts within the city connected by massive expressways, bridges, and tunnels (2016,111). This urban

An artist's sketch from 1959 of the proposed Lower Manhattan Expressway, a 10-lane highway through SoHo and Little Italy that required the demolition of 416 buildings (The Guardian 2016).
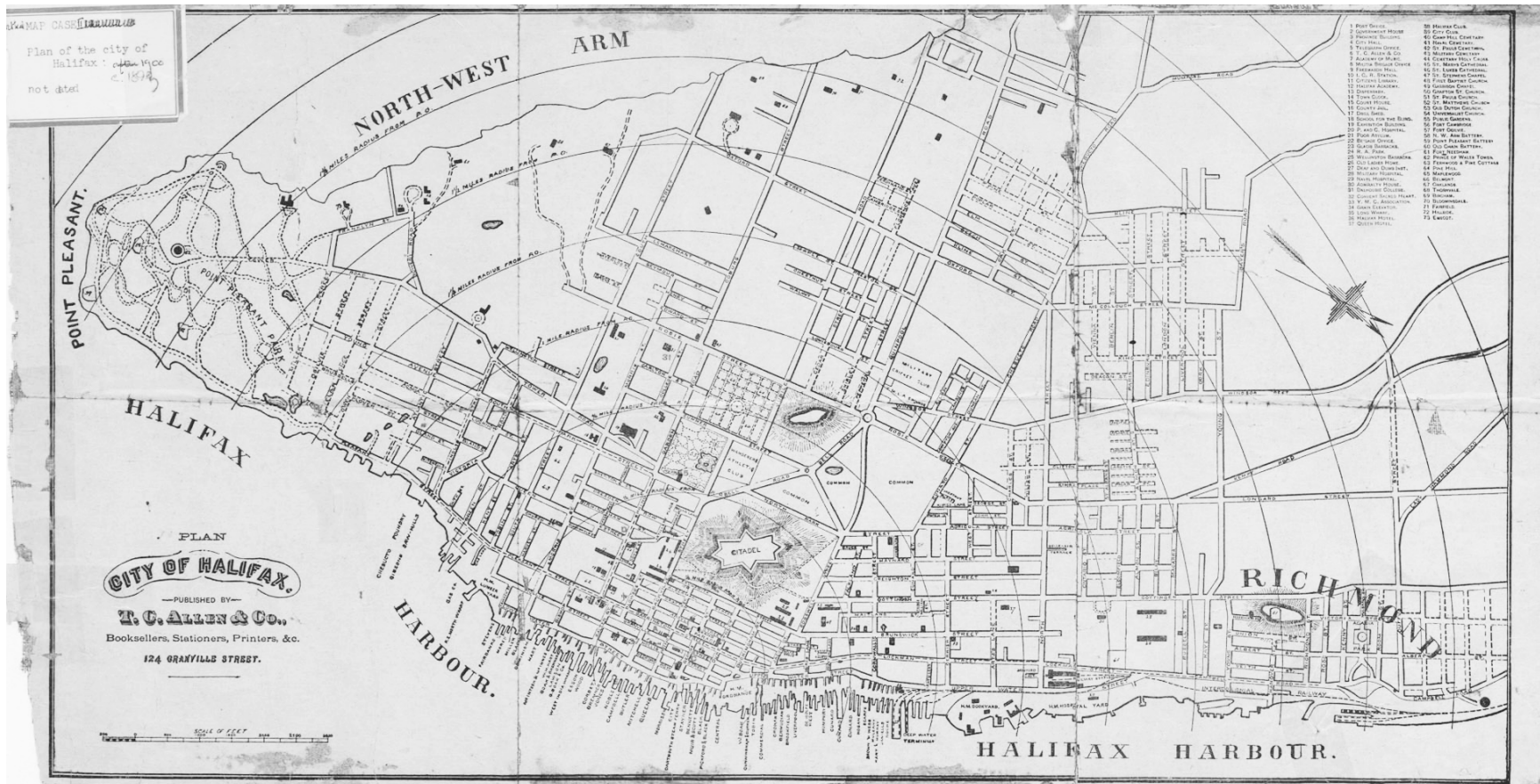
Illustrated Map of City of Halifax, published by T.C. Allen & Co. 1893. Showing the peninsula, downtown core grid oriented by the active water front. (NSA 1983)

Barrington Street near Blower, 1939. Nova Scotia Archives. (NSA 1939)

revitalization caused community dislocation with hundreds of thousands of inhabitants forced from their homes to clear acres of land, all in the service of progress. (Graham 2016)

Halifax and the Urban Challenge

Halifax's urban landscape presents challenges not uncommon to other North American Cities. By exploring these challenges this project briefly examines the syntax of two prominent commercial streets, Barrington Street and Spring Garden Road. Through a concise historical overview and analysis of urban strategies the urban typological block framework is evident in the city.

Halifax described as "a rich and dynamic city that is growing and changing, with centuries of building and rebuilding producing a many-layered continuity" (Sandalack and Nicolai 1998) is an example of the ideals of a city and the challenges it presents. Halifax's urban landscape is marked

Corner of Barrington and Prince st. Collage of past and present. Collage.

by its early adoption of a grid structure and its strategic orientation toward the water, reflecting its history of imperial ownership and unique peninsula-shaped geography. Over time, however, the city has undergone significant transformations, characterized by ambitious traffic planning initiatives and urban renewal projects that diverge from its historical roots.

Originating as part of a colonial trading route, Barrington Street now stands as a multifaceted urban corridor, rich with historical layers. The architectural diversity along the street reflects a blend of past and present influences. Sandalack and Nicolai (1998, 15) noted that in the 1800's,

16 acres were demolished for the urban renewal scheme. Pictured here is the corner of Duke and Barrington Street where the mixed use, commercial, Scotia Square was to be built. (NSA 1967)

the city experienced economic development and population expansion that aligned with regional and global cycles of conflict and peace. Barrington Street emerged as Halifax's paramount commercial and residential thoroughfare, stretching across the entire peninsula by the 19th century, comprised of four distinct sections: Pleasant, Barrington, Lockman, and North.

Carved, is a collage discussing urban development planning efforts of the immediate, rather than implications of the future.

In 1896, the transition from horse-drawn to electric streetcars marked a pivotal advancement for Halifax, enabling regular commuting and driving rapid urban expansion across the peninsula and beyond (Sandalack and Nicolai 1998, 17). This era saw Barrington emerge as the primary shopping district, supported by the presence of renowned retailers like Birk's and Eaton's Stores. By 1911, the city's retail epicenter condensed within a five-block radius from Blowers to Buckingham Street.
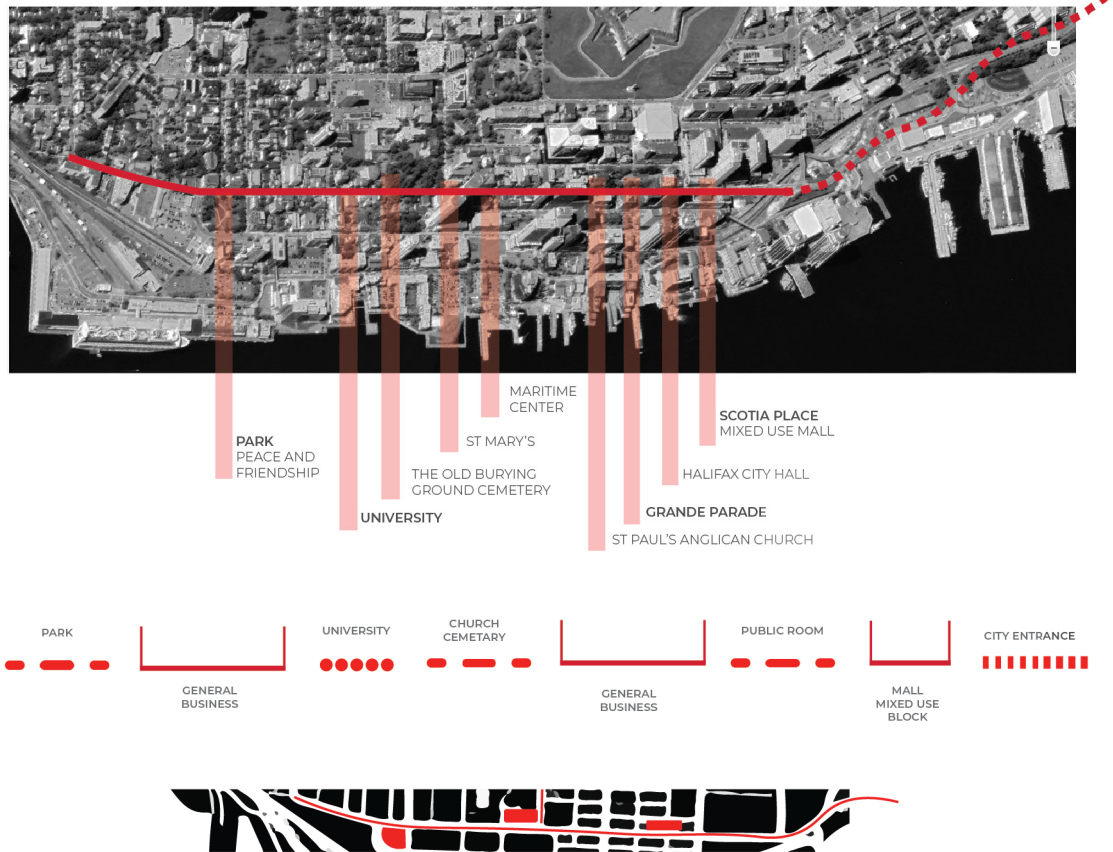
As the city's population expanded following the Second World War, so too did the occupancy of the peninsula, accompanied by the ongoing development of commuter suburbs. This post war prosperity initiated new large scale models of urban planning and development that would

ultimately alter the urban form of the City and Barrington Street.

In 1957, the city commissioned Gordon Stephenson to conduct The Stephenson Report, a pivotal study prompted by controversy and funded through an approved CMHC grant. The report included statistical surveys examining building conditions and social challenges, ultimately informing decisions regarding slum clearance initiatives. The urban renewal project gained approval, according to council, due to the exhaustive study in which proposed the clearance of 8.8 acres of land housing 1,600 inhabitants.

The presence of conflicting urban typologies and disjointed spatial organization hinders the overall legibility and coherence of Barrington Street. The extensive urban renewal efforts followed a North American trend seen in cities where historic structures were demolished to accommodate automobiles and pursue privatized economic commitments. "The elimination of tenements and the creation of some new economic initiatives ... drastically altered the fabric of the city. The street pattern of Halifax had changed very little since it was established in 1749" as stated by Sandalack and Nicolai (1998, 20). A city characterized by its compact nature is now forever changed to produce large monolithic structures overtaking entire blocks and swallowing the original lot patterns. Scotia Square was a massive development covering several blocks composed of office towers, commercial block, shopping mall, and several high rise apartments. This transition from historically open streets with porous grid structures to closed and modern monolithic structures alters the urban typological narrative. It reflects a departure from the ideals of the "smooth city"

BARRINGTON ST - HIGH STREET

PARK
PEACE AND
FRIENDSHIP

UNIVERSITY

MARITIME
CENTER

ST MARY'S

THE OLD BURYING
GROUND CEMETERY

SCOTIA PLACE
MIXED USE MALL

HALIFAX CITY HALL

GRANDE PARADE

ST PAUL'S ANGLICAN CHURCH

PARK   UNIVERSITY   CHURCH   PUBLIC ROOM   CITY ENTRANCE
                                 CEMETARY

GENERAL   GENERAL   MALL
BUSINESS   BUSINESS   MIXED USE
                                                            BLOCK

Upper Map, 2024 Barrington Street composition, calling out import historical and new urban structures. Second, is the syntax of the street defined diagrammatically. Lastly, Noli styled map with the traffic and public space noted in red.

characterized by open and interconnected urban spaces, towards a more closed and compartmentalized urban form.

Studying the current Barrington St. in a Noli styled map you can seen the syntax of the street, with large anchoring blocks and considered public infrastructure. One of the oldest public spaces in Canada is the Grande Parade, which was set aside as a town square in 1749 (Sandalack and Nicolai 1998). Barrington once established as the city's most important commercial and residential street with numerous cross streets has evolved into a high traffic main street artery, that is peppered with various commercial, institutional, and public.

5517 Spring Garden Rd.
The last residential building;
photograph by Ian Selig
(Blackmore and Selig 2024)

In comparison, Spring Garden another important high street connecting perpendicularly to Barrington Street. When analyzing its syntax, the rhythm is balanced with a mixture of public, commercial, institutional and residential. However historically Spring Garden was filled with private homes, which have all but disappeared leaving a single residence now zoned as commercial. This revolution of commercial interests overtaking the urban typological language of the city can be seen in the collaged image of the corner of South Park and Spring Garden.

Upon reviewing the layout and structure of Barrington and Spring Garden, there is an observation of significant changes influenced by the evolving urban landscape of the city. These changes prove a shift towards a more privately focused urban agenda, characterized by the emergence of large monolithic structures, altered zoning patterns, and noticeable impacts on the city's inhabitants. The Urban fabric has been shaped by these developments, resulting in a transformation of it overall structure and character.

A Typological History of Urban Rooms

In the 21st-century urban context, the concept of "urban rooms" as described by theorist Rob Krier provides a framework for understanding the multifaceted nature of city spaces through examinations of the street and the square and urban modernizations. Krier's (1979) architectural typology emphasizes the importance of well-defined, functional spaces that collectively contribute to the urban fabric. This project studies the urban block, commercial strip, and plaza describing how each play distinct roles within the urban context.

SPRING GARDEN - HIGH STREET
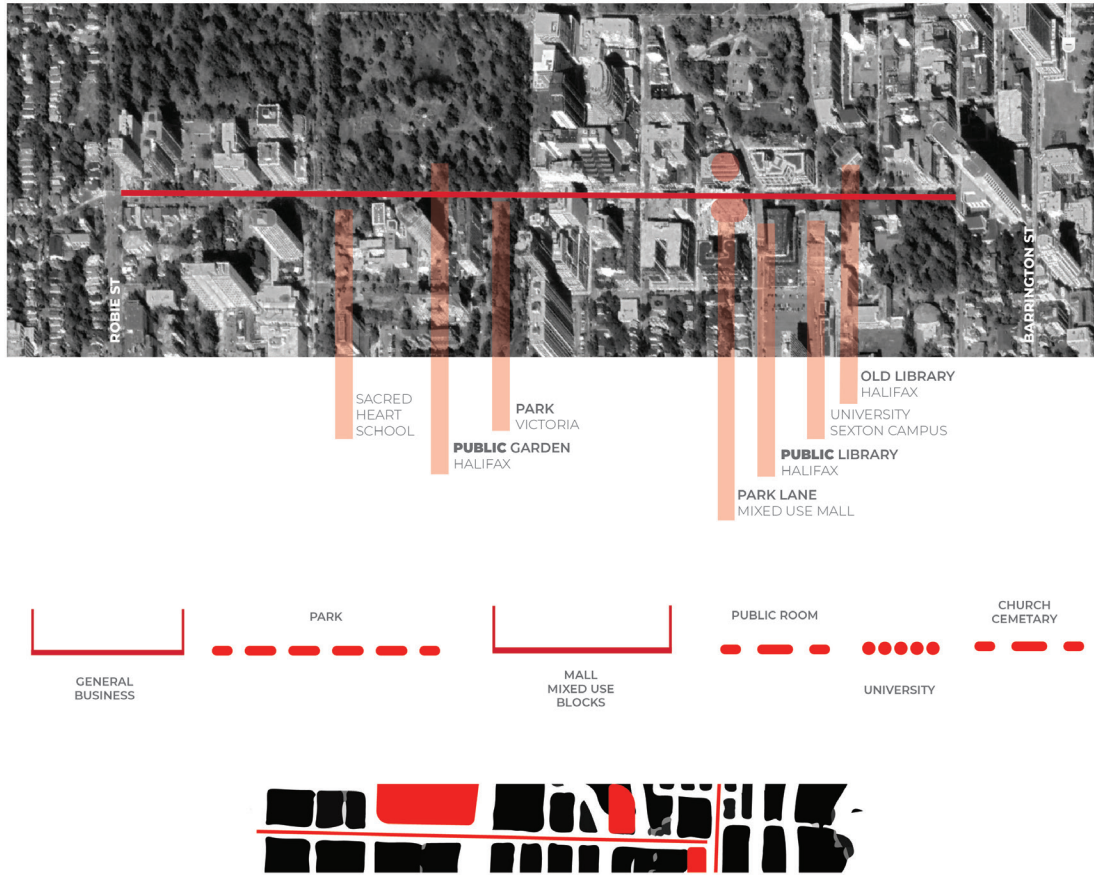
Spring Garden Road composition, calling out import historical and new urban structures. Under top image is syntax of the street diagrammatically. Below is Noli styled map with the traffic path and public space noted in red.

Corner of South Park and Spring Garden. Collage of past and present.

The urban block is a fundamental unit in Krier's typology, defining the structure and rhythm of the city. Typically bounded by streets, urban blocks are composed of residential and mixed-use buildings that create a sense of enclosure and continuity. Krier views these blocks, formed by streets as essential for shaping housing patterns and community dynamics. The urban block influences the distribution of residential spaces, providing a semi-private environment where urban dwellers can experience intimacy and neighborly interactions. These blocks facilitate a balance between public accessibility and private retreat, fostering a sense of belonging and community within the city.

The commercial strip, or main street is a vibrant linear urban room that acts as a vital artery of economic and social activity. Its pattern is an action, neither in need of buildings or without as it rarely operates as an autonomous isolated space. It is a circulatory system producing spatial relationships and often complex layouts. Lined with shops, cafes, and other commercial establishments, these strips are dynamic spaces where the public and private realms intersect. The commercial strip is characterized by its accessibility and continuous flow of pedestrians, making it a hub for commerce, social exchange, and cultural expression. Krier emphasizes the importance of active street frontages and a mix of uses to create lively, engaging environments that draw people in and sustain urban vitality.

In Krier's typology, the plaza or his described square, is an open, public urban room that serves as a focal point for social activities and civic life. Typically surrounded by significant buildings, plazas are designed to encourage public gatherings and interactions. They function as the heart of communal life, where people meet, socialize, and

participate in public events. The design of plazas often includes elements such as fountains, seating areas, and greenery, which enhance their attractiveness and usability. Krier highlights the role of plazas in fostering social cohesion and providing spaces for collective experiences within the urban fabric.

In summary, Krier's architectural typology of urban rooms comprising the urban block, commercial strip, and plaza reveals the intricate layers of urban form and function. Each type of space contributes uniquely to the city's morphology, enriching the urban experience by providing diverse environments for living, working, socializing, and reflecting. Through this lens, we gain a comprehensive understanding of the built environment's intricacies and the roles these urban rooms play in shaping the dynamics of city life.

The Block

An urban block typology originally found in the polis, a gridded master-planned street pattern designed by classical

PAVILION OR POINT TYPE | ROW HOUSE (STREET/STRIP/ LINE) | COURTYARD / BLOCK TYPE

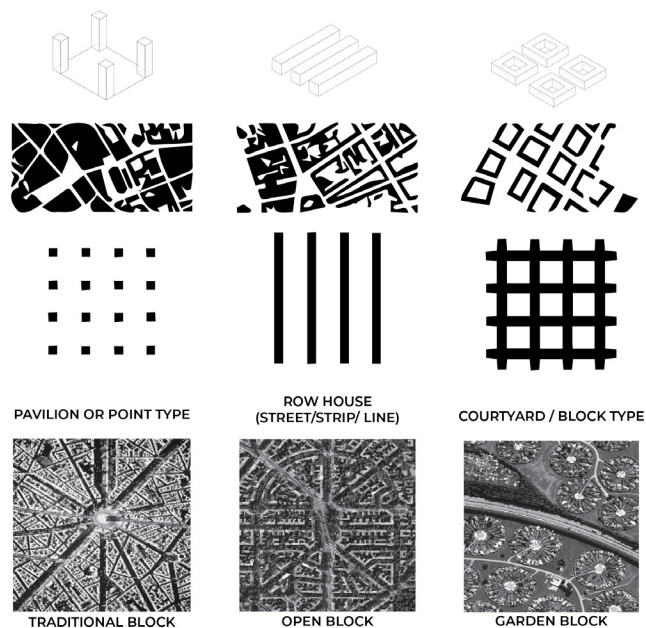TRADITIONAL BLOCK | OPEN BLOCK | GARDEN BLOCK

Diagram of block types.

Greece in the 4th century BCE. The orthogonal plan, as described by Jonathan and Chloe Tarbatt, was "occupied by oriented courtyard houses, and as such did not address the streets that they enclosed" (2020, 7). This design reflects the ancient Greek approach to urban planning, where internal courtyards were prioritized over interaction with the external street network.

The relationship between buildings and streets evolved during the Roman Empire in the 3rd century. Trajan's blocks featured shops at ground level that faced the street, in addition to inward-facing courtyards. This change is evident in the floor plans of Trajan's Market. Urban blocks have since seen numerous iterations, with exterior facades facing public streets, sometimes including private streets or yards, and others being semi-private or public within the block itself.

Urban blocks incorporate various architectural typologies, each contributing to the diversity and functionality of the urban fabric. The pavilion type consists of freestanding buildings within a block, offering flexibility in use and design. Pavilion buildings often create dynamic public spaces around them, enhancing the block's interaction with the street. The row house type, characterized by a continuous line of attached houses, maximizes land use efficiency and fosters a strong sense of community. These houses typically feature uniform facades and direct access to the street, contributing to a cohesive streetscape. Courtyards, whether internal or shared among multiple buildings, provide semi-private spaces for residents. They offer a retreat from the bustling urban environment while still maintaining connectivity to the public realm.

These types of urban blocks are clearly part of the historical influences in cities like Halifax, evident in the underpinnings of its orthogonal grid. Foundationally, the urban block is clear in form and function as it relates to the streetscape. Whether open or closed, the success of a block is determined by its interaction with the street and the city's inhabitants.

If the block is a room in the city, it is the foundation by which all pieces are connected.

The Plaza

As the urban block lays the groundwork for typological analysis, the plaza, also known as a square, emerges as fundamental social infrastructure, serving as the core of communal interaction and exchange within the urban fabric. Kevin Lynch (1960) explains that a plaza is a place which becomes the center of activity in a city. To understand the plaza as a unit of the city, it is first important to clarify it as a public space.

In ancient Greek cities, the agora served as an open meeting area for various activities for the citizens. Similarly, the Italian piazza has historically been a central gathering space, shaped by its cultural, climatic, and historical context. However, these traditional forms may not be directly transferable to the modern urban context of a colder Canadian winter in Halifax. Despite this, the conceptual idea of the plaza's relationship to the street and surrounding buildings remains significant, as the principles of good urban design prioritize the quality of public spaces.
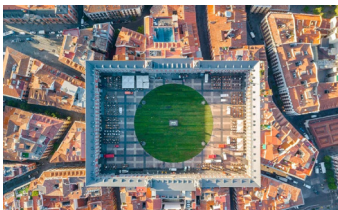
Plaza Mayor, Madrid, Spain. (Peluso 2018)

The public realm is vital in the everyday life of inhabitants, offering places for play, informal gatherings, and local culture. In a typological study of public plazas, Stefania, Sringa, and

Thiodore describe a sense of place as a pattern of mental and emotional feelings that result from connections between people in public places. They suggest it is a "catalyst to change one's perception of 'space' to 'place,' which has more meaning and value" (2020, 240).
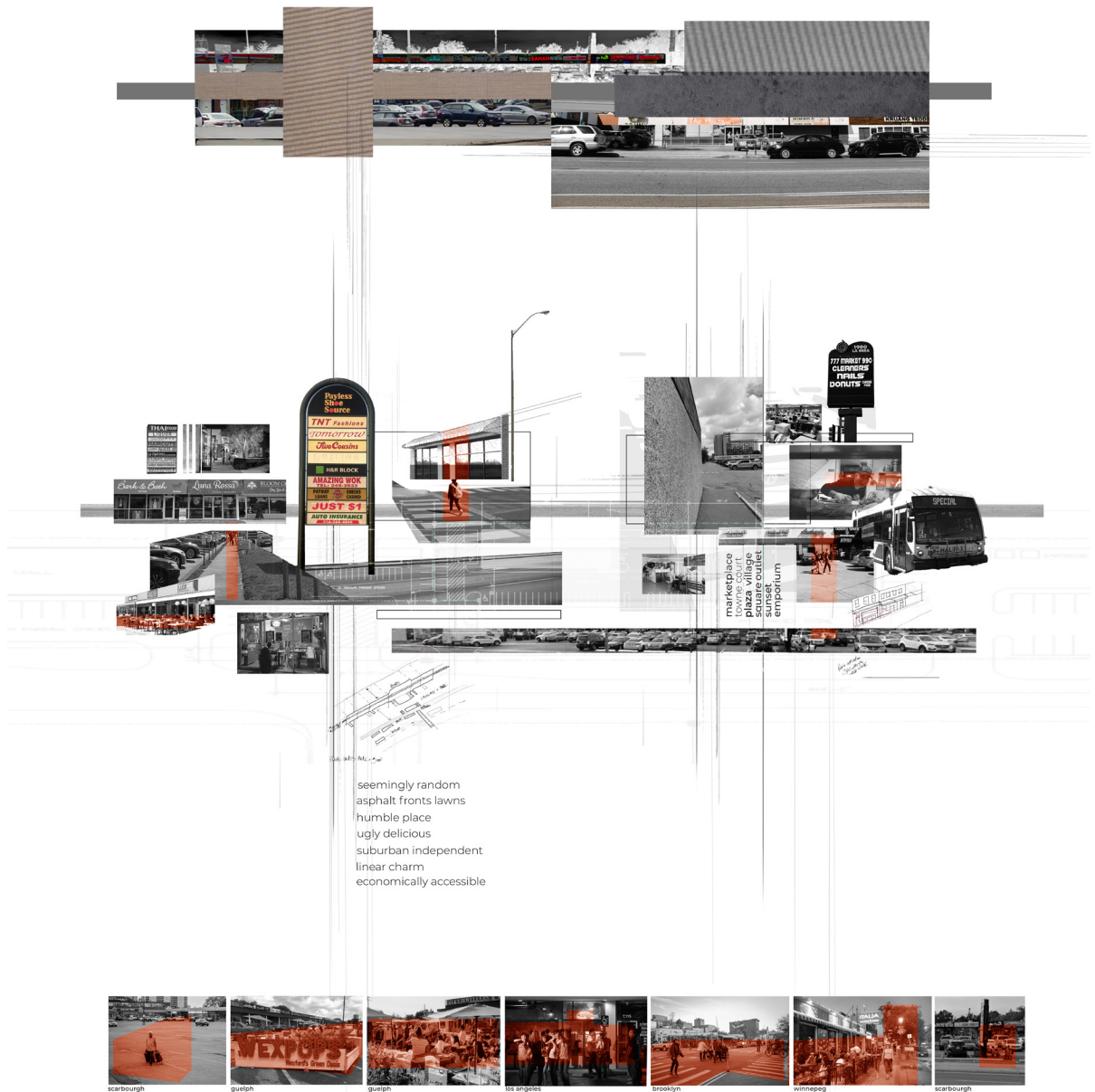
Sustainable cities employ public spaces as crucial tools for balancing urban mass with voids, infusing characteristics of livability, accessibility, scale, comfort, and sociability—all key elements associated with public plazas for social good. Halifax's public spaces are characterized by their location, historical value, and economic measures, reflecting the city's unique context and needs. These spaces play a pivotal role in shaping the urban experience and fostering community cohesion.

The Strip

Urban commercial strips finds its origins in the concept of 'Main Streets' that emerged as focal points of commercial activity within cities. These corridors, characterized by a diverse mix of retail outlets, office spaces, parking facilities, and residential buildings, epitomize the architectural fabric of North American urban landscapes, particularly in the post-industrial era. As suburban expansion unfolded, these commercial nodes proliferated along the city's major thoroughfares, embodying the architectural expression of transitional spaces within the urban realm, as described by Loukaitou-Sideris (1997). However, over time, inner-city commercial strips underwent architectural transformations, transitioning from vibrant urban arteries to fragmented spaces punctuated by expansive parking lots under private ownership and monolithic grid swallowing structures of commerce. Originally conceived as departures from

traditional marketplaces, Main Streets served as architectural showcases for storefront designs, embodying the evolving architectural vocabulary and economic dynamics shaping urban centers.

Main Streets, once synonymous with vibrant city life, have evolved into elongated, auto-centric strip malls across North America. Here, seemingly random businesses occupy the

seemingly random
asphalt fronts lawns
humble place
ugly delicious
suburban independent
linear charm
economically accessible

The Strip mall collaged into fragments to find clarity in assemblage, spatial condition, social infrastructure, and experience.

commercial strip, drawn by cheaper rents compared to those in malls or urban centers. Spatial conditions of asphalt front lawns, sprawling sidewalks, and endless rows of parked cars, the strip mall epitomizes suburban dependence, its humble architecture reflecting the sprawl that defines its surroundings

In Review

Urban blocks are the building blocks of the city, often laid out in grid patterns that reflect the historical and political contexts of their development. These blocks are defined by the streets that encircle them, creating a rhythm and order that guides movement and interaction. Within these blocks, commercial strips emerge as vibrant corridors of activity. Streets like Barrington and Spring Garden in Halifax function as the commercial and social lifelines of the city, hosting an array of businesses and services that cater to daily needs and foster community interaction. These strips are not just thoroughfares; they are dynamic spaces of exchange and connection.

Plazas, on the other hand, are the social infrastructure of the city. These open spaces, whether they are closed, dominated, nucleated, grouped, or amorphous, serve as communal gathering points where cultural expressions and social interactions thrive. They are the heart of the urban fabric, offering a respite from the city life demands while enhancing the sense of community.

In Halifax, the evolution from compact, porous grids to larger monolithic structures has significantly transformed these urban rooms, highlighting the importance of thoughtful urban design in maintaining the city's cohesive and integrated character. As we move into the design phase that is tested

on a specific site in Halifax, understanding these urban typologies will be crucial in creating spaces that reflect and enhance the city's architectural and social fabric.

In conclusion, cities are often understood through the metaphor of "rooms," distinct spaces with unique functions, characteristics, and atmospheres that collectively shape the urban experience. These urban rooms are the fundamental components of the city's architecture, providing spaces where social, economic, and cultural activities unfold. Just as rooms within a house serve different purposes, so do the various urban spaces within a city.

Chapter 3: Typological Analysis of Quinpool Road

Chapter 3 navigates the intricate urban challenges posed by a specific block within Halifax, where typologies intersect with discordance. Employing a methodological approach grounded in a historical examination of past urban dynamics, case study analyses, and a dissection of key typologies, the project aims to emphasize the interconnectedness of architectural elements.
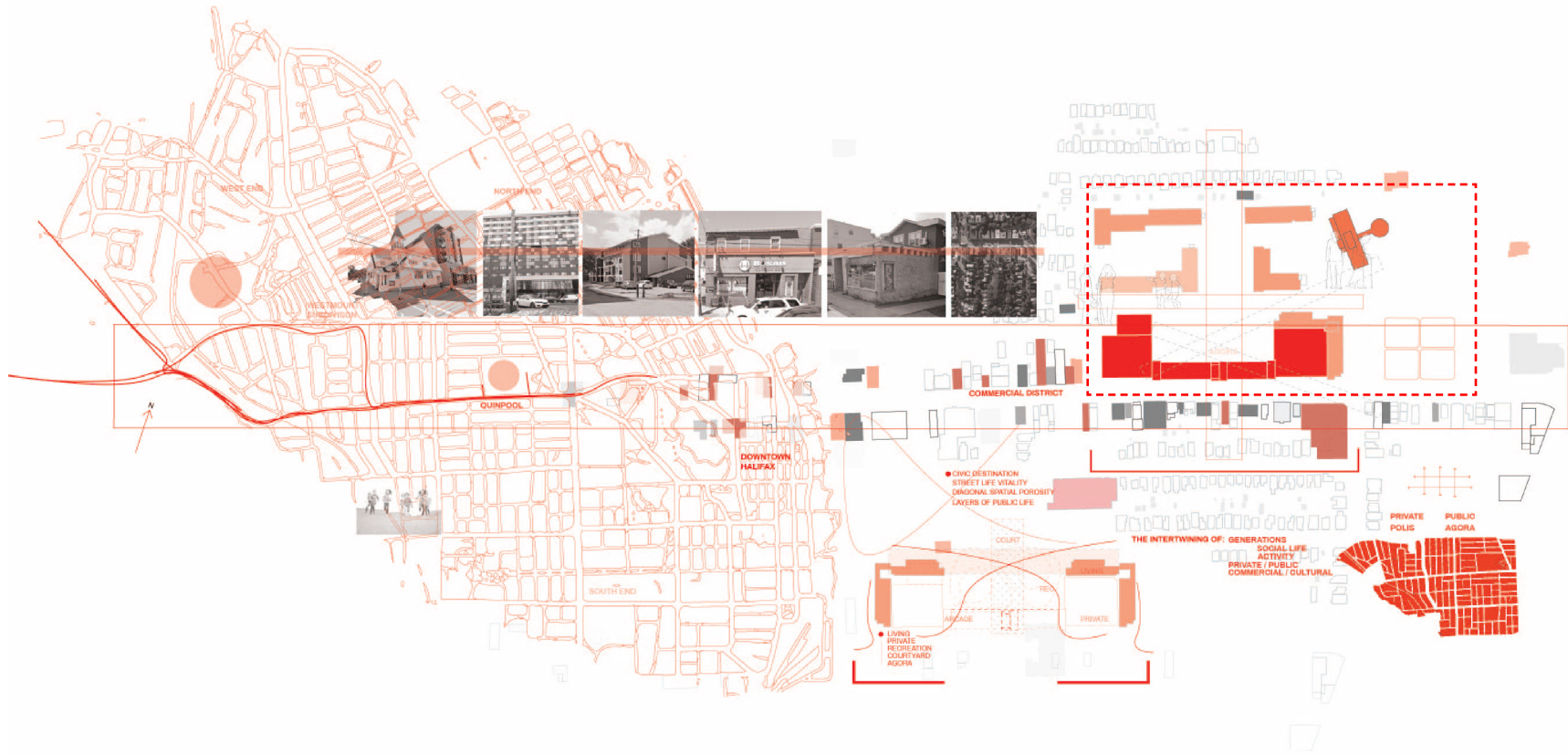
City Nexus

The decision to use the Quinpool Road Shopping Center block as a testing site for exploring public space stems from its role as a vital city nexus. Situated within a dynamic urban context, Quinpool Road serves as a focal point for a myriad of social, economic, and cultural activities. Zoned as a central business district, it functions both as a vital transportation corridor and as a showcase of historical identity, functionality, and urban growth.

Over time, Quinpool Road has undergone significant transformations, embodying the principles of placemaking while also grappling with challenges such as the proliferation of non-places, obstructed pathways, and neglected urban artifacts. The analysis of Quinpool Road, drawing from the insights of urban theorists such as Aldo Rossi and Kevin Lynch, sheds light on the complexities of urban development and underscores the importance of preserving the inherent identity of a place while adapting to the evolving needs of modern society.

Halifax Mural Festival brought artists to Halifax creating murals on Quinpool Rd. Mural by Jieun (June) Kim on the wall of Naughty Paw Pet Grooming, 6260 Quinpool Rd (Halifax Mural Festival 2023).

Commuter Electric Tramway construction in early 1900's on Quinpool. (NSA 1986-

Quinpool Overview Collage. As the commercial corridor of the city, layers of street life unfold, revealing history, generations of civic activity, and diverse cultural identities. This site serves as a nexus of residential, commercial, private, and public spaces. Diversity as a commercial strip with a sequence of street-facing storefronts, like those on any main street, highlights the importance of social infrastructure, aligning with Jan Gehl's concepts in the book 'Life Between Buildings' (1987).

LEGEND
- RESIDENTIAL, SINGLE, SEMI-DETACHED & DUPLEX
- MULTI-FAMILY UNITS
- BUSINESS WITH DWELLINGS OVER
- COMMERCIAL SECTION (RETAIL & WHOLESALE BUSINESS)
- MANUFACTURING & INDUSTRY
- SCHOOLS & COLLEGES
- HOSPITALS, HOMES, & OTHER INSTITUTIONS
- PARKS & PLAYGROUNDS
- CEMETERIES
- H.M. FORCES, DEPARTMENT OF NATIONAL DEFENCE
- H.M. GOVERNMENT - DOCKS, RAILROADS
- CIVIC ADMINISTRATION
- SHIPPING, PRIVATE FIRMS

HALIFAX 1945

- INDUSTRIAL
- GENERAL BUSINESS
- GREEN SPACE AND INSTITUTIONAL
- SITE

HALIFAX 1972

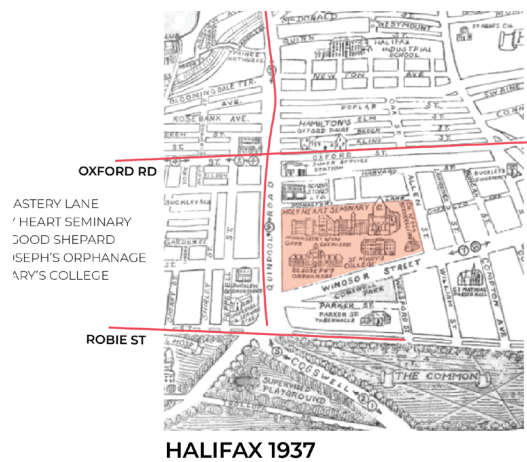Halifax timeline mapping study, discussing the Nolli structure of the city blocks, while finding the shifts in the urban districts and populace of the city.
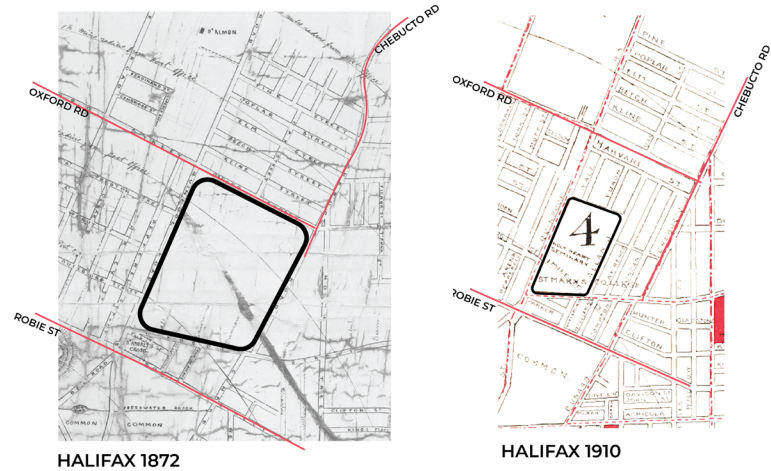
HALIFAX 1872

HALIFAX 1910

HALIFAX 1937

Finding the site through historical analysis of mapping the key block.

Quinpool's Evolution

The history of Quinpool Road is deeply intertwined with the growth and development of Halifax. Originally a rural road connecting the city to surrounding areas, Quinpool Road gradually evolved into a high traffic commercial and residential hub. The architectural types along the road reflect different periods of development, from early vernacular structures to more recent modernist buildings.

To understand the city as a campus of rooms, categorized by function, the project starts with a comprehensive mapping of the peninsula. The development of zones reveals

distinct areas of residential, commercial, institutional, and recreational activities. This initial analysis provides a framework for understanding how different parts of the city interact and function together as a cohesive whole.

By mapping these zones, we start to identify key intersections where different functions converge, creating interesting urban spaces. This approach allows us to see the city not just as a collection of buildings and streets, but as an interconnected network of "rooms," each with its own purpose and character.

Historical studies of Quinpool Road reveal how the edges of the site have evolved as the city has changed. Noticing in

QUINPOOL RD - HIGH STREET
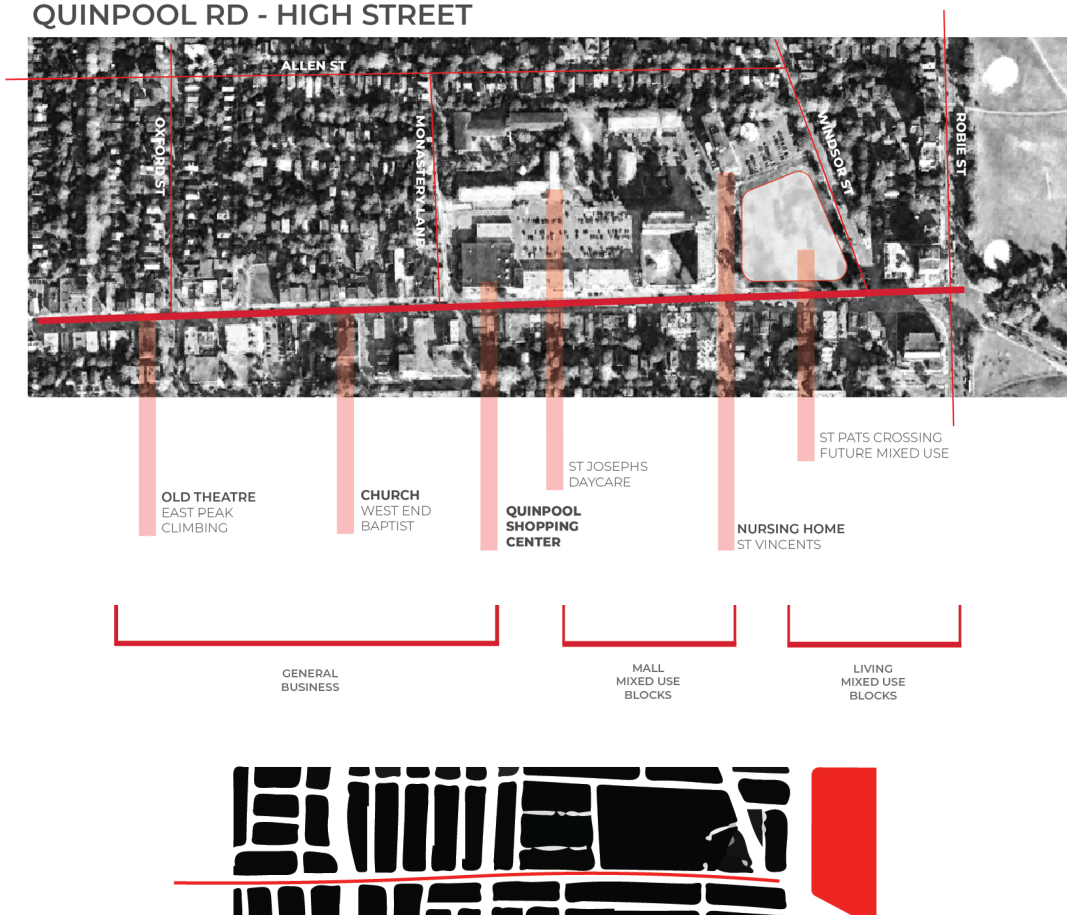
Quinpool Road defined as a high street, or commercial district with economic values, rather than community. An auto centric strip mall, on a main street corridor of the city.

Quinpool Road Aerial view 1962 (Halifax Municipal Archives 1962; Google Earth 2021).

1872, a vast site that originally held the YMLA (Young Mans League Association) grounds at the corner of Quinpool and Windsor, or the Race course with its finish line at Oxford St. By 1937, the area was characterized by theological institutional buildings, forming a campus of Roman Catholic interests. The collective memory of the site shifting from rural, to institutional, and now commercial we begin to understand the 'collective memory' of the city. How the evolution of the city has shaped this urban block.

21st century Quinpool is know for its division of voter districts on the peninsula bordering the middle to lower economic North end and the higher income group of the South end. This commercial route became important as suburban sprawl took hold, commuters used Quinpool as a direct link to exterior neighbourhoods from the peninsula. This high traffic main street is used by approximately 180 cyclists, 4000 pedestrians, and 28,500 vehicles per day. When comparing Quinpool to commercial streets like Barrington and Spring Garden, the street syntax provides evidence of a strong commercial strip with little public space.

The Nolli diagram of Quinpool illustrates an oversized block, diverging from the orthogonal grid typical of the city's layout. However, Quinpool Shopping Center, as an urban artifact, disrupts this grid and represents a shift in volumetric massing. This transformation is also evident in aerial shots comparing 1962 to 2021. In 1962, institutional buildings lined the main street, while agricultural support systems occupied the latter half of the property towards Allen Street. By 2021, the area had transformed into a commercial strip mall with apartment blocks on the backside. Moreover, the images reveal a diagonal relationship between Quinpool Rd. and Windsor St., carving the urban block in a departure from the usual linear blocks.

Foundational urban blocks are central to Halifax's city structure. Aldo Rossi's concept of urban artifacts highlights these structures as crucial components of urban memory. Quinpool shows how the urban block is not merely functional units, but blocks representing collective memories that link the past and present through their physical and historical significance. This is evident in St. Joseph's Daycare, which references the former orphanage, and St. Vincent Nursing Home, both remaining as collective memories. Architectural elements influence the character and resilience of urban environments, revealing the complex relationship between Halifax's urban form and its historical context.

Urban Fragmentation Analysis

In *A Theory of Good City Form*, Kevin Lynch explores the patterns that shape the relationship between human purpose and urban form. Cities are defined by the spatial arrangement of their inhabitants, who engage in various activities within these spaces. These patterns are influenced

1800's

INSTITUTIONAL TYPOLOGY **RESIDENTIAL TYPOLOGY**

1899 THE GOOD SHEPARD MONASTERY

1880 INDUSTRIAL SCHOOL FOR WAYWARD BOYS

1896 OXFORD ST. METHODIST CHURCH

1895   POLO GROUNDS WITH SURROUNDING HOUSES

1865 BLINK BONNIE HOME QUINPOOL AND MACDONALD

1900's

INSTITUTIONAL TYPOLOGY

THE GOOD SHEPHERD MONASTERY

1895 THEOLOGICAL SEMINARY

1899 ST JOSEPHS ORPHANAGE

OPENED 1954 ST. PATRICKS HIGH SCHOOL

1920 OXFORD ST & QUINPOOL METHODIST CHURCH

COMMERCIAL (MAINSTREET) TYPOLOGY

1960 LOOKING EAST QUINPOOL

1960 LOOKING WEST QUINPOOL

1960 OXFORD THEATRE BLOCK QUINPOOL

1964

1970

1970

1967

RESIDENTIAL TYPOLOGY

1970-1980'S

2000'S

COMMERCIAL (MAINSTREET) TYPOLOGY **RESIDENTIAL TYPOLOGY** **APARTMENT TYPOLOGY** **INSTITUTIONAL TYPOLOGY**

2019 | 1966

2019 | 1966

2019 | 1972

Typological study of Quinpool Main Street through its evolution from 1800's to its current paradigm. Reviewing Institutional, Residential, and Commercial.

by social dynamics and the physical characteristics of the environment, which are in turn shaped by their functions. Quinpool Road exhibits distinct characteristics shaped by urban vernacular and the needs of its population.

If no form is permanent, as Rossi and Lynch would describe, Quinpool is a valuable site for testing the evolution of urban typologies that can encourage community connections and public gathering.

Identifying Quinpool roads' current architectural forms reveals a conscious effort to retain elements of the past. Adaptively reused commercial spaces and the enduring presence of the Methodist Church highlight this preservation. Although the demolition of the original stone, brick, and lumber buildings of the theological site by the early 1970's shows the shift of political and economic drivers of the community as urban density has surged. The Quinpool business district now features 10-20 storey apartments and condos, replacing the main street's historical diversity. These modern structures incorporate ground-floor glass-fronted shops facing multiple sides of the block, with residential towers beginning above the second story.

The residential streets hold 2 storey timber Maritime homes some with Victorian details, while the commercial structures are varied in height though cater to the street facing datum enticing pedestrians with approachable storefronts and clear signage. These signs are crucial to convey meaning to the architecture, in an environment with rapid automobile traffic. "Learning from the existing landscape is a way of being revolutionary for an architect... not the obvious way, which is to tear down Paris and begin again, as Le Corbusier suggested in the 1920s, but another, more tolerant way"

(Venturi, Scott Brown, and Izenour, 2017) Understanding that utilizing the vernacular, including signage is meaningful and contextual. Architecture is about the communication of space, producing an aesthetic and cultural significance while building an urban landscape.
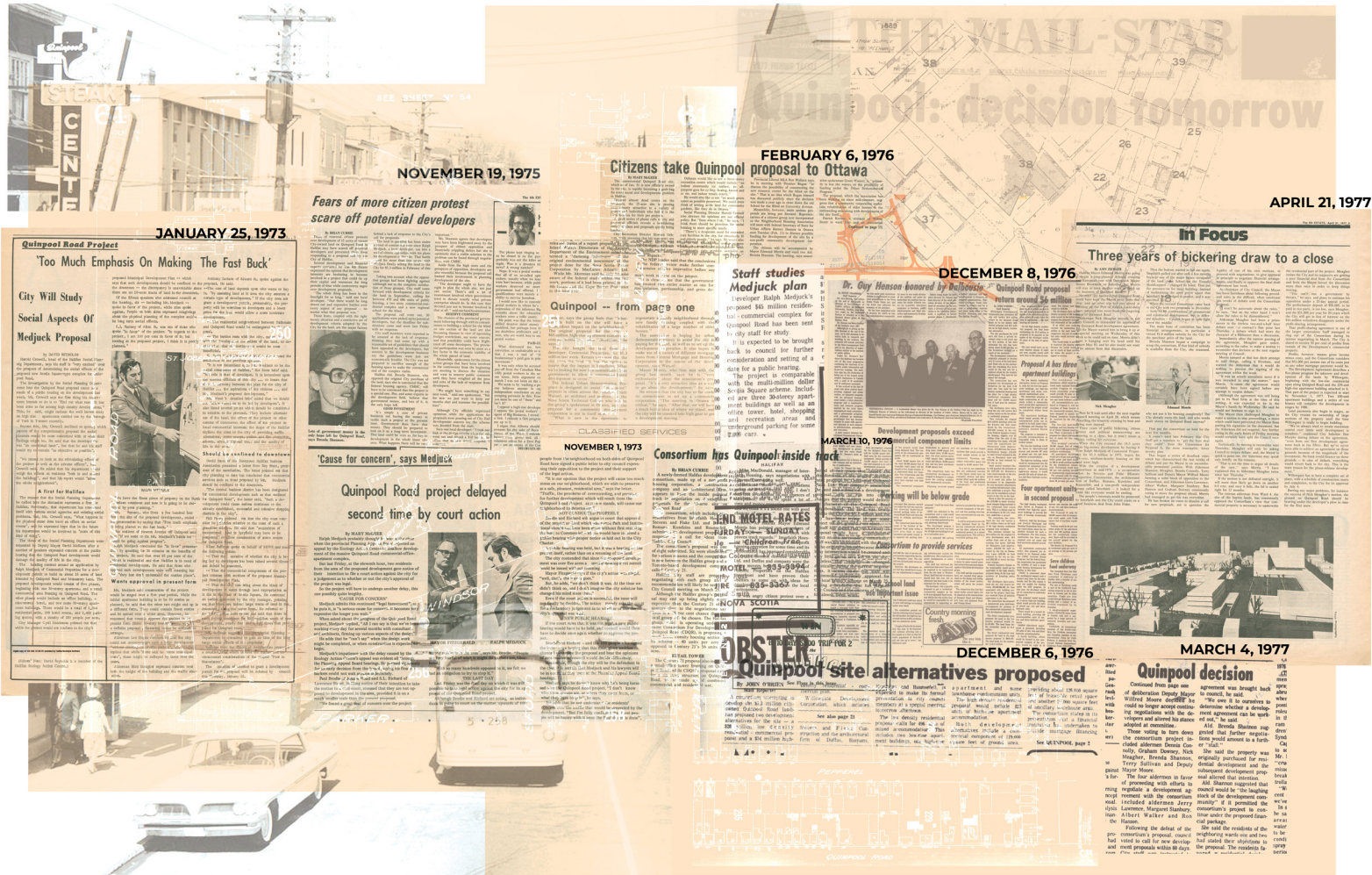
As urban density continues areas like Quinpool can be examples of singular forces, selfish in focus for monetary architecture. Disregarding identities of urban structure the drastic changes leave sustainable city principles aside.

The Controversy

Urban fragmentation often results from contentious planning decisions, where conflicting interests among developers, city officials, and community members lead to piecemeal development. This is evident in the Quinpool Shopping Center block, where differing objectives have created a lack of cohesion in the urban architecture.

Economic pressure is a significant driver of controversy. Centennial Properties, owned by Ralph Medjuck, aimed for a high-density, high-profit project, while Halifax community groups advocated for preserving local character and public spaces. This clash resulted in fragmented urban space, where commercial interests overshadow social and cultural values.

Historical preservation further complicates planning. Conflicts between maintaining historical integrity and prioritizing modernization can lead to fragmented urban landscapes. The redevelopment of Quinpool Road exemplifies this, as debates over development scale and type have resulted in a site reflecting both historical elements and modern pressures.

Quinpool: decision tomorrow

NOVEMBER 19, 1975

FEBRUARY 6, 1976

Citizens take Quinpool proposal to Ottawa

APRIL 21, 1977

JANUARY 25, 1973

Quinpool Road Project

'Too Much Emphasis On Making The Fast Buck'

City Will Study

Social Aspects Of

Medjuck Proposal

Fears of more citizen protest
scare off potential developers

In Focus

Three years of bickering draw to a close

Quinpool -- from page one

DECEMBER 8, 1976

Staff studies
Medjuck plan

Quinpool Road proposal
return around $6 million

Proposal A has three
apartment buildings

'Cause for concern', says Medjuck

Quinpool Road project delayed
second time by court action

NOVEMBER 1, 1973

Development proposals exceed
mercial component limits

MARCH 10, 1976

Consortium has Quinpool inside track

Four apartment building
in second proposal

DECEMBER 6, 1976

Quinpool site alternatives proposed

MARCH 4, 1977

Quinpool decision

Ralph Medjuck discusses purchase of the 3 acre theological site in October 1971 with R.C. Archdiocese, with an unconditional agreement submitted April 7, 1972, not dependant on rezoning or acquisition of adjacent properties. The sale closes December 19, 1973. Centennial Properties proposes a 55 million dollar urban renewal plan submission in 1972 to Halifax Regional Municipality for Development Approval. Ultimately controversy forced the sale of the site to the city of Halifax. Collaged, manipulated images overlayed with maps.

Community opposition also plays a role. Exclusion from the planning process leads residents to resist changes, resulting in compromises that create a patchwork of development. The evolution of Quinpool Road, from an institutional and agricultural site to a commercial and residential hub, highlights these challenges.

By layering and analyzing various development proposals for Quinpool and the current outcome, we can compare past and present conditions. By using an overprinting method, layering each version in plan, one can grasp the project's scale, acknowledge the urban fabric, and to understand traffic, pedestrian pathways and street conditions. This approach emphasizes the importance of considering the interwoven elements that shape the urban landscape. Initial visions favored economic drivers, leading to large-scale, monolithic structures that disrupted neighborhoods revealing the challenges in creating cohesive urban spaces that balance historical preservation, economic development, and community needs.

The framework of this thesis began with understanding urban theory and the evolution of city forms, grounded in


Layers of each planning stage, from 1914 hand drawn city plan to the 1980's building on site today.
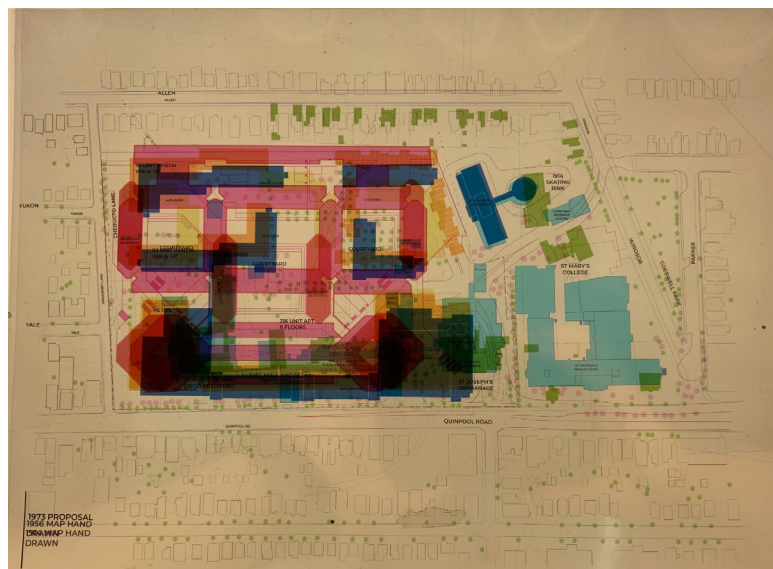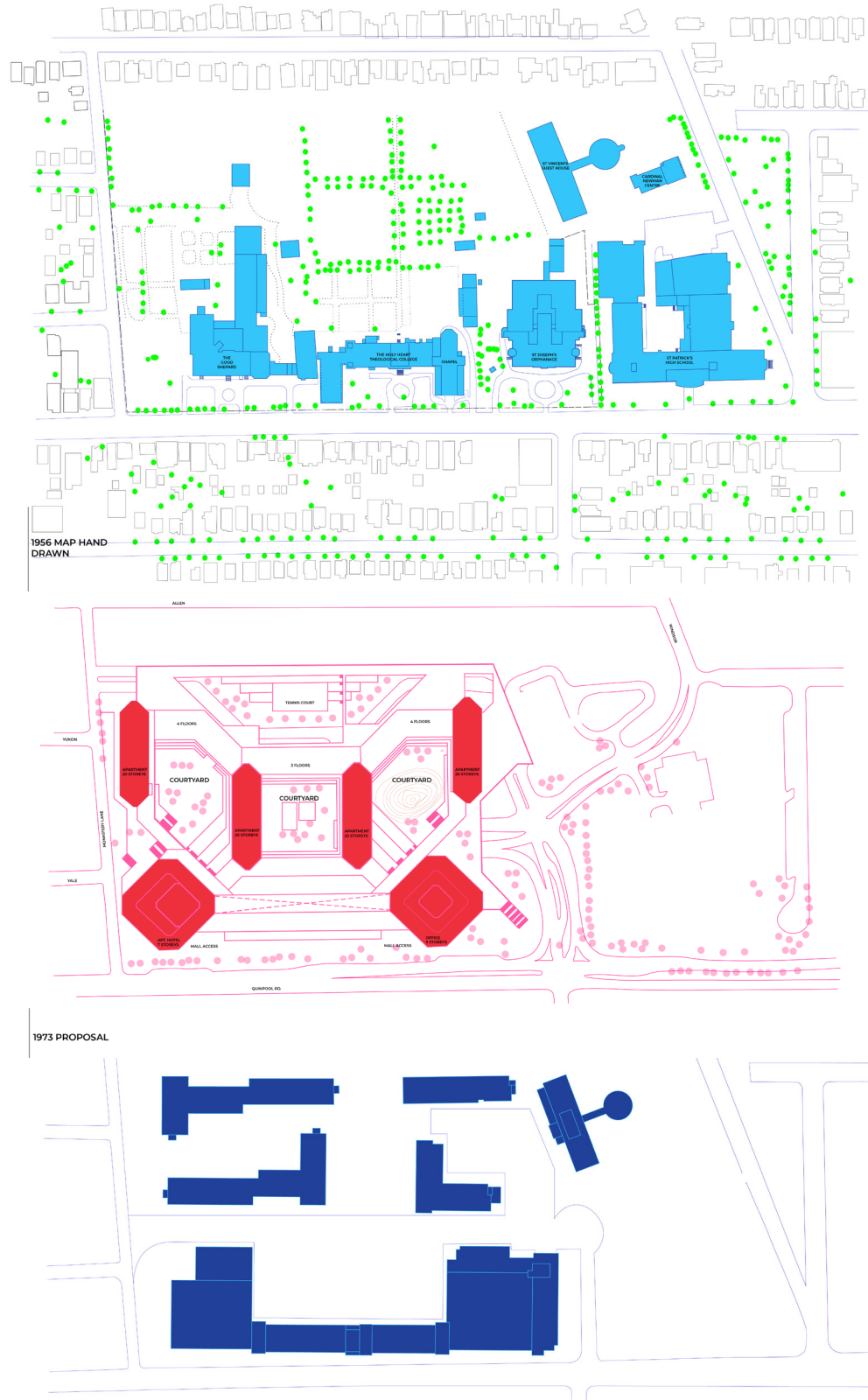
Seven different insurance city maps from 1914 to the current were found in archives. Above are three of the layers used in an overprinting method to compare the depth of interventions and urban architectural language. 1956, 1973 and 1977.
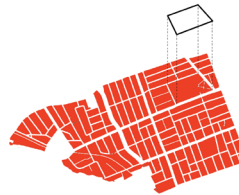
Foundation in theory, historical analysis, and figurative study of urbanity. Framework diagrams, top left to bottom right is the order of operations.
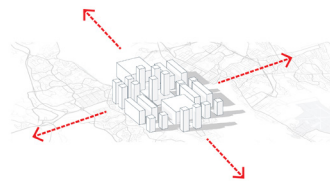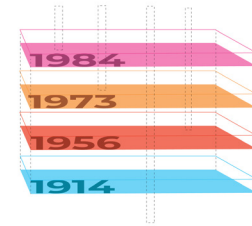

CITY EVOLUTION
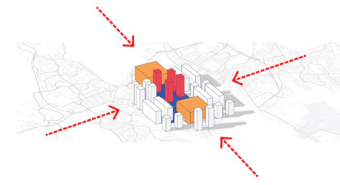
CITY NEXUS

URBAN BLOCK EXAMINATION

HISTORICAL LAYERS

the analysis of historical and contemporary urban dynamics. This foundational step sets the stage for identifying a city nexus, with Quinpool Shopping Center selected as the focal site due to its role as a pivotal urban intersection. Following this, a detailed examination of the site's historical boundaries and development patterns is conducted through layered site plans, revealing the site's transformation and controversies over time. These steps establish a comprehensive understanding of the site's context, which then leads to the identification of distinct "rooms" or fragments within the campus, such as the apartment block, the parking plaza, and the urban strip mall. This approach not only highlights the spatial and functional diversity of the site but also prepares the groundwork for the design interventions discussed in a later chapter.

Finding the Rooms of the Campus

Fragment Analysis

By dissecting the site into various fragments or "rooms"—namely, the apartment block, the parking plaza, and the urban strip mall—we can analyze the individual characteristics
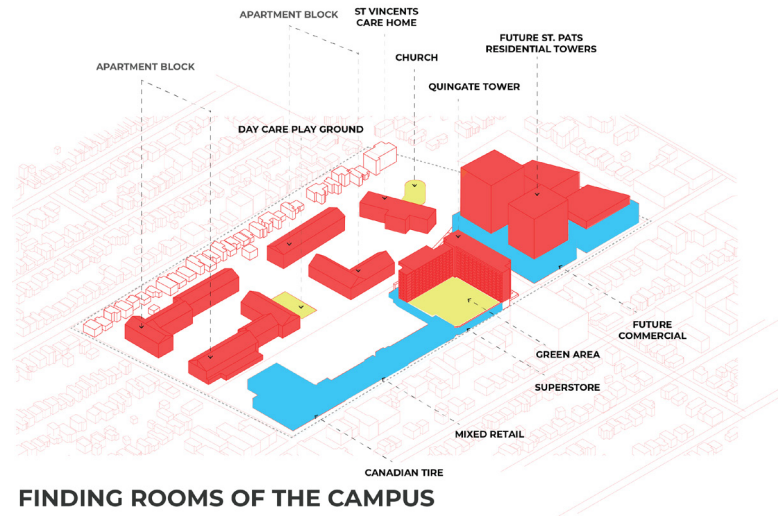
FINDING ROOMS OF THE CAMPUS

Diagram of framework discussing current site analysis for finding rooms of the campus

of each fragment and their collective impact on the urban fabric. This detailed examination allows us to understand the specific needs and dynamics of each component. By acknowledging the pieces and intricacies of the site, the necessity for targeted public interventions becomes clear, setting the stage for a more cohesive and functional urban design.

The Site

At each scale of clarity, the architectural fragments become more evident. As the urban block deviates so does the programing within the key site. The four apartment complexes seems to barricade the shopping center from Allen Street where the residential grid re-forms. St. Vincent nursing home has a relationship with the adjacent green space between Windsor St. and Parker St., though argumentative to the urban grid of Quinpool.

To better understand the disjointed elements a deeper look at the single block. Walking the polygonal border, you begin to dissect the pieces and fragments that form the whole.
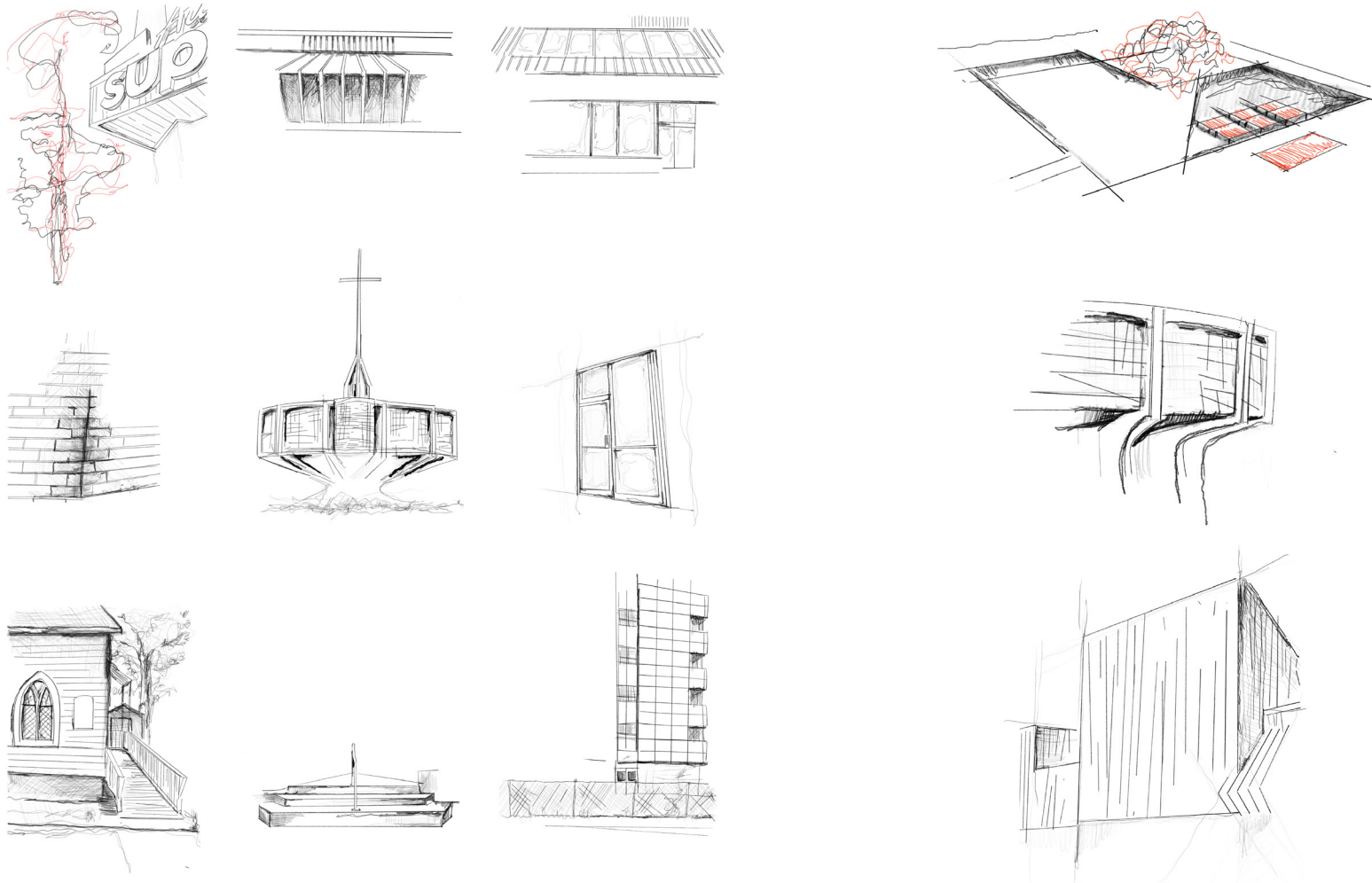
Fragment Study. The site bordered by Monastery Lane, Allen Street, Windsor and Quinpool, fragmented elements with linear moment, material interests, shapes consistently squared, with exception of the church space parallel facing Windsor Street are sketched.

Each element inhabits the space within, seemingly ignoring the others. The linear direction striations of windows, facades, entrances, and structures are challenged by angular framed roof lines pointing to the street. The most significant alteration of form is the circular church attached to St. Vincent Nursing Home. This juxtaposition of shapes and orientations highlights the dynamic relationship between old and new architectural elements in the urban landscape.

Site Forces

As the juxtaposition of fragments unfolds on the site, it becomes evident that each piece represents an assemblage of spatial conditions that can act as opposing forces. For example, there is a clear dichotomy between residential and commercial areas within the site. Additionally, auto-centric
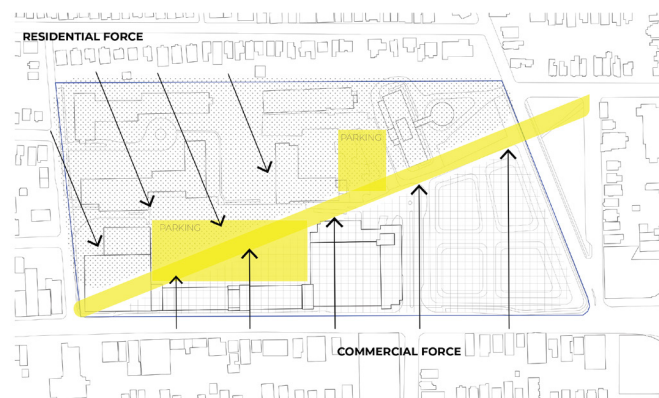
Framework diagram which is mapping site forces

design elements further influence the site's functionality. These dueling site forces contradict each other in their linear block forms, seemingly barricading the public and creating barriers to cohesive urban integration.

The Apartment Block Fragment

Quinpool's urban fabric reveals several fragmented spaces and critical issues, notably where the apartment block acts as a blockade, creating a stark border between the parking

Looking closer at the selection of businesses, private and public considerations of the site, and how it has a relationship with its surroundings. Consider parking lots, versus public space and walled buildings versus porous commercial main streets.

St. Joseph's Daycare, centered in the main green-space with a fenced parked.

Pedestrian pathways neglected, shouldering forgotten in between spaces with broken sidewalks bordering the parking lots, and street ways. Hostile Architecture.

plaza of the commercial strip and the adjacent residential areas. This separation hinders the fluidity and interaction between different urban rooms, disrupting the coherence of the overall urban experience. The apartment block, while providing necessary housing, inadvertently isolates the residential zone from the commercial activities, creating a physical and perceptual barrier.

Additionally, the parking lots associated with these four-storey apartments contribute to this fragmentation. These parking areas, combined with the centrally located, fenced-off green spaces, further segregate the residential environment from the commercial strip. These green spaces, intended as private amenities for apartment residents, are removed from the commercial area, reinforcing the disconnection between different parts of the urban landscape.

Layered into this is the concept of the "missing middle" in urban housing. The missing middle refers to a range of housing types—such as duplexes, triplexes, townhouses, and courtyard apartments—that bridge the gap between high-density apartment blocks and single-family homes. These housing types are crucial for creating diverse, inclusive, and vibrant urban communities. In Quinpool, the absence of these intermediary housing options exacerbates

the divide between the commercial and residential areas, leading to a lack of connectivity and engagement.

By integrating missing middle housing into Quinpool, the urban block could transform from a blockade into a transitional space that promotes interaction and connectivity. This approach would enhance the permeability of the urban fabric, allowing for a more seamless blend of residential, commercial, and public spaces. Incorporating diverse housing typologies not only addresses the spatial fragmentation but also fosters a more inclusive community, supporting a variety of socio-economic backgrounds. In this way, Quinpool can evolve into a more cohesive and dynamic urban environment, where the boundaries between different urban rooms are softened, and the city's inhabitants can experience a more integrated and enriching urban life.

The Parking Plaza Fragment

Quinpool Shopping Center exemplifies the loss of public space, as the parking lot predominates a central part of the site. Located strategically between the residential area and the commercial strip, this segment acts as a physical and functional divide. It reflects a common urban challenge where the expansion of parking facilities often comes at the expense of valuable communal spaces. This fragment, though crucial for providing access and convenience to shoppers, interrupts the potential for a more integrated

Panoramic photo of the Quinpool Centre strip mall in the West End of Halifax, Nova Scotia, Canada, taken on August 19, 2019. (Coastal Elite 2019)

and interactive urban environment that could better blend residential and commercial uses. Such configurations often prioritize vehicular access and economic interests over the social and aesthetic values of public spaces, impacting the cohesion of the urban landscape.
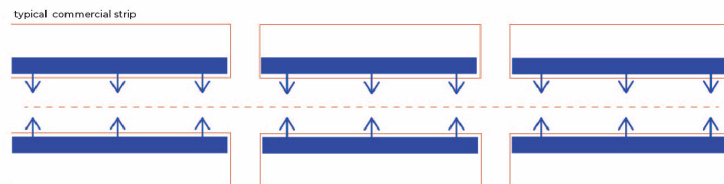

Diagram discussing the typical streetscape of a commercial street.

The Urban Strip Mall Wall

The Quinpool Shopping Center, constructed as a strip mall with its parking located opposite the street, presents a design that contradicts the traditional layout of a main street. This design disrupts the typical flow and interaction that characterizes main streets, which are usually lined with diverse storefronts directly accessible from pedestrian pathways. The strip mall's configuration, with a continuous façade and parking at the rear, interrupts the organic growth and social dynamism often found in main street settings where perpendicular lanes invite connectivity among various businesses.

This juxtaposition highlights the distinction between North American-style strip malls and traditional main streets. Strip

The Quinpool Shopping Center, strip mall from the parking plaza. (Top image, then from left to right) Main entrance to mall, located beside a ubiquitous Wendy's. The datum of the Quinpool road commercial district. Seven out of eleven street entrances are not wheelchair accessible.

malls are often designed with convenience for car access as a priority, creating a frontage that faces vast parking lots, not the street. This often results in a more segregated and auto-dependent environment, contrasting sharply with main streets that typically prioritize pedestrian access and street-facing businesses. The design of Quinpool Shopping Center reflects these strip mall characteristics, which can lead to a lack of integration with the surrounding urban fabric and diminish the pedestrian-friendly appeal that main streets traditionally foster.

Chapter 4: Compositional Strategies

Determine Hierarchal Grid

This section explores the application of the modular grid from the Campus of Saint Gall, focusing on how its principles of organization and spatial hierarchy can be utilized to structure the Quinpool Shopping Center site and other sites where urban fragmentation cause disruption. Historically, the Quinpool shopping block reveals its roots in Catholicism, with the street frontage along Quinpool Road originally hosting theological stone structures. This historical context aligns with the concept of "modularity," offering a sense of organization rooted in Roman Catholic theory, particularly the organization of the Plan of St. Gall. Sanderson (1985) states, "The developed form of modularity called square schematism applies to every aspect of the plan, including the design of the church."
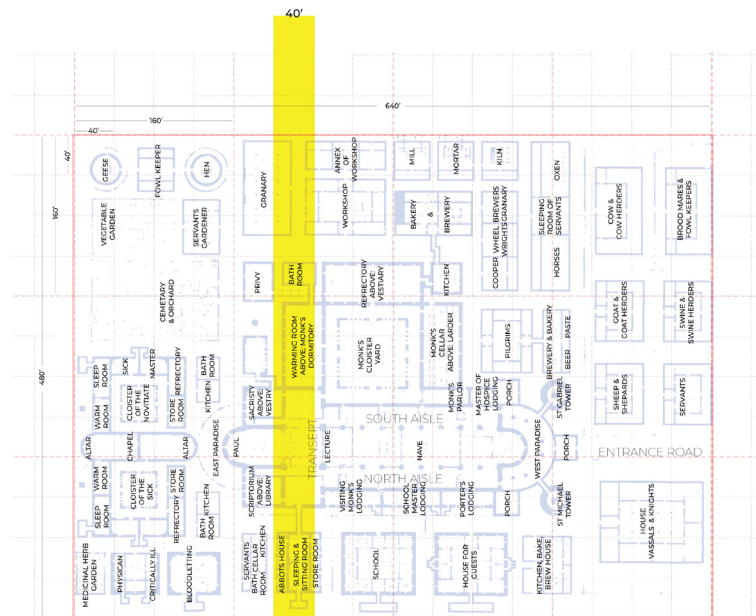
DETERMINE THE GRID

Diagram of theological grid of St Gall, elaborating on the strips in the orthogonal plan.

Incorporating this schematism, the rooms on the site unfold into an ordered arrangement of plots with varying symmetric and asymmetric linear planes. This modular approach provides spatial organization and programmatic qualities reminiscent of the original campus layout. The campus can be viewed as a distinct "space" within the city, centering around a core public area that serves as a prominent landmark. The relationship between all buildings within these boundaries is designed to collaborate, communicate, and reinforce a space for community connection.

This structured organization contrasts with the previously discussed site forces, where residential, commercial, and auto-centric elements clash, creating barriers and disrupting public access. By reintroducing a modular grid, the design aims to harmonize these elements, fostering a more integrated and cohesive urban environment.

Porosity and Axial Integration

Porosity Grid

To enhance public space and ensure its prioritization, the concept of "porosity strips" is introduced. These volumetric voids will act as pathways and communal spaces that penetrate the existing boundaries, ensuring seamless integration with the urban fabric. This approach not only respects the historical context of modularity but also innovates upon it to address contemporary urban challenges.

Porosity strips can become a defining feature in urban planning, particularly in cities where public space is often overlooked. By breaking through the walls of the site, these strips create permeability, fostering a network of
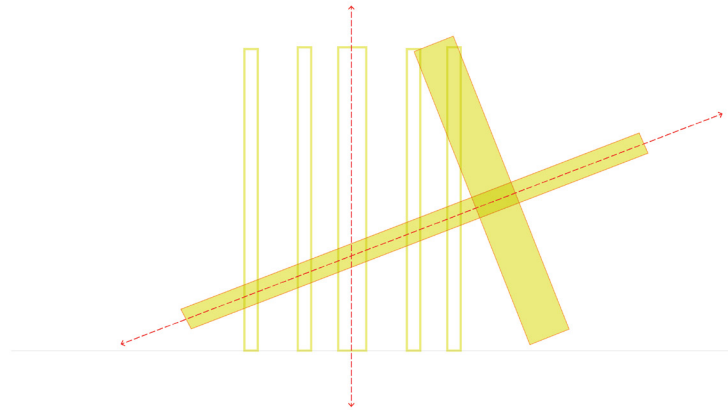
DETERMINE AXES & POROSITY

Diagram next step in the framework regarding axes and porosity.

interconnected spaces that invite public use and engagement. This method reclaims forgotten spaces, transforming them into vibrant areas that encourage community interaction. The integration of porosity strips within the modular grid reinforces the importance of public space in urban design, ensuring that it remains a central, accessible element in the city's structure.

Central lines

In architectural and urban design, an axis is a central organizing element that structures the spatial layout and relationships within a site. Axes provide a framework for arranging buildings and open spaces, ensuring a structured and coherent design. They define the orientation and alignment of various elements, guiding the spatial configuration to create an organized environment. By establishing clear pathways for pedestrians and vehicles, axes facilitate movement and connectivity, promoting seamless transitions and accessibility across the site.

Additionally, axes enhance visual and spatial relationships by connecting key points such as landmarks, buildings, and

open spaces. They create a sense of balance and symmetry, which is essential for the design's aesthetic quality. Axes also define hierarchical importance by highlighting significant buildings or spaces placed along the central line, thereby creating focal points that draw attention. Overall, axes are fundamental tools in architectural and urban design, providing structure, direction, and coherence to the spatial arrangement and relationships within a site.

Public Room as Defined Spatial Form

The typological approach to the public room focuses on the concept of the Plaza, designed to facilitate recreation and communication. This core space is shaped by the figurative measure derived from site analysis, which identifies key elements that influence the design and functionality of the public space. Understanding the site's requirements and existing forces, the figurative measure ensures that the plaza serves as a public room that integrates seamlessly into the urban fabric while fostering community interaction.

Restoring fragments of the urban fabric into continuous landscapes involves inserting suture-like interventions,
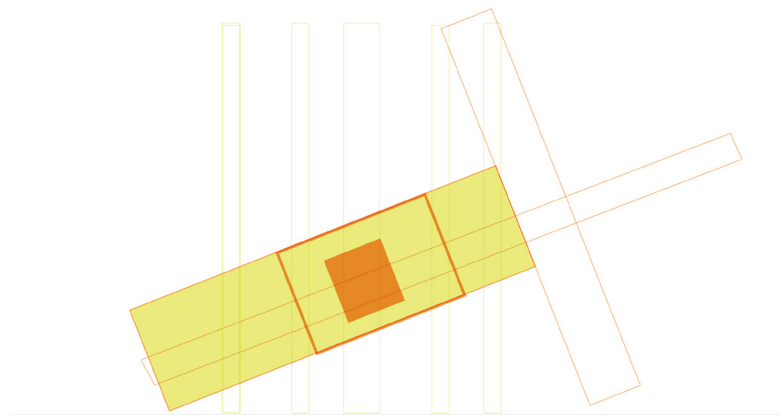
DEFINE THE FIGURE
Diagram next step in the framework finding the figure-ground.

vibrant public spaces. This style of intertwining built forms creates cohesion and continuity.

Public Space Principles

Public space, the antecedent of this thesis, is seen in the cloister and church of the Plan of St. Gall, central elements that support the community and form the core of the master plan. Unlike the original cloister, which aimed to sequester monks from the streetscape, this project aims to make public space accessible to all. Considering the cloister as a more private square or courtyard, the larger public room is the defined plaza or agora.

The courtyard represents a more private and enclosed urban room within the city. Drawing parallels to the cloisters of monasteries, courtyards are typically surrounded by buildings that create a sense of seclusion and tranquility. Leon Krier, an architect and urban planner who advocates for human-scale development with mixed-use neighborhoods and the integration of public spaces in urban design, describes these smaller scaled spaces as intimate and contemplative, offering a retreat from the bustling urban environment (2011). Courtyards provide a quiet refuge for residents, while still maintaining a connection to the surrounding city. They serve as communal spaces for relaxation, reflection, and social interaction within a protected and serene setting.

Applying this approach to the Quinpool Shopping Center site involves creating a public plaza carved out of the campus, shaped by the residential and commercial factors and understanding the city context. This design incorporates a figurative element
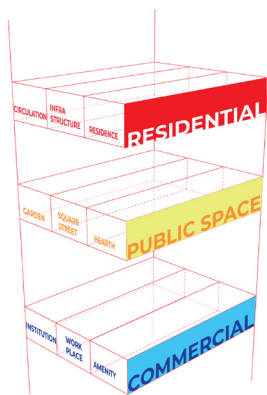
Diagram defining the campus rooms for a modern campus plan at Quinpool

that enforces a public room amidst a fragmenting urban fabric, discovered through thorough analysis.

The urban rooms, layered with the theological roots of Quinpool, can be applied to the residential block, commercial strip, and plaza. The residential block echoes the Plan of St. Gall's community-centric approach, providing housing that supports interaction and communal living. The commercial strip, reminiscent of the monastery's milling and crafts triad, fosters economic activity while maintaining social cohesion. The plaza acts as the modern cloister, a central gathering space promoting community engagement and public life. These elements together create a layered urban fabric that respects historical context while addressing contemporary needs, ensuring that Quinpool remains a vibrant and inclusive part of the city.

Architectural Voids

Voids in architecture, such as courtyards, atriums, and other open spaces, play a crucial role in transitioning between public and private spaces. These voids act as intermediary zones, facilitating movement from public streetscapes to private residential areas. They manage the flow of people and activities, providing necessary spatial breaks within the built environment.

In urban design, voids enhance connectivity and permeability. They function as buffers, mitigating the impact of high-density commercial activities on adjacent residential areas. This transition helps maintain the quality of life in mixed-use developments by modulating noise, light, and movement, creating a gradient from public to private spaces.
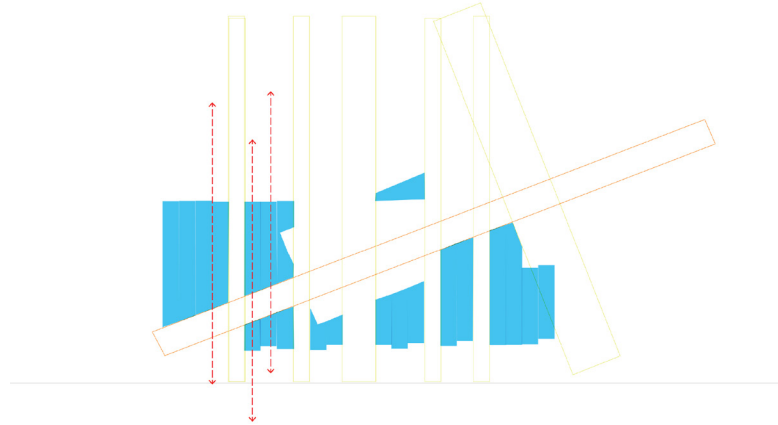
URBAN VOIDS

Diagram next step in the framework studying commercial voids and architectural spatial relationships.

The relationship between public and private spaces is essential in urban planning. Voids offer visual and physical relief in densely built environments, providing spaces for social interaction, recreation, and relaxation. They enable natural light and ventilation to penetrate buildings, improving environmental quality in both public and private areas. These spaces can foster community engagement while respecting the privacy needs of residential zones.

The strategic integration of voids in architectural design ensures effective transitions between different types of spaces. By carefully positioning these open areas, designers create more adaptable urban environments. Voids are integral to the spatial organization and functionality of urban areas, supporting the dynamic relationship between public and private realms.

Interstitial Nodes in Urban Design

The interaction of architectural elements creates interstitial nodes that facilitate public transitions. Using the overprinting method of overlaying pieces together, these nodes emerge as critical points where paths intersect and activities

converge. Described by Kevin Lynch, they serve essential roles in urban design, providing spaces for brief interactions and transitions, effectively connecting different urban areas. Interstitial nodes help manage movement between public and private spaces, ensuring functional and coherent urban environments. By strategically placing these nodes, designers enhance connectivity and support the flow of people and activities throughout the urban fabric.
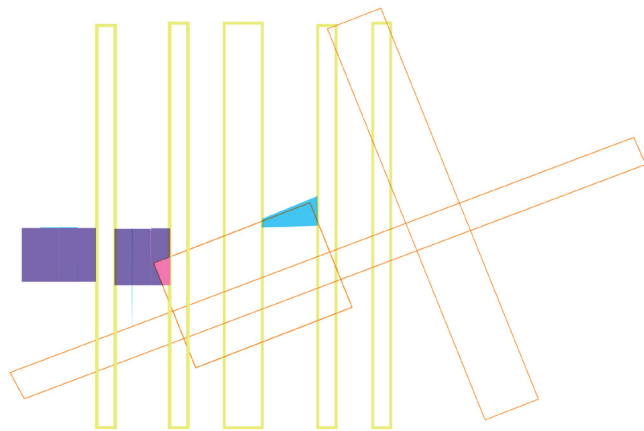
INTERSTITAL NODES

Diagram next step in the framework studying the intermediate spaces of exchange.

Transitioning into Jan Gehl's principles for human-scale design, the next phase focuses on creating public spaces that prioritize human interaction and community life. Jan Gehl's *Life Between Buildings* (1987) principles emphasize designing urban environments that encourage engagement with surroundings and each other. This involves creating spaces that are inviting, accessible, and conducive to social activities.

Gehl's approach highlights the significance of small-scale interventions that enhance public space quality. These include the use of street furniture, greenery, and pedestrian-friendly pathways that encourage lingering
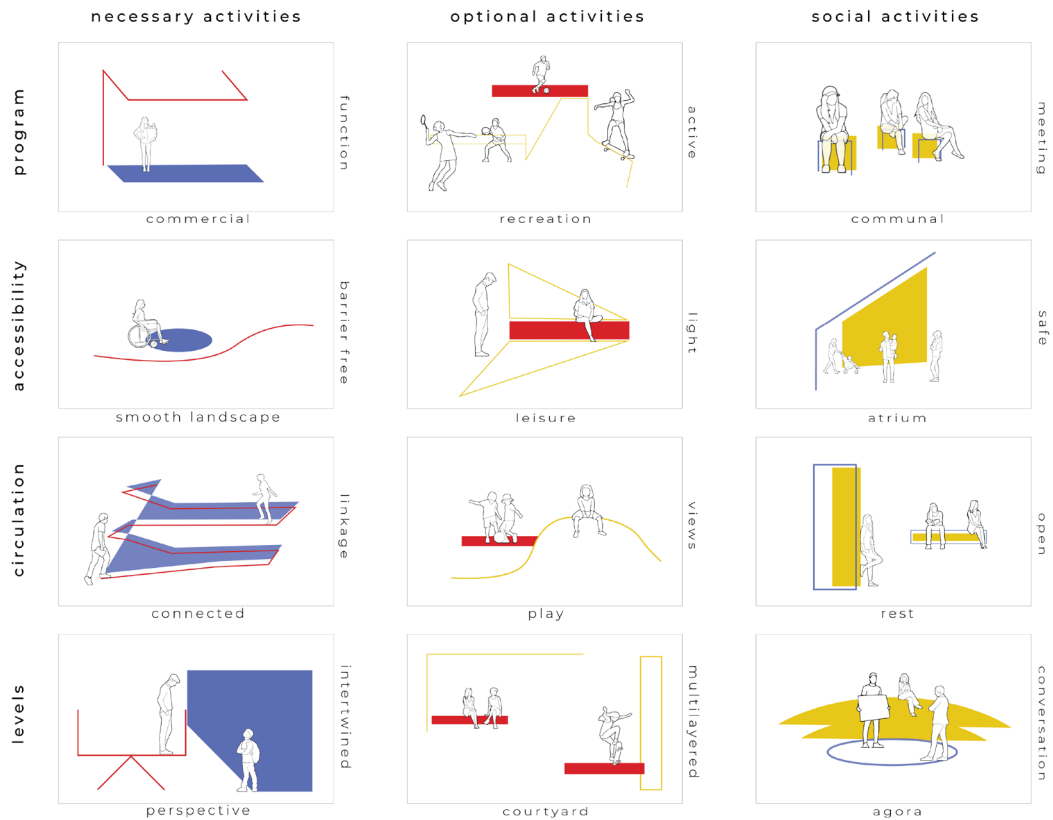
Using concepts of necessary activities, optional activities, and social activities discussed by Jan Gehl, a Danish urban designer and architect, this framework focuses on how public spaces can be designed within the plaza paradigm encouraging livable urban architecture(2010).

and interaction. Implementing Gehl's principles aims to transform urban spaces from mere thoroughfares to destinations, fostering community and belonging.

The integration of porosity strips, axes, figure ground, architectural voids, and interstitial node designs aligns with Gehl's theories. These elements create routes within the newly defined parameters, facilitating seamless movement and interaction. Porosity strips and axes ensure connectivity, while carved plaza space provide communal areas for social gathering. This framework supports a dynamic urban life.

Central to the design is the plaza, conceived as the agora, a primary gathering space promoting community engagement

and public life. Within this agora, a hearth or core element serves as a focal point, enhancing the sense of place and belonging. This core element functions as a physical and symbolic center, where the community converges, interacts, and builds connections. This strategy ensures that Quinpool becomes a cohesive, vibrant, and inclusive part of the city, addressing both historical context and contemporary needs.

As the juxtaposition of fragments unfolds on the site, it becomes evident that each piece represents an assemblage of spatial conditions, influencing and shaping the urban fabric. Overprinting layers of residential, commercial, porosity strips, axes, and the agora with a central hearth reveals the dynamic interplay of these elements. The architectural response to these layers prioritizes public space, ensuring that all other aspects are influenced by its significance.

Compositional Layers

By applying a method of overprinting, each layer—residential, commercial, and public—can be examined in relation to one another. The residential blocks provide housing that supports community living, while the commercial
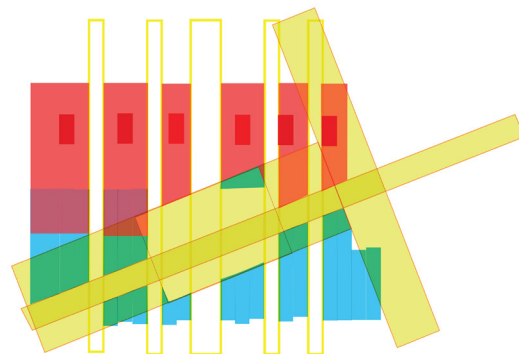
COMPOSITIONAL URBAN PLAN

Diagram overprinting method of all layers in the site; residential red, commercial blue, public yellow, and the impact of intermediate spaces, as a composition.

strips foster economic activity. The porosity strips ensure connectivity across the site, facilitating movement and interaction. The axes, both pedestrian and vehicular, guide the flow of traffic and establish clear pathways.

Central to this framework is the agora, conceived as the public room, with a hearth serving as the focal point. This space becomes the heart of the design, influencing the placement and orientation of surrounding structures. The importance of the public space is paramount, establishing the urban rules and ensuring that all architectural elements contribute to a cohesive and integrated environment. This approach aims to repair the fragmented urban site by creating an inclusive public realm.

Chapter 5: Design Response

Strategies for Urban Integration

This chapter addresses the urban fragmentation of the Quinpool Shopping Center block, focusing on the design implementation of public spaces as a strategy for creating cohesion. As established in previously, we understand the site is characterized by a disjointed mix of residential, commercial, and auto-centric elements that disrupt the urban fabric and hinder connectivity. The design approach aims to rectify this fragmentation through the strategic use of public space. By establishing clear pathways, integrating permeable design elements, and creating multifunctional public rooms, the project seeks to transform the site into a cohesive and interconnected environment. This methodology demonstrates how targeted architectural interventions can enhance urban cohesion, promote community interaction, and create a more functional and inclusive urban landscape.

The project is based on the following program outline:

- Urban Public Space: These public rooms and passageways within the campus form the backbone of the public space, ensuring accessibility and connectivity. The agora and hearth serve as central gathering points, fostering community interaction and engagement

- Urban Residential: The residential component includes diverse housing units catering to various demographics, such as singles, families, and different income levels. This diversity supports the public space and community amenities, creating a balanced and integrated urban fabric.

- Urban Commercial: The commercial areas include publicly accessible facilities like service centers, recreation, libraries, workplaces, clinics, educational facilities, retail and food spaces. These commercial elements are designed to be porous, ensuring dual

access and integration with the surrounding urban fabric.

By prioritizing the public room and integrating these elements, the project aims to create an activated mixed-use urban environment that fosters community engagement and supports a diverse population. It is the intention for this thesis to serve a diverse demographic, reaching people of different ages, stages of life, cultural and socio-economic backgrounds.

Using the framework described in Chapter 4, the design response emerges to address urban fragmentation through cohesive architectural strategies. This section focuses on carving figures, puncturing boundaries, intertwining programs, and incorporating dynamic structures to create a unified urban environment. The design integrates urban greenbelts, dual frontage commercial corridors, multifunctional community plazas, and mixed urban housing to enhance connectivity and social interaction. By establishing clear circulation paths and incorporating permeable design elements, the project transforms the
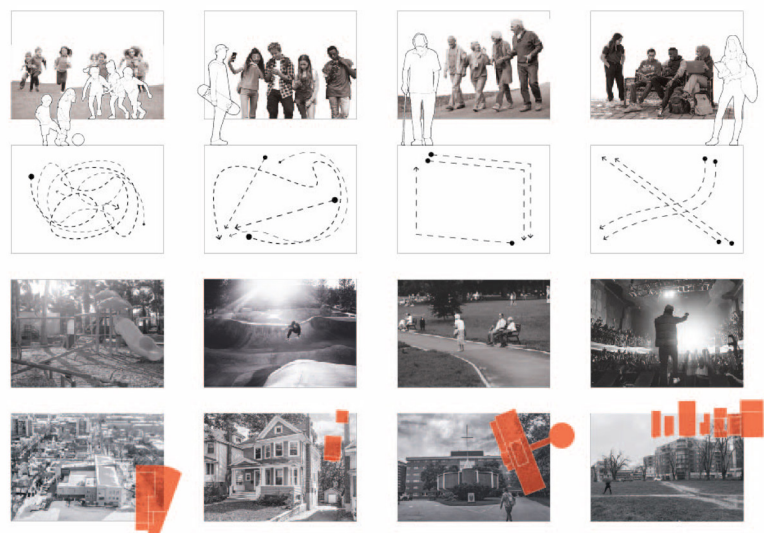
Actors and activities around the existing site and adjacent community buildings were observed and considered.

fragmented urban block into a cohesive, functional, and inclusive space.

The community of Quinpool Road in Halifax is characterized by a diverse demographic with a range of actors and activities that shape the urban environment. Key actors include local businesses, such as retail stores, cafés, and restaurants that serve both residents and visitors. Educational institutions like Saint Mary's University bring a significant student population, creating demand for amenities and recreational spaces. Additionally, the presence of residential buildings and community centers fosters a range of social activities including local events, neighborhood gatherings, and informal interactions among residents. As noted by a local community survey, "The blend of commercial, educational, and residential uses on Quinpool Road creates a dynamic environment with frequent interactions among students, residents, and business patrons" (City of Halifax 2023). This vibrant mix of actors and activities underscores the importance of designing public spaces that accommodate diverse needs and encourage community engagement.

Public Space

Organizational Porosity Puncture

The organizational grid, informed by the historical context of the site, produced a grid schematic that defines the alignment for the porosity choices. Considering the site limitations, edges, and functional requirements, forty-foot punctures penetrate the blockades of the commercial urban strip mall, parking areas, and apartment block fragment. The forty-foot measure, reflecting the modular sizing from the Plan of St. Gall, provides a historical basis for spatial organization.
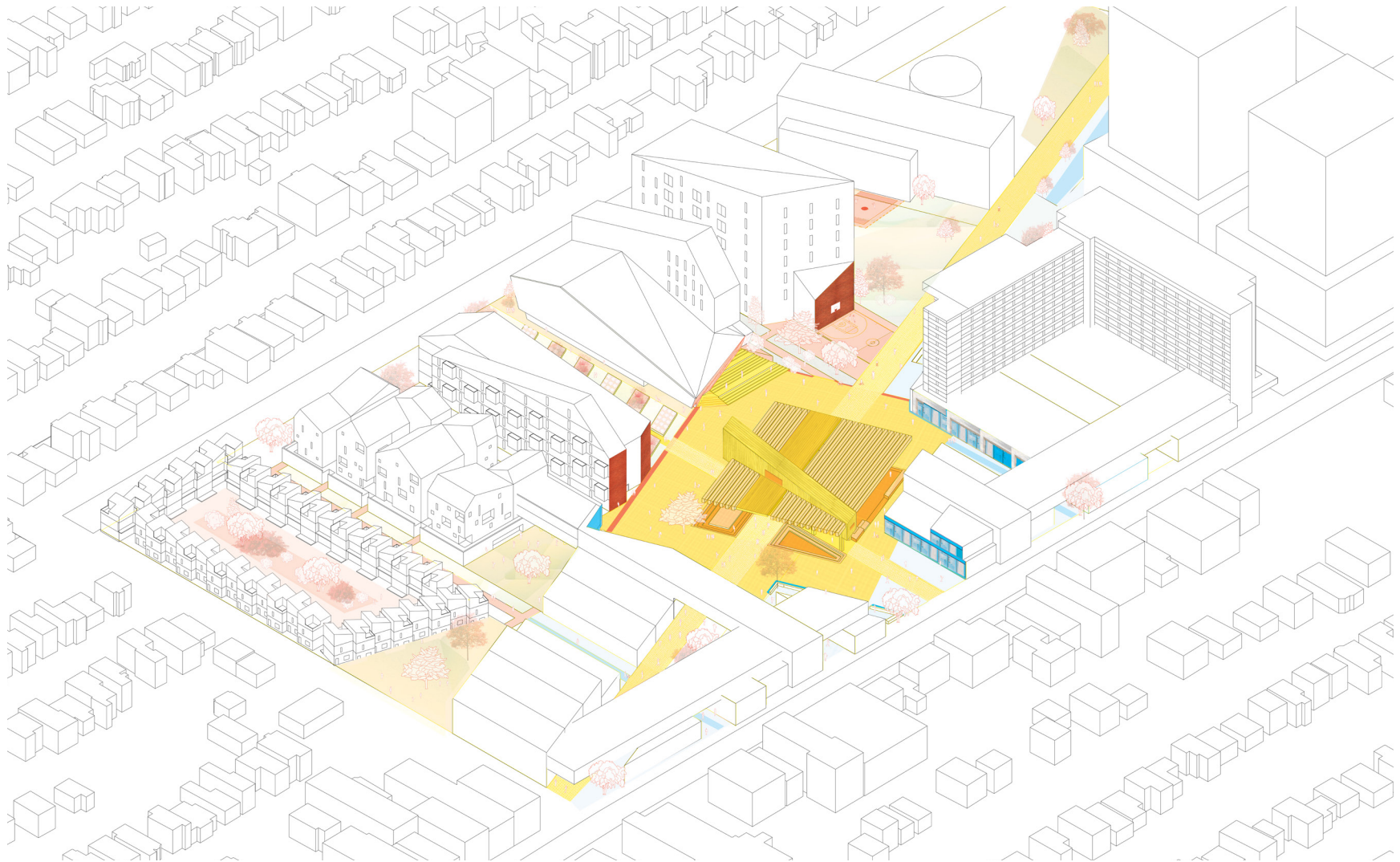
Axonometric highlighting public space interventions of the carved agora, main public room activator, a core architectural landmark, public porosity punctures, main corridor axes, interstitial private to public nodes, and recreational program.

These punctures establish clear lines of sight, promote diverse activities, and enhance approachability. The porosity of these openings extends the streetscape, creating intermediate spaces that facilitate movement and interaction. These spaces serve as extensions of the streetscape, providing vital connections and supporting life between buildings. This idea of a "porous" urban strip allows for greater permeability and interaction between different parts of the city, involving design elements that encourage pedestrian movement and social interaction across typically segregated areas.

Urban porosity can transform the city into a network of interconnected spaces that act as mediators between diverse urban architecture. Stavrides (2018) suggests that this concept facilitates mutual recognition and collaboration among inhabitants, fostering an emancipated urban culture. Janson (2016) notes, "Once you have penetrated or plunged into the interior, such a form of shaping space permits continuously variable hybrid forms between separation and connection or of different states of spatial density." The porous strips grid creates openings or passageways through established boundaries, allowing for greater flow and connectivity, thereby reducing the separation between areas. Extending pathways, roads, or other infrastructure through these boundaries encourages more fluid transitions between spaces, further diminishing the rigidness of these edges.

Starting with the organizational grid enforces a prioritization of public-forward thinking, ensuring that the design supports community interaction and accessibility. This approach transforms rigid, segregated spaces into interconnected, dynamic environments that activate public interaction. The

design strategies aim to mend fragmentation by blurring boundaries, embedding structures, and layering landscape elements, thus promoting a cohesive urban environment.

Unlike the singularly focused, monolithic block-swallowing urban developer model, this approach fosters a more nuanced and integrated urban fabric. The monolithic model typically prioritizes economic gain and maximizes building footprints at the expense of public space and connectivity. In contrast, the porosity-based approach values human-scale interactions, diversity of use, and accessibility, creating a balanced environment where public spaces are prioritized and seamlessly integrated into the urban landscape. This method prevents the creation of isolated, inaccessible urban areas and promotes a more inclusive and dynamic urban experience.

Axes as the Site Transept

In architectural and urban design, axes play a critical role in structuring space. Redefining the axis as the site transept draws parallels to the transept in a cruciform church layout, highlighting its role in creating spatial intersections and facilitating movement. This approach emphasizes the importance of axes in integrating segregated buildings and enhancing connectivity within the urban fabric.

The site transept serves as a central line that organizes the spatial layout, aligning buildings, pathways, and open spaces. This method addresses urban fragmentation by reducing physical and functional disconnects. Diagonal pathways, as part of the site transept, introduce efficient routes for pedestrians, cutting across the traditional grid and enhancing accessibility. This design strategy encourages exploration
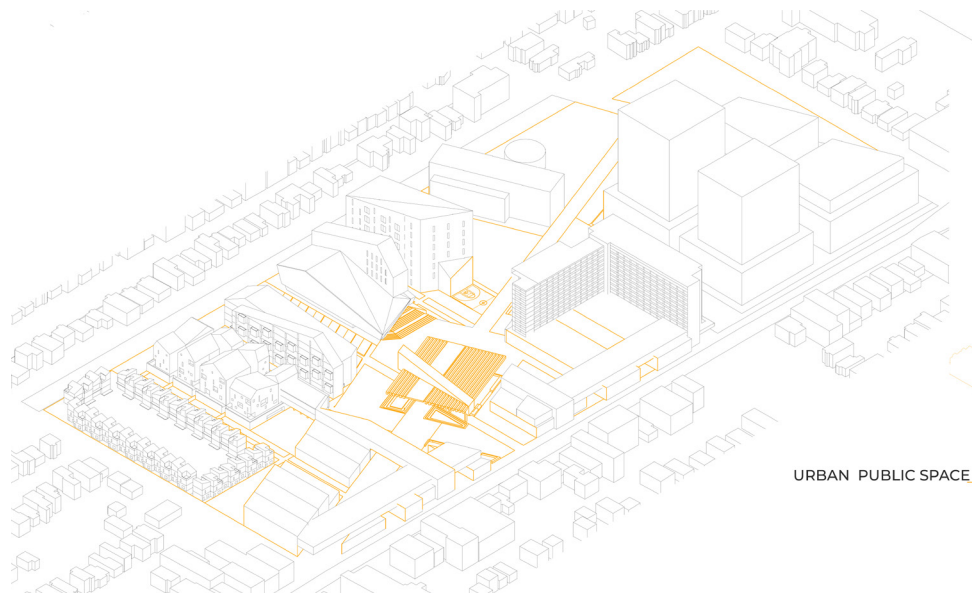
URBAN PUBLIC SPACE
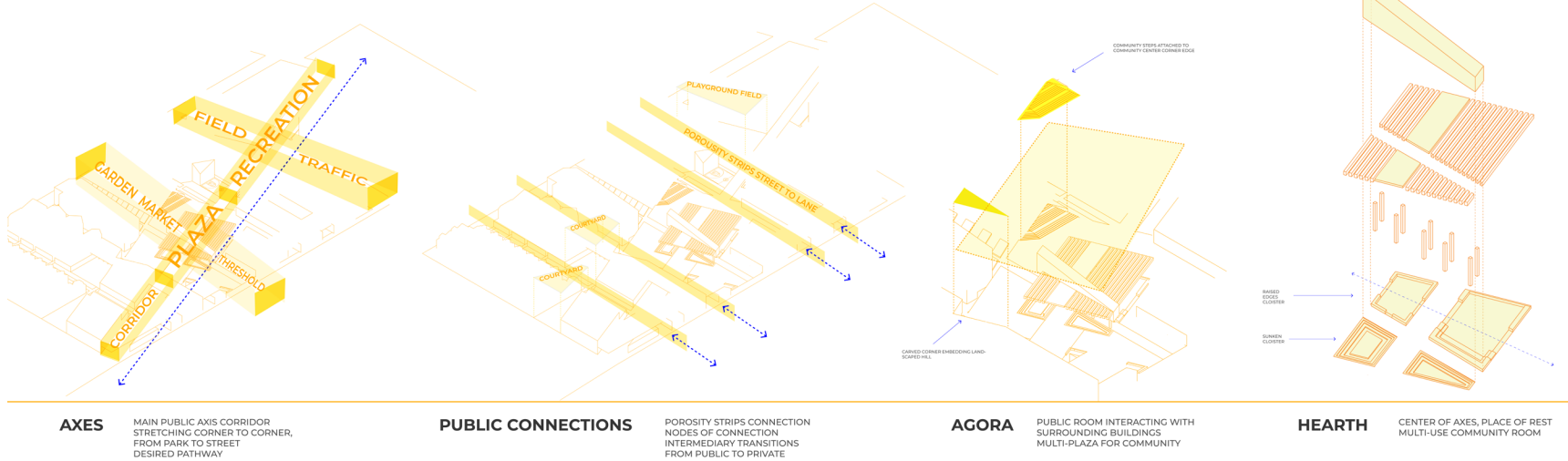
AXES   MAIN PUBLIC AXIS CORRIDOR
STRETCHING CORNER TO CORNER,
FROM PARK TO STREET
DESIRED PATHWAY

PUBLIC CONNECTIONS   POROSITY STRIPS CONNECTION
NODES OF CONNECTION
INTERMEDIARY TRANSITIONS
FROM PUBLIC TO PRIVATE

AGORA   PUBLIC ROOM INTERACTING WITH
SURROUNDING BUILDINGS
MULTI-PLAZA FOR COMMUNITY

HEARTH   CENTER OF AXES, PLACE OF REST
MULTI-USE COMMUNITY ROOM

Diagrams describe the major points of urban public space in four main categories, as defined by the methodological framework.

and interaction, fostering community engagement. Integrating outlier buildings into the urban fabric is a key benefit of the site transept. At Quinpool Road, the St. Vincent Care Home is an example of a building that is physically and functionally disconnected. A diagonal site transept crossing beside the care home links it with central areas, creating pathways that improve accessibility for residents and visitors, and enhancing overall site cohesion.

The site transept creates spatial intersections that become nodes of activity and interaction. These nodes, located where the transept intersects other pathways, serve as focal points for social and economic activities, transforming passive spaces into community hubs.

The aesthetic quality of the urban design is also enhanced by the site transept. Diagonal pathways and intersections create visual interest, breaking the monotony of the traditional grid. This dynamic spatial organization enriches the experience of moving through the site, offering diverse perspectives.

The site transept is rooted in the historical and cultural significance of the transept in church architecture, symbolizing crossing and intersection. This concept is relevant to urban design, aiming to integrate diverse urban elements and create a cohesive community. The site transept provides a strategic tool for organizing space, enhancing connectivity, and fostering interaction, transforming the site into a dynamic environment.

By redefining the axis as the site transept, urban design can effectively address fragmentation and segregation. The site

transept offers a clear framework for spatial organization, improving accessibility and integrating segregated buildings. This strategy creates a vibrant urban environment that enhances the quality of life for residents and visitors. The integration of the St. Vincent Care Home through the site transept exemplifies the potential of this approach to transform isolated spaces into connected communities.

Carving the Agora

In urban design and architecture, the concept of figure-ground refers to the spatial relationship between built structures (figures) and the open spaces (ground) around them. Figures include solid, built elements such as buildings and walls, while ground refers to the open space surrounding these figures, such as streets, courtyards, parks, and other public spaces. The visual contrast between figure and ground helps identify the spatial layout and the density of the built environment versus open spaces. This aids in understanding how buildings relate to each other and to the open spaces, contributing to the overall urban form and connectivity.

QUINPOOL STREET THRESHOLD

Vignette of the agora and central hearth element intended for multifunctional space such as community markets, barbeques, and group events.

When public space is essential to unifying fragmented urban landscapes, carving a figure into the urban block is crucial. This figure shapes the internal edges of space, creating a public room that serves as a focal point for community interaction. By carving through buildings and leaving voids of activity, such as public steps on a community center or a facade carve-out, the design introduces dynamic public spaces that support diverse activities and enhance social interaction. These voids are not mere empty spaces but are thoughtfully integrated to extend the streetscape and provide accessible areas for people to gather, relax, and engage.

The carved-out portions of the facade use materials like red brick, which are common in Halifax, maintaining the typical residential plan on other faces while introducing public space. The use of traditional materials ties the design to Halifax's architectural heritage, creating a sense of continuity and belonging. This material choice adds a layer of visual interest and texture to the public spaces, reinforcing the area's traditional building methods. The public room also takes over and removes the auto-centric parking lot areas that previously dominated the site and blocked pedestrian and community connection. By carving the agora on a diagonal, the design introduces an interconnected piece of the axes, forcing further building relationships in a previously fragmented urban campus. The strategic placement of these voids ensures they are visible and inviting, encouraging public use and fostering a sense of community.

Historically, the agora served as a central place for discourse and interaction in ancient Greek cities. As noted by historian Richard Sennett, "The agora was a place where citizens

could meet and discuss public matters, a physical space that facilitated civic engagement" (Sennett 1994). Similarly, this modern agora aims to create a public realm that encourages community engagement and interaction.

By carving the agora into the urban block we introduce a public room that replaces auto-centric areas and enhances pedestrian and community connection. By integrating figure-ground principles and using traditional materials, the design creates a cohesive and inviting environment enhancing community interaction and creating a public room.

Hearth as a Landmark

The concept of a "Central Hearth" serves as a pivotal activator of public space within an urban environment. Acting as a focal point, it draws people together, facilitating community interaction. The hearth's design establishes a meeting place, functioning as a landmark of connection and respite. As an architectural activator, it transforms the space into a communal hub, supporting various functions and interactions that enhance the urban fabric and improve social connectivity.

This hearth in the urban plan of Quinpool serves as a central point within the public room, acting as a focal landmark in the urban landscape. Positioned at the intersection of the site's axes and the main Quinpool Road threshold, this timber construction landmark reflects the energy of these crossing pathways. While connecting theological history of the site by modernizing a timbered structure that transepts the main corridors. The atrium-like shape provides coverage for public gatherings, creating a sheltered seating area below. The rule of enclosure, as explained by Gottried Semper symbolizes this central space providing warmth,

shelter and protection (1989). This public space project emphasizes the public realm as needing a core hearth, or enclosure to support rest and community connection.

Kevin Lynch's concept of landmarks emphasizes distinctive, recognizable points that aid in urban navigation (1960). The hearth, as a prominent landmark, aligns with Lynch's principles by offering a central, identifiable gathering space. Its timber construction connects to traditional building methods, contrasting with surrounding urban elements to enhance visibility and significance.
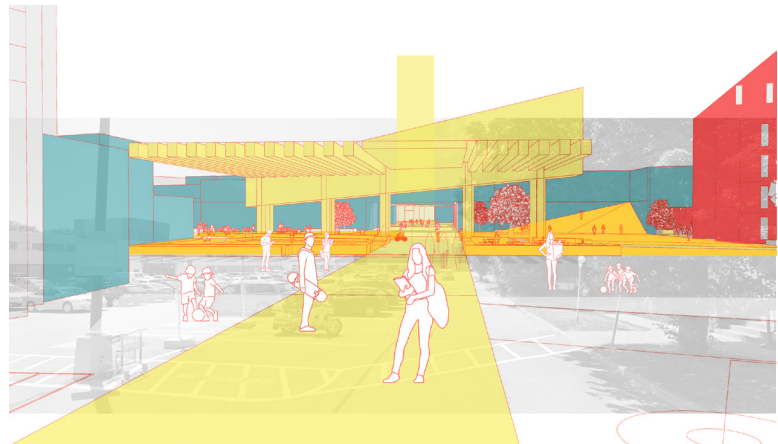
A vignette of the agora and central hearth, looking towards Monastery Lane. This image uses an overlaying method where the current site is shown in black and white, with the proposal color-coded over it: blue tones represent commercial areas, red indicates residential spaces, and yellow denotes public spaces.
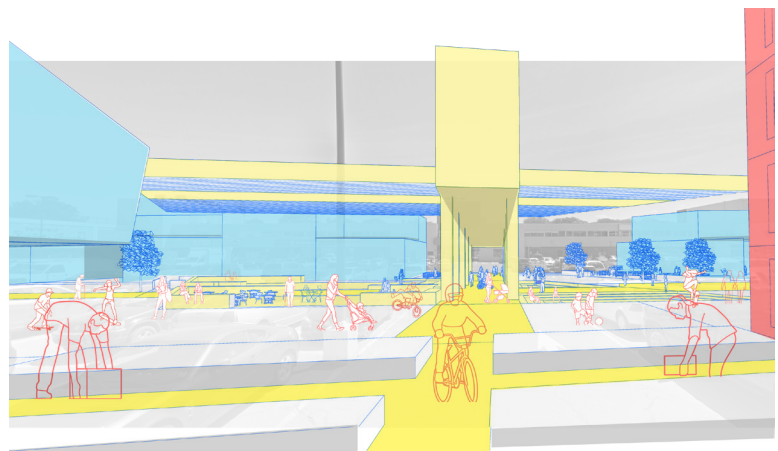
Vignette of the agora and central hearth, looking towards Quinpool Road, using the overlaying method.

The hearth includes elevated walls for seating that mirror its shape, offering various levels for interaction. On the opposite side, a sunken living room-style seating area matches the shape and is strategically punctured by the main pathways of the axes. This dual-level seating arrangement supports a range of social activities and interactions.

The hearth's design incorporates coverage and shelter, creating a functional environment for public use. The atrium-like form allows natural light to enter, contributing to a comfortable atmosphere. Positioned at key pathway intersections, the hearth is accessible from multiple directions, making it a central hub for movement within the site.

By integrating the hearth as a central landmark, the design addresses functional needs while creating a symbolic heart for the community that is accessible to all, not solely the immediate campus inhabitants. The strategic placement and distinctive form of the hearth enhance its role in the overall urban design, improving connectivity and interaction.

The hearth landmark serves as a central point within the public room, embodying the intersection of the site's axes and the main Quinpool Road threshold. The timber construction, atrium-like for, and integrated seating areas provide a sheltered, functional space for public engagement. By aligning with Kevin Lynch's concept of landmarks, the hearth enhances the navigability and cohesion of the urban environment, creating a structured and efficient public realm

Intertwining Courtyards Nodes

Exploring the concept of softening the rigid distinctions between different urban areas, such as residential,

INTERSTITIAL NODE : COURTYARD

These interstitial nodes are courtyards and squares within the site that transition from public to private, from commercial to residential, offering public space as a boundary. View of Intersection of Row Houses on Monastery Lane to the Dynamic Commercial Anchor.

commercial, and public spaces. Using these interstitial nodes, represented by courtyards and squares within the site, serve as critical transition zones from public to private and from commercial to residential spaces. They offer public space as a boundary, creating a gradient of accessibility and privacy. The courtyards and squares function as buffers, modulating the intensity of activities and ensuring effective transitions between different zones. This spatial arrangement supports a balanced urban fabric where different functions coexist efficiently.

At the intersection of Monastery Lane and the row houses, courtyards provide semi-private spaces that offer residents a degree of seclusion while maintaining a connection to the public realm. These spaces are designed to facilitate casual interactions among residents, supporting a sense of community. They also act as visual buffers, mitigating the impact of the adjacent dynamic commercial anchor. This design ensures that residential areas preserve their privacy without being completely detached from the commercial activities.

The dynamic commercial anchor, strategically located to attract visitors and shoppers, benefits from its proximity to these interstitial nodes. The squares and courtyards enhance the commercial area's functionality by providing spillover spaces for activities such as outdoor dining, markets, and public gatherings. These intermediate spaces are crucial in supporting an urban environment where commercial activities and residential quality of life are balanced.

Reframing in this project, Kevin Lynch's (1960) concepts of nodes revolves around the idea of strategic points within an urban environment where various pathways and
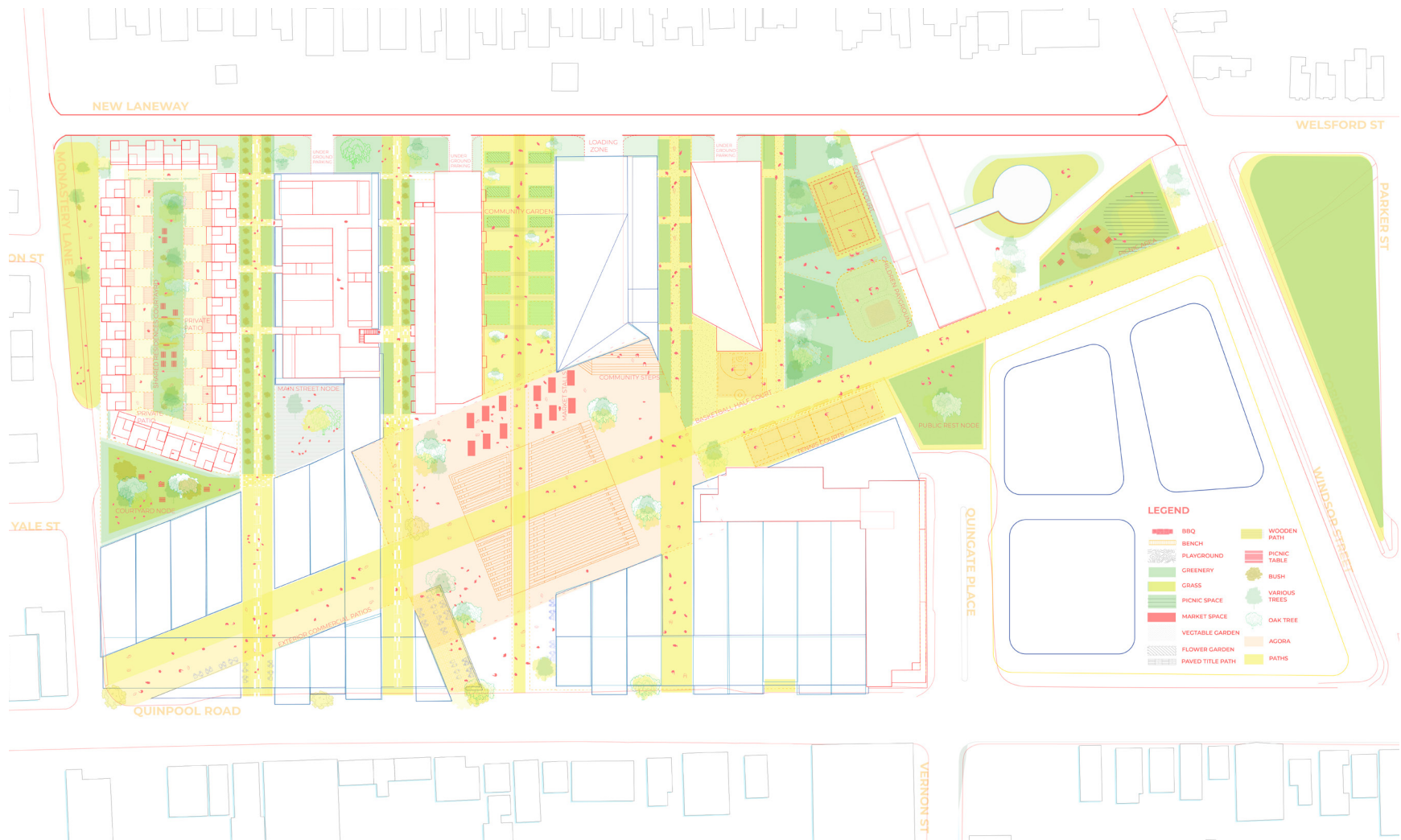
Public space is vital as it unifies the fragmented urban fabric through the implementation of key design elements. The agora serves as a central community hub, fostering social interaction and civic engagement. Axes and porosity punches enhance connectivity and accessibility, creating clear pathways through the site. Interstitial nodes transition between public and private spaces, integrating residential and commercial areas.

activities converge, facilitating orientation and interaction. These nodes serve as reference points, helping individuals navigate the complex urban landscape by providing clear and recognizable moments. Similarly, taking Leon Krier 's (2011) theories of architecture as community, emphasizing the importance of identifiable and human-scale public spaces within the city, advocating for urban forms that promote social interaction and connectivity. Krier's approach to urban design highlights the role of interstitial nodes in creating cohesive and legible urban environments, where spaces between buildings and pathways are thoughtfully integrated to enhance the overall urban experience.

In the context of the overprinting method, interstitial nodes are revealed through the layering and intersection of different urban elements. This method involves superimposing various layers of spatial information, such as historical maps, current site plans, and proposed designs, to identify the in-between spaces where different urban forms intersect and interact. These shapes, emerging from the overlaying process, highlight the potential for creating dynamic public spaces that bridge the gaps between residential, commercial, and public areas. By focusing on these interstitial nodes, the design can enhance connectivity and functionality, ensuring that the in-between spaces are activated and contribute positively to the urban fabric.
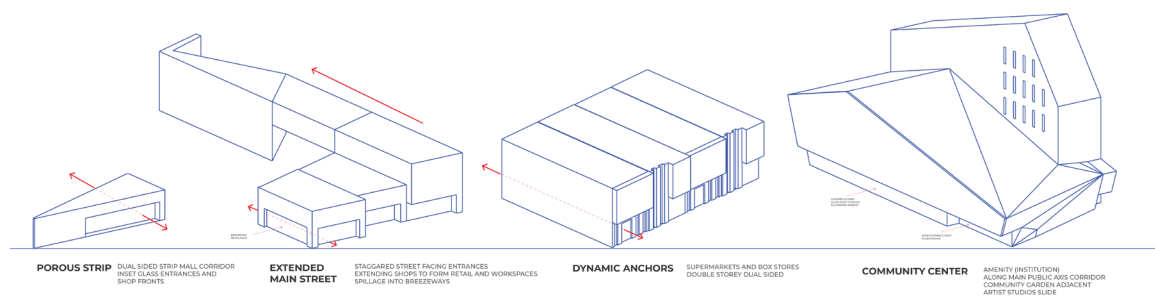
Urban Commercial Types

This section examines the commercial streetscape shifts within the Quinpool Road site, focusing on typological tests and their implications. The staggered placement of urban structures creates spatial interactions and visual interest, integrating diverse functions and activities. This shearing

movement in programmatic elements allows for a more fluid blend of residential, commercial, and public spaces. The analysis includes the porous strip, extended main street, dynamic anchors, and community center, each influencing the architectural shifts and forming distinct types within the urban fabric. This approach aims to explore the potential for enhanced connectivity and interaction within a multifaceted urban environment.

Porous Strip

The porous strip reimagines the traditional single-sided strip mall by introducing a dual-sided commercial corridor punctured by pedestrian paths and making space for shop fronts on both sides. This design contrasts sharply with the conventional North American strip mall and main street typologies. In a typical strip mall, stores are arranged in a linear fashion, facing a large parking lot, with little interaction between the commercial area and the surrounding urban fabric. This layout often creates a blockade effect, segregating the commercial zone from the rest of the city.

In contrast, the porous strip introduces permeability and interaction by allowing pedestrian pathways to cut

| POROUS STRIP | DUAL SIDED STRIP MALL CORRIDOR INSET GLASS ENTRANCES AND SHOP FRONTS | EXTENDED MAIN STREET | STAGGARED STREET FACING ENTRANCES EXTENDING SHOPS TO FORM RETAIL AND WORKSPACES SPILLAGE INTO BREEZEWAYS | DYNAMIC ANCHORS | SUPERMARKETS AND BOX STORES DOUBLE STOREY DUAL SIDED | COMMUNITY CENTER | AMENITY (INSTITUTION) ALONG MAIN PUBLIC AXIS CORRIDOR COMMUNITY GARDEN ADJACENT ARTIST STUDIOS SLIDE |

Diagrams of the commercial forms, describing their shift from single sided to dual side, and the dynamic progression of the typologies afforded on Quinpool to support community, services, and the campus.

through the commercial corridor. This creates multiple entry points and encourages fluid movement between spaces. The dual-sided nature of the corridor means that shops face both the pedestrian paths and the central commercial area, fostering greater engagement and accessibility. This design shifts the focus from automobile-oriented access to pedestrian-friendly environments, enhancing the quality of public space and connectivity.

This approach aligns with Jan Gehl's principles of creating livable urban spaces that prioritize pedestrian activity. Gehl states, "Good cities are those where you can walk and bicycle to most daily activities, and where it is easy to meet and talk." (2010, 50). The porous strip embodies this principle by facilitating pedestrian movement and social interaction, transforming the commercial typology into a more integrated and dynamic urban element.

By comparing the porous strip to the traditional main street, we see that the main street typically features shops facing a

CROSS AXIS THRESHOLD

Thresholds spatially break through traditional street fronts, transforming shops into dynamic designs while still considering traditional street shop front elements.

central road with sidewalks on either side. While this layout does encourage some level of pedestrian activity, it still tends to prioritize vehicular access. The porous strip, however, takes this concept further by creating a more permeable and interactive environment. Pedestrian paths puncture the corridor, creating spaces for public engagement and making shop fronts accessible from multiple directions.

Extended Main Street

The extended main street concept pushes the commercial activity beyond the traditional street front and further into the site. By shearing through the conventional street alignment, it offers additional shop fronts and commercial spaces that extend deeper into the urban fabric. This design approach creates a more integrated and accessible commercial environment, encouraging pedestrian movement throughout the site rather than just along a single axis.

This strategy enhances the economic viability of the area by increasing the number of commercial spaces and creating a more vibrant shopping experience. As noted by Victor Gruen, the pioneer of modern shopping malls, "The essential purpose of the shopping center is to create a variety of commercial offerings within walking distance, maximizing the shopper's convenience and choice" (Gruen 1960, 33). By extending the main street into the site, the design aligns with this principle, providing a diverse array of shops and services that are easily accessible to pedestrians.

Architecturally, this approach breaks away from the rigid confines of the traditional main street, introducing a dynamic and permeable layout that encourages exploration and interaction. The extended main street allows for a seamless

integration of commercial and public spaces, shifting the urban experience.

Dynamic Anchor Stores

Dynamic anchor stores, such as Canadian Tire or Atlantic Superstore, play a crucial role in attracting foot traffic and supporting the economic viability of commercial spaces. An anchor store is typically defined as "a large store that serves as the dominant retailer in a shopping center, drawing customers to the smaller stores in the vicinity" (Levy and Weitz 2009, 45). By carving their front facades into a diagonal arrangement, these stores not only function as commercial hubs but also act as dynamic forces of public spatial interaction. This design strategy shifts away from the traditional box store bookend, creating a more engaging and accessible public space. The diagonal orientation enhances visibility and invites pedestrian movement, transforming these anchor stores into active contributors to the urban fabric.

Community Center

Adding a community center across from the main street threshold of Quinpool creates a vital intersection of public and residential spaces, blending programmatic elements to serve both commercial and residential needs. This architectural choice pushes public and service-based functions deeper into the residential area, shifting traditional boundaries and deleting singular focused blocks. The community center becomes a dynamic node that reinforces the concept of a "city within a city," promoting greater connectivity and interaction among diverse urban elements. By integrating such a multifunctional space, the design ensures that public amenities are accessible, fostering a sense of community
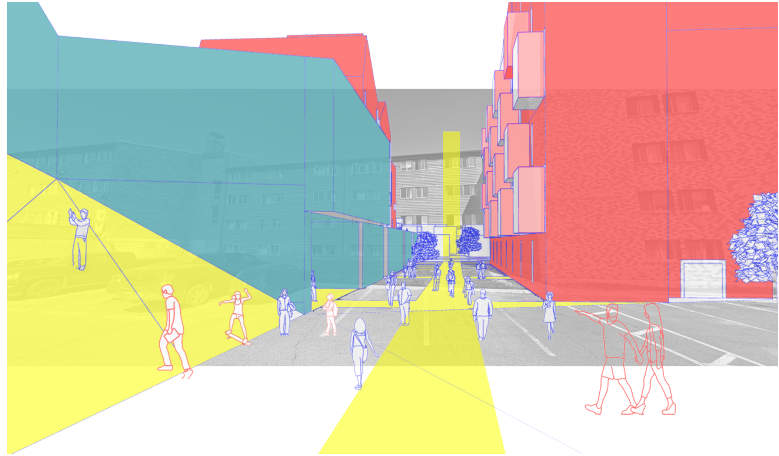
Looking through a porosity puncture as it extends the main street, is carved by the agora and offers life between the buildings. Three programmatic types interlaced together.

Looking through the main site transept, or cross axes, reveals the blending of commercial and residential areas, showing clear connections and spatial relationships. This perspective highlights how the commercial areas seamlessly transition into the residential sectors, enhancing the integration and cohesion of the urban environment

Looking from under the hearth towards the residential mid-rise on the left to the community center on the right, with a possible community garden inbetween.
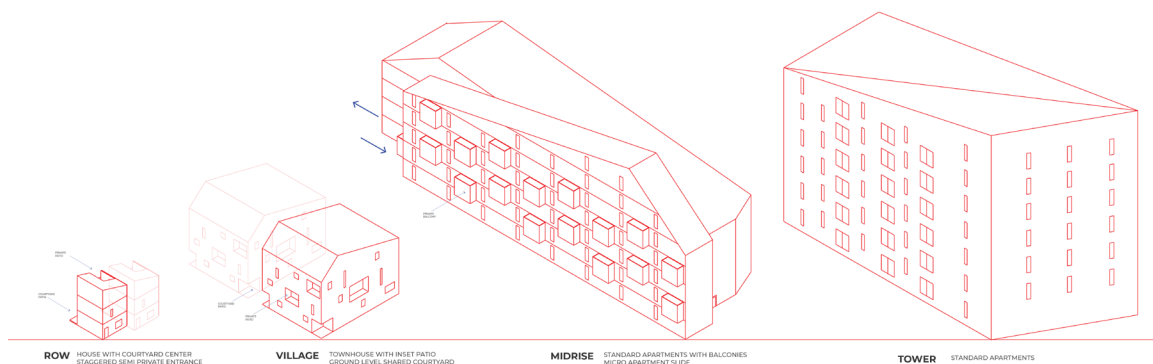
and belonging within the residential neighborhood.

Community centers play a crucial role in transforming residential neighborhoods. As Jane Jacobs notes, "Lively, diverse, intense cities contain the seeds of their own regeneration, with enough population density and diversity to continually recreate the city" (1961, 238). By placing the community center strategically, the design leverages its potential to act as a catalyst for social interaction, providing residents with spaces for recreation, education, and community services. This integration not only supports the immediate residential area but also enhances the overall urban fabric, creating a more resilient and adaptable environment.

Urban Residential Types

Establishing the Middle

The "Missing Middle" concept in urban planning refers to a range of multi-unit or clustered housing types that are compatible in scale with single-family homes but provide more diverse housing options. This concept is instrumental in residential design in a campus setting, offering a framework that integrates a variety of housing

ROW HOUSE WITH COURTYARD CENTER
STAGGERED SEMI PRIVATE ENTRANCE   **VILLAGE** TOWNHOUSE WITH INSET PATIO
GROUND LEVEL SHARED COURTYARD   **MIDRISE** STANDARD APARTMENTS WITH BALCONIES
MICRO APARTMENT SLIDE   **TOWER** STANDARD APARTMENTS

Typological study for Quinpool roads city within a city intentions, introducing additional urban housing types reflected in the neighbourhood and beyond.

types to create inclusive, resilient neighborhoods. As Daniel Parolek, who coined the term, explains, "Missing Middle Housing provides a solution to the mismatch between the available U.S. housing stock and shifting demographics combined with the growing demand for walkability" (2020, 12). By implementing the Missing Middle framework, architects and urban planners can design residential campuses that promote density, affordability, and community interaction, seamlessly blending with existing urban fabrics.

This thesis employs the Missing Middle concept as a typological study of urban residential housing by creating four distinct housing types within the Quinpool site. These types include row houses, village (carriage-style) houses, mid-rise buildings with micro-studio slide addition, and towers. Each type is designed to address different housing needs and demographic trends, enhancing the overall diversity and functionality of the urban residential landscape. By incorporating these varied housing forms, the project aims to create a cohesive yet multifaceted community that aligns with the principles of Missing Middle Housing.

Row Houses

Row houses, a fundamental component of the urban fabric, are characterized by their attached, linear arrangement of homes, typically sharing side walls. These structures are integral to urban environments, offering a dense and efficient housing solution while maintaining individual ownership and privacy. As Allan B. Jacobs states, "Row houses provide a sense of community and continuity, contributing to the social fabric of cities by encouraging interaction among neighbors" (Jacobs 1993, 45). In the context of the Quinpool site, row houses are designed with internal
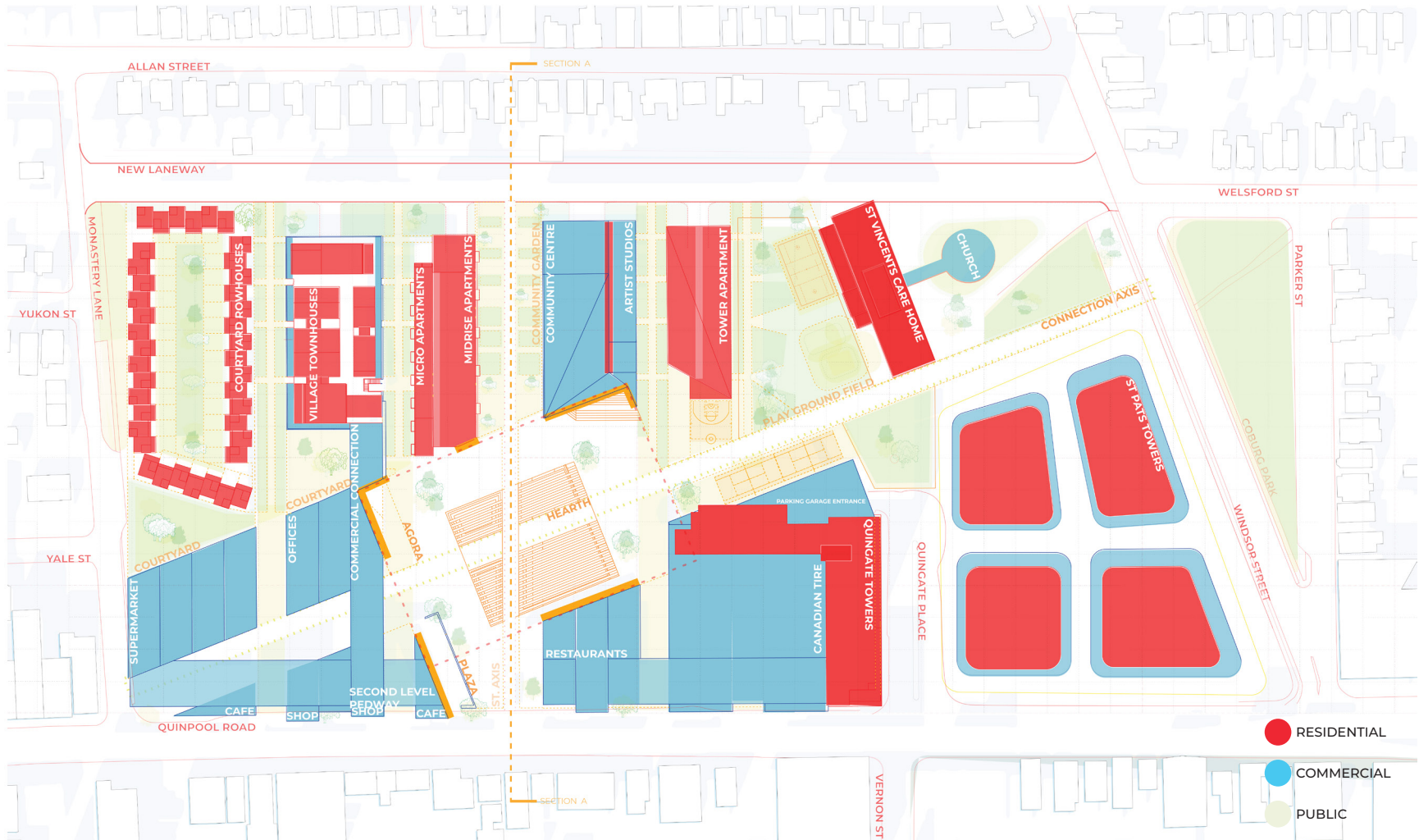
The Urban Design Plan of Quinpool Road includes a connection from Cobourg Park through to St. Vincent Care Home and diagonally across the site to connect with Quinpool Road and cross Monastery Lane. The addition of a new laneway addresses accessibility, traffic considerations and underground parking at Quingate place. The site is punctured and carved by public spaces whether through pedestrian paths, or the Agora figure.

courtyards and laneway-facing streetscapes, enhancing connectivity and accessibility within the neighborhood.

The design of these row houses features staggered alignment, with each home set back or forward by approximately 5 feet. This staggered arrangement ensures more private entrances, reducing direct sightlines between homes and fostering a sense of individuality and privacy. The backyards of these homes are designed with personal patios, offering residents a private outdoor space. Additionally, a shared communal central core with benches and tree cover provides a semi-public area for social interaction and community activities. This blend of private and communal spaces aligns with the principles of creating vibrant, livable urban environments.

The decision for the linear row to incorporate angular roof structures, adds visual interest and variety to the streetscape. The carved rooftop private patios further enhance the functionality and aesthetic appeal of the homes, providing sheltered outdoor spaces for residents. This design approach not only addresses the need for private outdoor areas but also integrates well with the overall urban plan. As Jane Jacobs emphasizes, "Good urban neighborhoods must offer a mix of uses and functions, which includes providing spaces for private retreat and public engagement" (1961, 152). The integration of row houses with these features supports a balanced and dynamic urban community.

Village Townhouse

The village townhouses, limited to a maximum of 4-5 storeys, feature playful angles in their gabled rooflines, punctured windows, and private patios. These townhouses are strategically perched atop the extended commercial main

The site section through the core axes shows the community center with the attached artist-in-residence and micro studios. Behind, you can see the new residential tower with its angular roofscape, matching the playful angles of the proposed new builds. Additionally, the interaction of adjacent buildings, planned to reach upwards of 25 storeys, is visualized. Meanwhile, the existing Quingate tower is retained as housing continues to be a priority in this urban design.

street, blending ground-floor commercial spaces with upper-floor residential units. This integration creates a dynamic urban environment where commercial and residential functions coexist, promoting a lively and interactive streetscape. As Jane Jacobs notes, "The district is full of eyes upon the street, the natural proprietors of the street" (1961, 45). The village townhouse design ensures that the commercial and residential elements support and enhance each other, contributing to the overall vibrancy of the area.

Unlike typical mixed-use developments, the village townhouses are designed in a carriage style, occupying corner units with two floors each. These homes offer two to three bedrooms, accommodating families of various sizes. Each unit includes a single balcony or patio, providing private outdoor spaces for residents. This arrangement fosters a sense of community within the residential area while maintaining privacy for individual units. The perched village design, with its elevated residential spaces above the commercial areas, creates a distinct separation between the public and private realms. This separation allows for a more controlled interaction between commercial activities and residential living, enhancing the overall urban experience.

The village townhouses share a main lower-level garden and interconnected pathways, linking six different buildings. This design promotes a communal living environment, with shared green spaces and walkways that encourage social interaction among residents. As Christopher Alexander emphasizes, "A city needs a variety of paths and places that are closely interconnected and that people can reach on foot" (1977, 55). The interconnected pathways of the

village townhouses align with this principle, creating a pedestrian-friendly environment that enhances connectivity and community cohesion. By combining ground-floor commercial spaces with upper-floor residential units, the village townhouses offer a unique approach to urban living that balances privacy, community, and accessibility.

Mid-Rise Shearing Residential Structure

The mid-rise building in the proposed urban design features two shearing structures connected by a central core that facilitates vertical movement across floors. The thinner of the two buildings accommodates micro apartments, maximizing both financial returns and affordability. These compact units are ideal for students and short-term renters, offering a cost-effective housing option in the city. The shearing design creates a dynamic architectural form, providing a variety of spatial experiences and optimizing the use of available land. This configuration not only enhances the visual interest of the building but also contributes to a diverse and adaptable urban landscape.
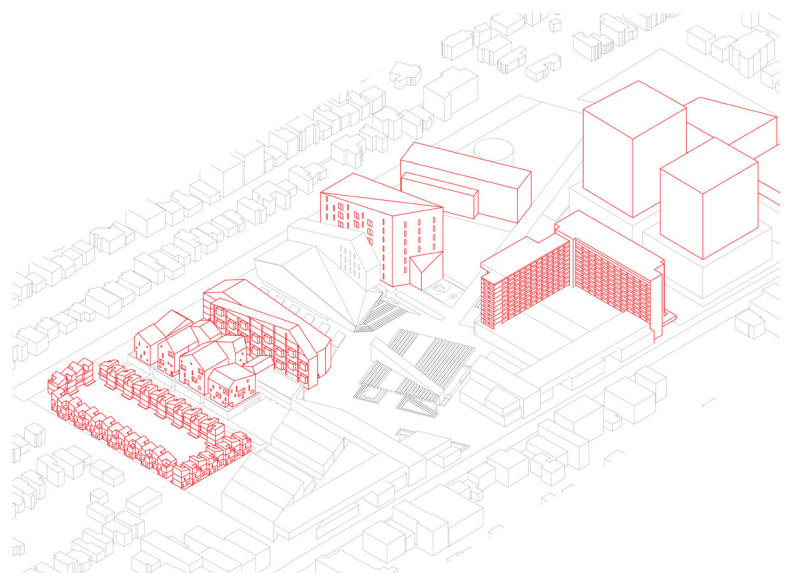
Highlighting residential typological interventions new and existing.

In contrast, the wider building houses standard apartments ranging from one-bedroom units to two-bedroom units with a den. This mix of apartment types caters to a broader demographic, including young professionals, small families, and downsizing seniors. By integrating different housing options within a single structure, the mid-rise building promotes social diversity and inclusivity. The central core acts as a shared vertical space, fostering interaction among residents and enhancing the sense of community. This typological approach differs from traditional single-function buildings by blending various housing needs into a cohesive, multifunctional structure that supports both economic viability and social sustainability.

Tower Housing

Incorporating a tower within the Missing Middle concept allows for the accommodation of a broader demographic, particularly addressing the needs of higher-density urban living. This tower is designed to house a mix of residents, including young professionals, small families, and retirees, offering a range of housing options. The typical architectural language of an apartment includes open floor plans, large windows for ample natural light, and efficient use of space, providing comfortable and functional living areas within an urban context. The tower's inclusion ensures a vertical density that complements the lower-rise residential types, creating a balanced and diverse urban environment.

The tower, with its angled roof, speaks to the residential language of the site by echoing the architectural features of the surrounding buildings. This design choice not only aligns aesthetically with the existing structures but also enhances the overall visual coherence of the urban landscape. The

angled roof serves as a distinctive element that blends with the site's residential character while rising up to meet the adjacent Quingate tower, creating a harmonious skyline. As urban designer Matthew Carmona notes, "Tall buildings can significantly contribute to the image and identity of a city, acting as landmarks and reference points within the urban fabric" (2014, 138). The tower's design integrates seamlessly with the residential fabric and promotes accessibility, fostering a cohesive urban community.

The urban residential section aims to systematically repair the broken urban fabric through diverse typological responses. By integrating row houses, village townhouses, mid-rise buildings, and towers, the design addresses various housing needs and promotes social diversity. Each typology is strategically placed to enhance connectivity, facilitate movement, and create a cohesive urban environment. This approach ensures that residential areas are well-integrated with commercial and public spaces, fostering a functional and inclusive urban landscape. The systematic application of these typological elements not only addresses the immediate housing needs but also contributes to the long-term resilience and adaptability of the urban fabric.

Chapter 6: Conclusion

Reflecting on Public Space as a Unifier

The role of public space as a unifier in urban design is critical in addressing the fragmented urban fabric seen in many cities, including the Quinpool Shopping Center site in Halifax. This thesis has drawn on urban typological studies and historical analyses of the site to propose a framework that employs public space as a primary driver of change. By prioritizing public space, the project aims to integrate diverse urban typologies, foster community connections, and enhance the overall urban landscape.

Historically, the Quinpool site has undergone significant transformations, from its origins with theological institutions to its current state characterized by monolithic commercial structures and auto-centric design. These changes have led to a fragmented urban density that disconnects residential and commercial areas. The proposed framework addresses these issues through strategic architectural interventions such as carving figures, puncturing boundaries, intertwining programs, and dynamic structures. These strategies aim to repair the disjointed block and create cohesive public spaces that serve as vibrant community hubs.

The framework emphasizes the importance of integrated urban greenbelts, dual frontage commercial corridors, multifunctional community plazas, and mixed urban housing. These elements work together to bridge diverse urban typologies and foster a sense of community. However, this project does not address the governance of public space, an essential aspect for ensuring its

effective use and maintenance. Future considerations should include exploring governance models for public spaces to ensure they remain inclusive and accessible.

The concept of the agora, historically a place of community discourse and political debate, serves as an inspiration for creating public spaces that promote social interaction and civic engagement. By integrating such spaces into the urban design, we can encourage community discourse and political debate, reinforcing the role of public spaces as central to urban life.

In conclusion, this thesis underscores the importance of public space as a unifying element in urban design. By employing a methodological framework grounded in historical and typological studies, the project demonstrates how targeted architectural interventions can transform fragmented urban areas into campus like communities. Future research and implementation should consider governance models for public spaces, ensuring they continue to serve their intended purpose as places of community interaction and civic engagement, much like the historical agoras, public plazas, and squares that inspired them.

References

Alexander, Christopher. 1977. *A Pattern Language: Towns, Buildings, Construction.* New York: Oxford University Press.

Benjamin, Walter. 2008. *The Work of Art in the Age of Its Technological Reproducibility and Other Writings on Media.* Edited by Michael W. Jennings, Brigid Doherty, and Thomas Y. Levin. Translated by Edmund Jephcott, Rodney Livingstone, Howard Eiland, and Others. Cambridge, MA: Belknap Press of Harvard University Press.

Blackmore, Olivia, and Ian Selig. 2024. "Still Vacant after All These Years." *The Coast Halifax*, May 5, 2024. https://www.thecoast.ca/news-opinion/still-vacant-after-all-these-years-17772061.

Boseman, J., and R. Dolley. 2019. Urbanization models and their impact on modern city planning. *Journal of Urban Studies*, 35, no. 2: 1-15.

Carmona, Matthew. 2014. *Public Places, Urban Spaces: The Dimensions of Urban Design.* New York: Routledge.

City of Halifax. 2023. Quinpool Road Area Demographic and Community Analysis. Halifax Regional Municipality.

Coastal Elite. 2019. "Quinpool District." Wikipedia, August 19, 2019. https://en.wikipedia.org/wiki/Quinpool_District.

Cox Brothers, Co. ca. 1906-1912. Laying Double Track for Halifax Electric Tramway, Possibly Quinpool Road, Halifax. Nelson Amiro, Nova Scotia Archives, 1986-132.

Gehl, Jan. 1987. *Life between Buildings : Using Public Space.* New York: Van Nostrand Reinhold.

Gehl, Jan. 2010. *Cities for People.* Washington, DC: Island Press.

Google Earth. 2021. "Imagery of Quinpool commercial district Halifax." Accessed January 2024. https://earth.google.com.

Graham, Wade. 2016. *Dream Cities : Seven Urban Ideas That Shape the World.* First edition. New York: Harper, an imprint of Harper Collins Publishers.

Gruen, Victor. 1960. *Shopping Towns USA: The Planning of Shopping Centers.* New York: Reinhold Publishing Corporation.

Gruen, Victor. 1964. The Heart of Our Cities: The Urban Crisis: Diagnosis and Cure. New York: Simon and Schuster.

Halifax Mural Festival. 2023. "Mural done by the great @junekima.rt for HMF 2022." Instagram photo, July 3-9, 2023. Accessed March 03, 2024. https://www.instagram.

com/p/CsbPXyHOe6z/?img_index=1.

Hill, Taylor G., and Megan MacGillivray. 2024. "Loneliness and Sense of Community Are Not Two Sides of the Same Coin: Identifying Different Determinants Using the 2019 Nova Scotia Quality of Life Data." *Journal of community psychology* 52, no. 1: 134–153.

Howard, Ebenezer. 1902. *Garden Cities of To-Morrow.* London: Swan Sonnenschein & Co., Ltd.

Jacobs, Allan B. 1993. *Great Streets*. Cambridge, MA: MIT Press.

Jacobs, Jane. 1961. *The Death and Life of Great American Cities.* New York: Random House.

Janson, Alban. 2016. *Fundamentals of Building Construction*. Pearson.

Koolhaas, R., S. Boeri, S. Kwinter, N. Tazi and H. U. Obrist. 2001. *The Harvard Guide to Shopping.* 1st edn. Cologne: Taschen.

Krier, Leon. 2011. *The architecture of community Leon Krier.* Washington, D.C: Island Press.

Krier, Rob. 1979. *Urban Space = Stadtraum.* London: Academy Editions.

Lerup, Lars. 2011. *One Million Acres & No Zoning*. New York: Architectural Association.

Levy, Michael, and Barton Weitz. 2009. *Retailing Management.* 8th ed. New York: Mc-Graw-Hill/Irwin.

Loukaitou-Sideris, Anastasia. 1997. "Inner-City Commercial Strips: Evolution, Decay: Retrofit?" *The Town Planning Review* 68, no. 1: 1–29. http://www.jstor.org/stable/40113438.

Lynch, Kevin. 1960. *The Image of the City.* Cambridge, MA: MIT Press.

Lynch, Kevin. 1987. *A theory of Good City form*. Cambridge, MA: The MIT Press.

NSA (Nova Scotia Archives database). 1893. Plan of the city of Halifax. Illustrated Map of City of Halifax, published by T.C. Allen & Co. https://archives.novascotia.ca/maps/archives/?ID=1234

NSA (Nova Scotia Archives database) Barrington Street near Blower, 1939. https://archives.novascotia.ca/eastcoastport/archives/?ID=6

Nova Scotia Archives. ca. 1967. Duke Tower and Scotia Square under construction at the corner of Duke Street and Barrington Street. https://archives.novascotia.ca/builtheritage/archives/?ID=136

Parolek, D. G., and A. C. Nelson. 2020. *Missing middle housing : thinking big and building*

small to respond to today's housing crisis. Washington, DC:Island Press.

Peluso, Salvatore. 2018. "Madrid. Plaza Mayor Turns into an Urban Park for Its 400th Anniversary." DOMUS, March 22, 2018. https://www.domusweb.it/en/news/2018/03/22/madrid-plaza-mayor-turns-into-an-urban-park-for-its-400th-anniversary.html.

Sandalack, Beverly, and Andrei Nicolai. 1998. *Urban Structure: Halifax.* Calgary: University of Calgary Press.

Sanderson, Warren. 1985. "The Plan of St. Gall Reconsidered." *Speculum* 60, no. 3: 615–32. https://doi.org/10.2307/2848178.

Sennett, Richard. 1994. *Flesh and Stone: The Body and the City in Western Civilization.* New York: W.W. Norton & Company.

Semper, Gottfried. 1989. *The Four Elements of Architecture and Other Writings*. Translated by Harry Francis Mallgrave and Wolfgang Herrmann. Cambridge, UK: Cambridge University Press.

Stavrides, Stavros. 2018. "Urban Porosity and the Right to a Shared City" In *Porous City: From Metaphor to Urban Agenda* edited by Sophie Wolfrum, 32-37. Berlin, Boston: Birkhäuser. https://doi.org/10.1515/9783035615784-005

Stefania, Sharene, Felia Srinaga, and Jacky Thiodore. 2020. "Typological Study of Public Plaza for Improving the Sense of Place in Glodok." In *3rd International Conference on Dwelling Form (IDWELL)*. 239-251. Atlantis Press.

Tarbatt, Jonathan, and Chloe Street Tarbatt. 2020. *The Urban Block : A Guide for Urban Designers, Architects and Town Planners*. London: RIBA Publishing.

The Guardian. 2016. "The Story of Cities, #32: Jane Jacobs v Robert Moses, Battle of New York's Urban Titans." *The Guardian*, April 28, 2016. https://www.theguardian.com/cities/2016/apr/28/story-cities-32-new-york-jane-jacobs-robert-moses.

Venturi, Robert, Denise Scott Brown, and Steven Izenour. *2017. Learning from Las Vegas.* Cambridge, MA: The MIT Press.