R E A N I M A T I O N :

Re-defining the Urban Network in
St. James Town, Toronto

by
Raymond Lai Man Fan

A thesis
presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Master of Architecture

Waterloo, Ontario, Canada, 2019

AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.
I understand that my thesis may be made electronically available to the public.

ABSTRACT

Urban intensification in the city of Toronto during the 1960s draws from the essential idea – "Tower in the Park", a concept that we now recognize as pervasively problematic. These neighbourhoods are flooded with criticism of gigantism, placelessness, a lack of street to building relationships, social and physical segregation. In addition, the privatization of public spaces renders a stagnant neighbourhood environment, and the inadequacy of public infrastructure does not support the needs of contemporary urban life in the city.

The work presented in this thesis focuses on St. James Town – one of the many "Tower in the Park" neighbourhoods, as a testing ground for strategies of revitalization. The reclamation of dysfunctional spaces that poses a threat to the urban condition, in turn, transforms the disadvantage into new opportunities for urban intensification. The site strategies laid out through this work encourages a fine-grained, diverse and dynamic urban environment that are site-specific and focuses on a sense of place. Change from large lot landholdings to smaller lot parcelization implies the promotion of incremental development, allowing for immediate response tailored for needs at a given moment in time. This approach breaks down the ownership structure and involves a variety of actors in the process of transformation. By reconstituting the network of relations between streets to building, building to parcels, parcels to block, and block to neighbourhood, the once homogenous built form of St. James Town brings about a new shift towards a diversely contrasting cityscape, ultimately showcasing the power of incremental systems of intervention.

ACKNOWLEDGEMENTS

To my supervisor, John McMinn: Thank you for your continual support, words of encouragement, critique and advice throughout the thesis. I am grateful to have been able to work with you on this thesis, thank you so much for all your help.

To my committee: Val Rynnimeri, thank you for guidance, support and providing the thesis a great foundation during the early stages. Rick Andrighetti, Thank you for your insightful feedback and advice during the review.

To my friend and housemate, Sameerah Aumjaud: Thank you for the good times and domestic rituals that brightens up the day and for your feedback and proofreading throughout.

To my family: Thank you for the love and support; without it, I would not have been able to achieve and accomplish my goals.

Thank you.

TABLE OF CONTENTS

LIST OF FIGURES (TBD)

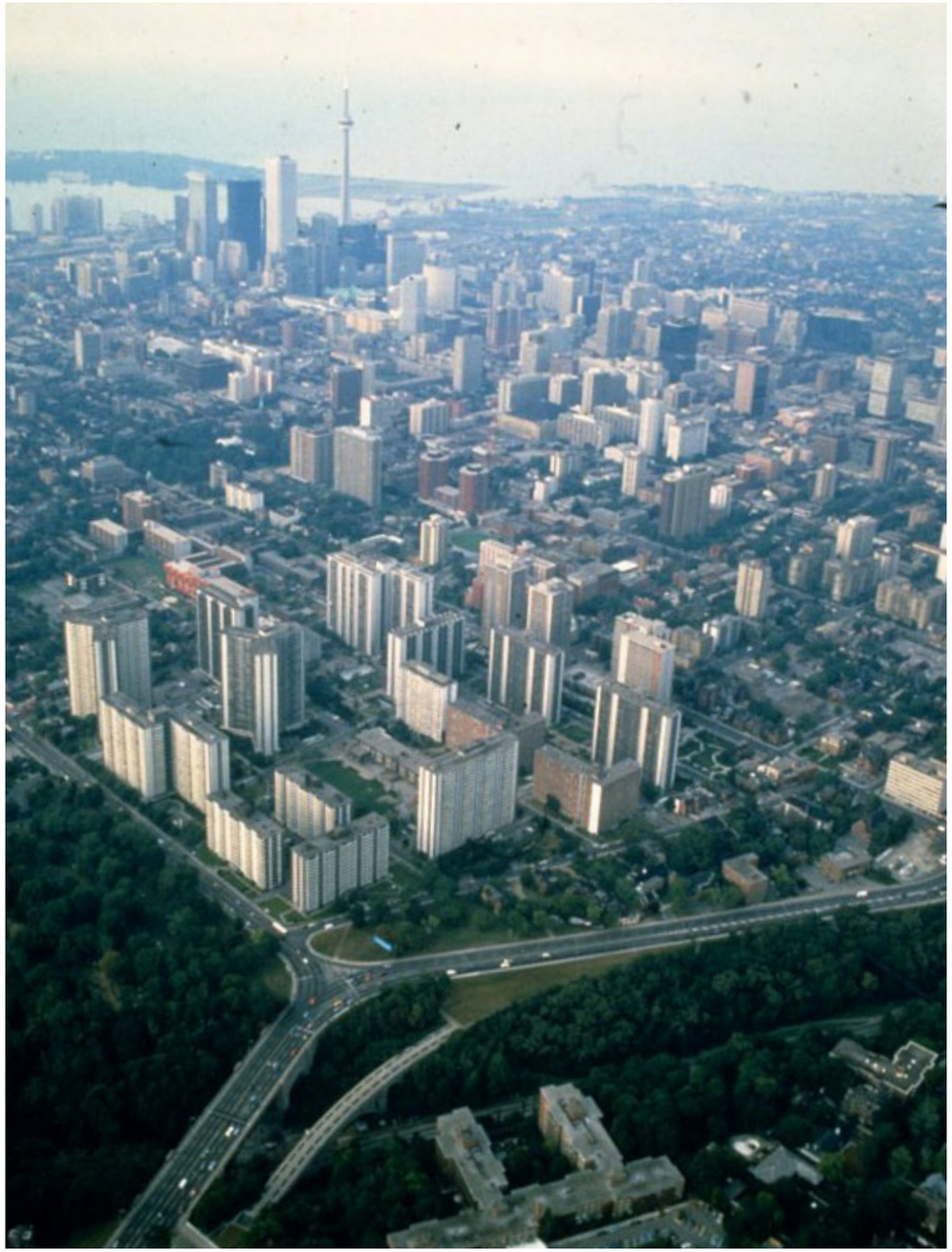


Fig. 0-1 Aerial View of St. James Town Toronto overlooking the downtown core in 1960s

INTRODUCTION

The 1950s marked a celebratory time for the City of Toronto. Following the second world war, the economy was growing, and the city was expanding rapidly. The post-war economy funded the development of a considerable portion of infrastructure across the city.[1] As Toronto continued to grow, the population soared simultaneously. It was not long until a desperate need of housing became apparent to city planners; an appropriate course of actions was urgently needed. Consequently, many mansions situated along the typical Torontonian long and narrow lots were converted to 6 to 9 storeys building apartments.[2] An increasing trend of underground parking amenity was established; this was linked to the growing tendency of automobile ownership.[3]

By the 1960s, a new morphology of residential development started booming: rather than exploiting the existing lot division of the city fabric, an escalating trend of land assembly had started to spread. The fundamental strategy of this new type of development accentuated the need for extensive building lots, this large plot of land hosted a single building footprint soaring towards the sky, and designed to hold a high-density of residential units. The land-to-building relationship was drastically transformed, resulting in the negligence of the building-to-street relationship.[4] The outcome was in the form of tall freestanding buildings surrounded by vast empty spaces. Ultimately, a collection of these towers formed a new neighbourhood typology - Tower in the Park.

The ideology of such planning was orchestrated to create an array of towers surrounded by natural elements, hence creating a park-like community. Unfortunately, the realisation of these neighbourhoods was far from what was intended. With huge setbacks from the lot boundary, buildings felt disconnected from the social and urban fabrics, and in many cases, completely divorced from streets. The notion of a superblock plan contributed to the detachment of the neighbourhoods from the existing city grid and became inherently anti-street.[5] The organization of spaces called for a separation of land uses, rather than a healthy integration of mixed uses, the latter being essential to vibrant urban life. Meanwhile, the structure of centralized ownership triggered the privatization of public spaces. These approaches eventually led to the segregation of neighbourhoods from the rest of the city.

The ground plane of this model of planning offers fewer pedestrian amenities, and the loss of architectural context along the streets renders a sense of

placelessness. Additionally, the situation was worsened by the increased attention to automobile development, such as major freeways and arterial roads. The planning of the city focused heavily on vehicular movements, rather than pedestrian movements or the social aspect of what the built form could provide. What was once envisioned as a vast green field of park amenities is now an endless expanse of asphalt paved parking, divided with yellow parking demarcation. The ground plane between the buildings is monotonous and underutilized, providing the impetus for the redevelopment proposal of this thesis.

This thesis hence focuses on one particular Tower in the Park neighbourhood, St. James Town, located at the north-east corner of downtown Toronto. Today, the cluster of apartment towers in St. James Town is a landing pad for many immigrant families. The spaces on the ground level continue to suffer from monotony and are not used to its full potential.

The structural components of the existing towers are in reasonably good condition, and able to support an extended life cycle. However, the other building components, such as exterior cladding, interior building systems, and interior finishes and fitments, having been poorly maintained, are in a state of degradation. Living conditions in St James Town are poor. Yet, the community houses more than 17000 residents and is the most densely populated neighbourhood in Toronto.[6]

This thesis draws on St. James Town as an ideal testing ground for the strategies of renewal within Tower in the Park neighbourhoods. The reclamation of such sites currently poses significant urban design challenges when it comes to their physical remediation, re-appropriation for new uses, and in the reinterpretation of their identities. By reconceptualising the dysfunctional open spaces and treating them as opportunities, these sites have the potential to act as catalysts for urban intensification. Due to their unique morphology, these tower formations possess great potential for re-adaptation. The site strategies presented through this thesis encourages a fine-grained, diverse and dynamic urban environment that is site-specific and highly emphasizes a sense of place.

The contemporary city is a complex system. The relationships between the underlying ecological, social, economic, political forces are dynamic, intertwining; and have a direct correlation with the formation of our urban environment. Toronto, like many other contemporary cities, is under a perpetual, fast-paced transformation; where the contemporary life, with its increasing complexity, is diverse and volatile. As a sharp contrast, Toronto's urban form is pervasively uniform, where the formation of the homogenous built environment is deeply influenced by capital accumulation and is frequently witnessed as a manifestation of economic forces. Repetition of typology, morphology, materiality, and methodology marks the ubiquitous sameness of contemporary urbanization, which is linked to the efficiencies of mass production.

This thesis hence proposes a series of design strategies through a set of building typology investigations. These approaches aim at understanding land patterns and ownership structure while redeveloping the street as a primary device to activate and diversify the urban landscape. The site strategies capitalise on the opportunities presented by existing conditions such as the underdeveloped and ambiguous open spaces towards the reanimation of the ground plan of St. James Town. In contrast to the Tower in the Park, the strategies embody a flexible character with a design approach that can morph with continually changing urban conditions. Parcelization of land lots suggests incremental development, allowing for emergent responses tailored for needs at a given moment in time. This approach breaks down the ownership structure and involves a variety of actors in the process of transformation. Ultimately, this thesis prioritizes the social parameters and the construction of built form that mediates through the heterogeneity and variability of urban life. Thereby, this work redefines the identity of Tower in the Park neighbourhoods, with the ultimate aim of breaking all the boundaries of alienation within the urban fabric.

INTRODUCTION END NOTES

1. Stewart, Graeme. 2007. “The Don Valley Parkway and Suburban Growth.” In Concrete Toronto: A guidebook to concrete architecture from the fifties to the seventies, by Graeme Stewart and Michael Mcclelland, 242. Toronto: Coach House Books.

2. Baird, George, and Barton Myers. 1978. “Vacant Lottery.” Walker Art Center 1-3, 6-51.

3. Therrien, Marie-Josee. 2007. “The Rise of Parking Garage.” In Concrete Toronto: a guidebook to conrete architecture from the fifties to the sevenites, by Graeme Stewart and Michael Mcclelland, 186. Toronto: Coach House Books.

4. Baird, George, and Barton Myers. 1978. “Vacant Lottery.” Walker Art Center 1-3, 6-51.

5. Jacobs, Allan. 1993. Great Streets. Cambridge: The MIT Press.

6. Barnes, Steve . 2011. Wellesley Institute: Canada’s densest neighbourhood, St. Jamestown, to possibly get new condos. March 11. Accessed January 29, 2019. http://www.wellesleyinstitute.com/housing/st-james-town-residents-feel-powerless-in-light-of-new-development-in-one-of-north-americas-densest-neighbourhoods/.

1

CHAPTER 1

1.1 The modernist manifesto and its influence on the Tower in the Park concept

Modernism or namely the paradigm of Functionalism was conceptualized in the early twentieth century by a group of Modernist architects that gave rise to the formation of the Congrès Internationaux d'Architecture Moderne (CIAM).[1] This avant-garde movement declared to provide revolutionary ideas that reform traditional ideas of architecture and develop solutions for problematic issues of the time.[2] Despite the involvement of many architects and thinkers, the architect, Le Corbusier had unduly dominated the movement. Many beliefs advocated by the CIAM are essentially the extension of Le Corbusier's approach to architecture and urbanism. [3] The following clause from the CIAM's declaration fully encapsulates some of the key defining principles of the movement:

> *"The idea of modern architecture includes the link between the phenomenon of architecture and that of the general economic system. The idea of "economic efficiency" does not imply production furnishing maximum commercial profit, but production demanding a minimum working effort…Town planning is the organization of the functions of collective life; it extends over both the urban agglomerations and the countryside…The chaotic division of land, resulting from sales, speculations, inheritances, must be abolished by a collective and methodical land policy. This redistribution of land, the indispensable preliminary basis for any town planning, must include the just division between the owners and the community of the unearned increment resulting from works of joint interest."* [4]

There is a pronounced theme of standardization as an argument for an economically viable option which promotes mass production of housing. The idea of a functionalist approach to planning stems from the rejection of the old city fabric, where the elimination of urban block forms and existing street patterns becomes a requisite. The group deemed the existing "medieval" urban fabric as detrimental and chaotic.[5] To regain control over the development of a city, a complete obliteration of the existing context is needed in order to apply a strict and radical reorganizational system. This organization focused on the separation of four functions: dwelling, work, recreation and transportation.[6]

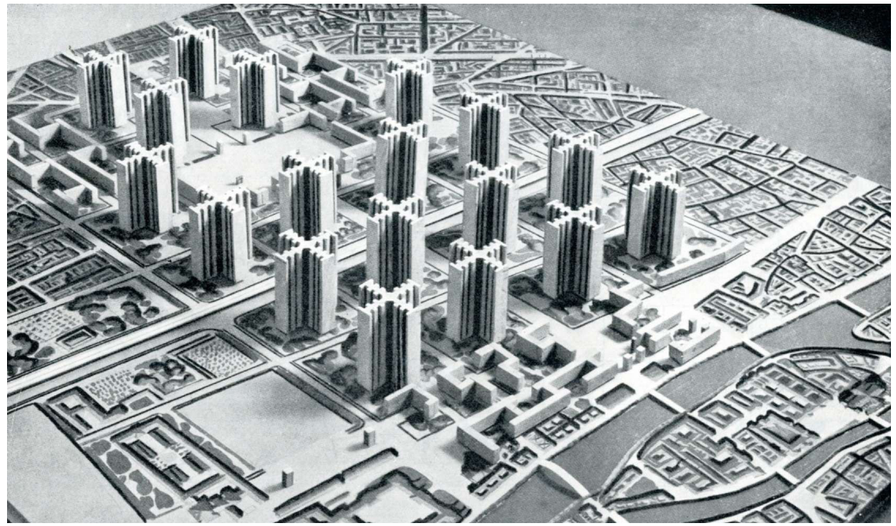


Fig. 1-1-1 Aerial View of Le Corbusier's Plan Voisin for Paris.

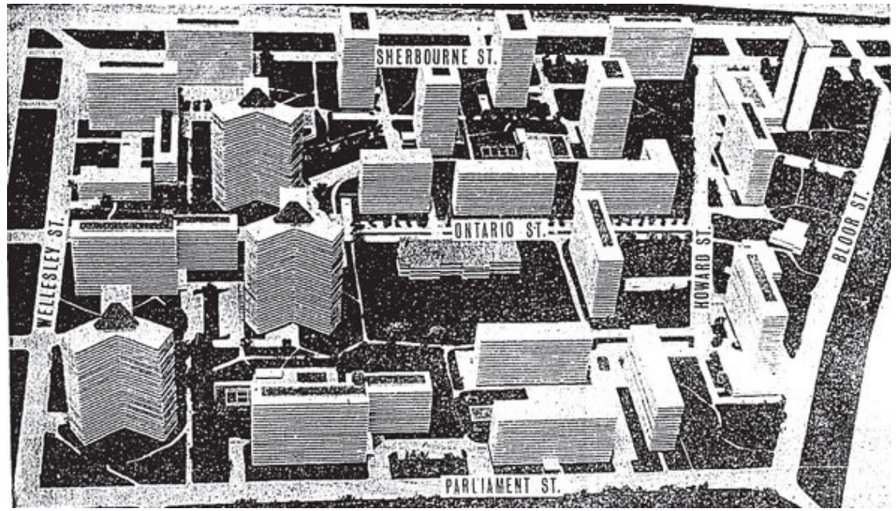


Fig. 1-1-2 Axonometric drawing for the St. James Town master plan in the 1960s

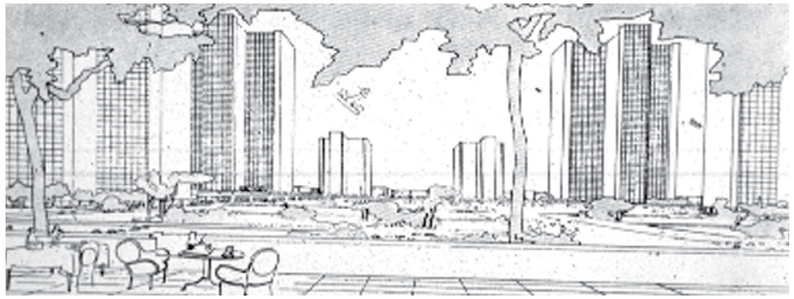


Fig. 1-1-3 Vignette of Le Corbusier's Plan Voisin for Paris

Fig. 1-1-4 Apartment block in a "Tower in the Park" neighbourhood in Toronto

While the CIAM group had no direct involvement with North American tower complexes,[7] there is no doubt that the concept of Tower in the Park neighbourhoods embodies the modernist doctrine in its entirety. Le Corbusier's Plan Voisin,[8] as seen in Figure 1.1.1/1.1.3, is an accurate representation of this vision; uniform heights, dominating structures forming the skyline, and empty public spaces devoid of any human life. These spaces are consistent with separation and introspection, with barriers and boundaries defining the space, and where community interaction is radically minimised. When comparing these images with the Tower in the Park neighbourhoods, their similarities become quite apparent; a repetitive high-rise typology, the exceedingly generous amount of open spaces, and the unrealistic desire to paint a natural environment filled with greeneries. As a whole, Tower in the Park neighbourhoods are fundamentally based upon the modernist utopian idea of a perfect lifestyle for the residents of the community. [9]

Consequently, critiques on modernist urban planning have a direct correlation to the underlying problems of the Tower in the Park concept. Randolph Hester in his book "Neighbourhood Space" describes the issues associated with the modernist ideal and its negative impact on urban neighbourhood spaces.[10] He suggests that contemporary urban development scenes embody issues of gigantism, privatization of public spaces, incomplete services, zoned-out land uses, and placelessness.[11] Similarly, the article "Towards an Urban Design Manifesto" by Allan Jacobs and Donald Appleyard[12] points out similar critiques on the principles conceived by the CIAM that could very well be describing issues of the Tower in the Park neighbourhoods. This framework implies a dominant focus on the two-dimensional organization of freestanding mass. Meanwhile, the negative space that consists of the public realm bears no apparent forethought and is a mere by-product of the architect's designed architectural form.[13]

The modernist manifesto was fixated on the organization of infrastructures, which fails to address the urban public life, which is the primary constituent of urban form. The failure of modernist principles accountable for the downfall of these neighbourhoods in Toronto, and as the city continues to evolve, the problems become more apparent.[14] The areas surrounding St. James Town are perpetually changing, but the conditions within the neighbourhood remain untouched. This phenomenon has led to further isolation of the area, hence urgently calling for a significant renewal of St James Town.

1.2 Influences of Automobile Advancement on the Planning of Tower in the Park Communities

Efficient mobility is one of the fundamental principles of the North American lifestyle: immense reliance is placed on cars, boats, airplanes and bicycles, among other means of transport. Travelling and exploring have become such an inherent part of our modern-day culture that it would be exceedingly difficult, if not impossible, to imagine a world devoid of contemporary transportation technologies. Due to this dependence, mobility arteries in the likes of railways, free-ways and subways eventually took priority over the creation of human-centred spaces.

By the early 1960s, the rejection of streets as a place for people and the expression of the community became common practice towards favouring efficiency, technology and speed as prime determinants of street design.[15] Ultimately, the planning of neighbourhoods in the expanding City of Toronto was primarily concerned with the efficient movement and accommodation of vehicles.[16] Toronto's neighbourhoods developed in the 1960s to 1970s were hence designed as satellite cities; often treated as places located entirely off the grid and independent from their surroundings.[17] The ideals of such development rely heavily on mobility, based on the assumption that every family would acquire ownership of at least one automobile. Food, shops and daily necessities were commonly consolidated towards a large shopping plaza; this transformed the entire ground plan of the neighbourhood into a deserted field of ambiguous open spaces. As residents were unable to identify the functionality of these spaces, the latter would generally be left deserted.

Figure 1.2.1 shows a sample along the Don Valley Parkway revealing nine Tower in the Park neighbourhoods. Each of these has strategically been placed at the junction of the freeway and major artillery roads. The location of these neighbourhoods has been heavily influenced by the adjacent network of transport infrastructure that would feed onto those neighbourhoods. All the nine precincts present one recurrent characteristic; the composition of each neighbourhood is formed by a cluster of high-density towers sitting on large parcels, with vast open spaces surrounding the towers, and with wide roads only serving as vehicular circulations. It also feels important to highlight that, while all the neighbourhoods bear similar features, they each constitute a very distinct configuration of those components, hence giving each precinct a particular relationship with its surrounding network.

All nine developments were once intended as a tower complex in a suburban context. However, according to the Central Area Plan of Toronto dating back to 1976, St James Town and Regent Park found themselves as part of Toronto's downtown core, as a result of rapid transformation and intensification, though their morphology and typology remain fundamentally different from the rest of the downtown core.[18] St. James Town is located at the Bloor St. and Sherbourne St. intersection, serviced by a primary subway system. It becomes apparent that

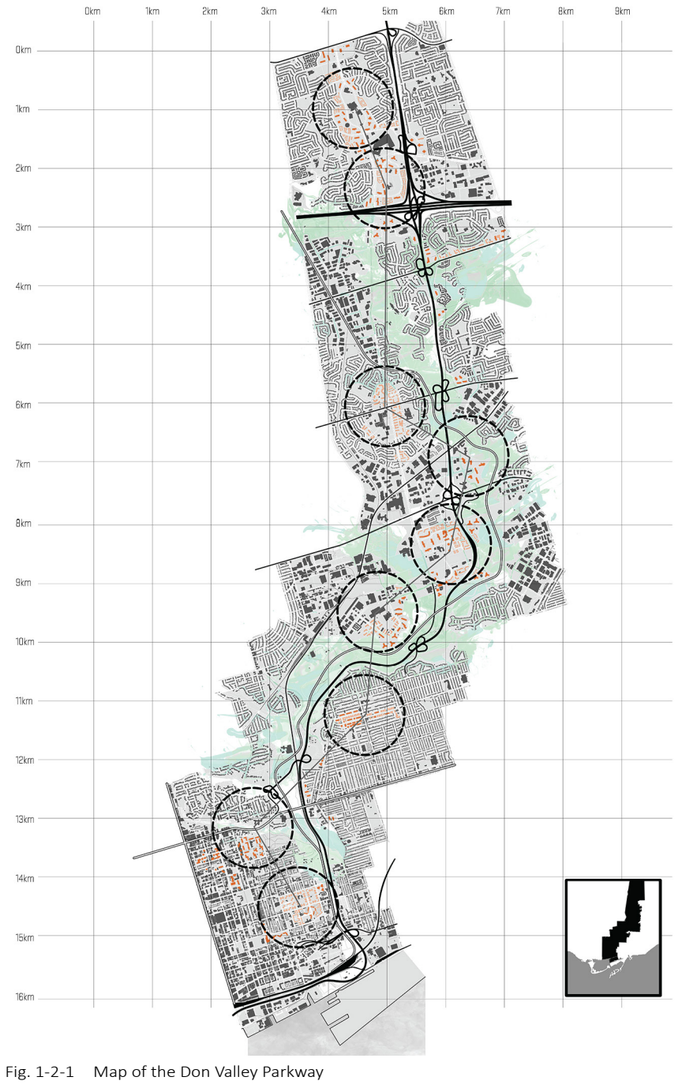


Fig. 1-2-1 Map of the Don Valley Parkway

the layout of the neighbourhood which favours vehicular movement over pedestrian circulation is an aspect that today presents itself as a hindrance to the efficient functioning of the neighbourhood. Furthermore, due to the reliable transit system established by the City of Toronto, the need for urban dwellers to own a car has declined considerably, making the overemphasis on vehicular mobility and the excessive supply of parking lots is increasingly redundant. The main problematic element currently posed by the typology of those areas is their inability to meet the current socio-communal needs of the demographics. Tower in the Park neighbourhoods are also now faced with a situation where the methods of re-appropriation of those vast empty spaces are greatly at question.

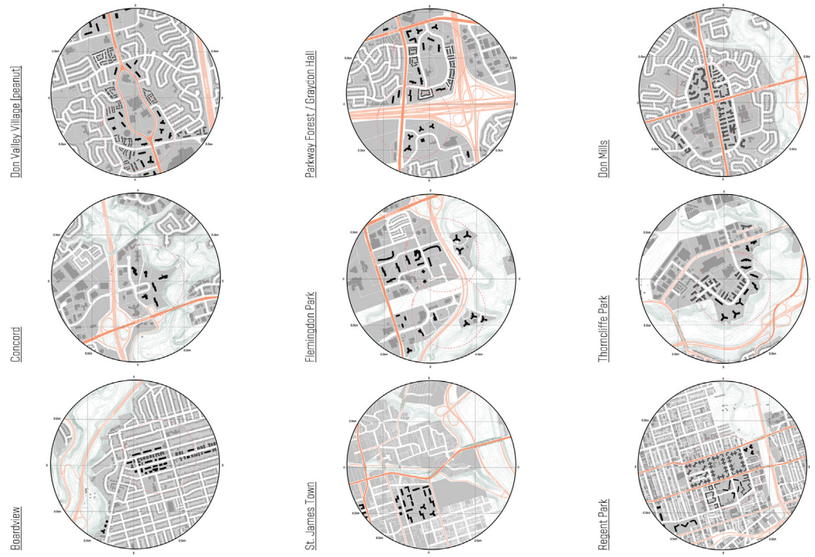


Fig. 1-2-2 Plan of 9 “Tower in the Park” neighbourhoods along the Don Valley Parkway

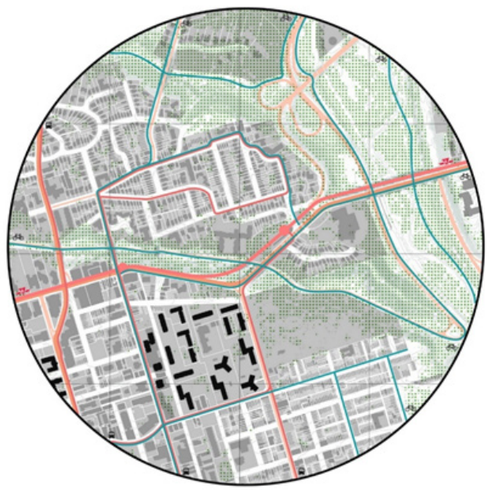


Fig. 1-2-3 Public transit network around St. James Town neighbourhood

Fig. 1-2-4 Designated area for vehicular circulation in St. James Town

Fig. 1-2-5 Typical ground floor condition in St. James Town

1.3 The traditional urban structure of Toronto versus the morphology of St. James Town.

Since the early days of Toronto's city planning, the urban structure was fundamentally based on lot subdivision. The study of the historical evolution of North Jarvis done by George Baird revealed that this developmental trajectory started since the 1850s and prevailed for over a century.[19] In reference to the study, in the 1950s, the trend started to shift: the strategy of land assembly took over and gained momentum in the 1960s.

This drastic change in the evolution of Toronto's urban structure was largely due to a new development trend started by private investors. Historically, the density of Toronto's Residential neighbourhoods was usually around 1.0.[20] Through the process of land assembly, developers were able to acquire larger parcels and have more flexibility with their development.[21] By going through re-zoning and building high-rise residential structures, landowners uncovered the potential of increasing the density from 1.0 to 5.0,[22] hence making the concept of high-density residential developments desirable and lucrative. These are the circumstances under which St James Town came to existence. Ironically, among the decisions made within the city council, these ideas were once received as "good planning", partly due to its desired ambition to supply an abundance of green spaces by virtue of the narrow but tall building form.[23] With the endorsement of the city, developers such as Cadillac, Greenwin, Meridian was given the authority, in the form of the "1969 Official Plan" to develop these modernist-influenced master plans at key nodes within the city. [24]

Fig. 1-3-1 Plan of St. James Town before 1960

Fig. 1-3-2 Redeveloped plan after 1960

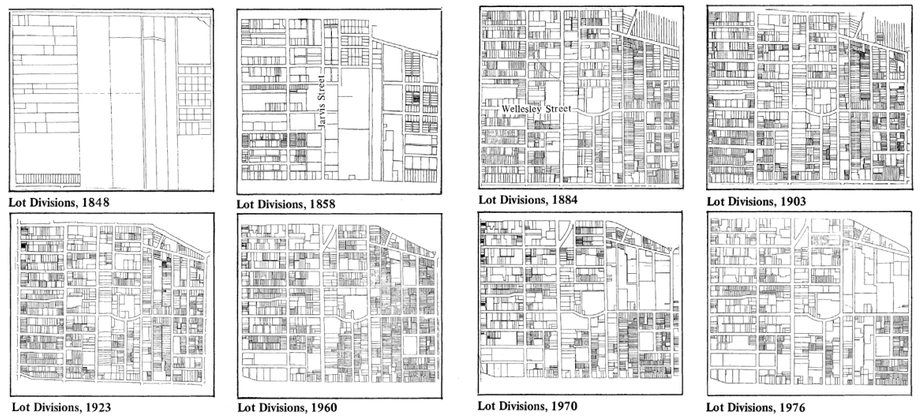


Fig. 1-3-3 Lot Division study around the St. James Town neighbourhood, conducted by George Baird

However, soon it became apparent that these principles were detrimental to neighbourhood development. The functionalist ideals promoted the eradication of the old. The credulous attitude towards the new has disregarded the incremental nature of the pre-existing small-scale urban form of Toronto. This has radically diverged the developmental trajectory of the precinct from its surroundings, hence alienating the neighbourhood completely. This experimental archetype of neighbourhood development failed to anticipate the shortcoming of large-scale redevelopment, mainly due to its lack of flexibility and adaptability over time.[25]

Over the past five decades, the City of Toronto has expanded tremendously, and the surrounding neighbourhoods of St. James Town have been reformed incrementally. The distaste towards the modernist planning regime among sociologists, architects and planners such as Jane Jacobs and Kevin Lynch, has led to new proposals; one that epiphanies the counter-position of its predecessor.[26] The last two decades also saw a dramatic shift in favour of preserving the historical fabric of the city, where planning guidelines such as the Heritage Conservation Districts and Tower Renewal Partnership have been deployed to preserve and enhance historic neighbourhoods.[27] As the Toronto downtown core continues its perpetual evolution, the condition of St James Town, on the other side, remains static. Meanwhile, the state of the towers is experiencing a severe decline. The exceedingly oversized urban structure incapacitates the adaptability of the precinct. Over time, this neighbourhood has gained a reputation as a planning anomaly, entirely disconnected from its surroundings. This short-sighted vision has prevented the neighbourhood from growing and adapting to the various growing needs of the population.

1.4 Zoning singularity and lack of mixed programming

"Advanced industrial societies took work out of the home, and then out of the neighbourhood, while the automobile and the growing scale of commerce have taken shopping out of the local community. Fear has led social groups to flee from each other into homogenous social enclaves. Communities themselves have become lower in density and increasingly homogeneous."[28]

The influence of the functionalist ideas which focuses on compartmentalization consolidated various activities into multiple sectors, programs and functions that are stringently segregated and dissociated from one another. Consequently, the planning of Toronto neighbourhoods in the 1960s ruled out elements of work, commerce, restaurants off its agenda, dedicating space solely to a massive residential quarter. The romanticism of a home without the pollution of the busy city life, surrounded by nothing but endless fields of greenery, was an American dream that everyone sought for.

Fig. 1-4-1 Homogenous environment in St. James Town

This rigid organization of the plan determined that streets were to be dedicated to traffic; away from pedestrian circulation, open spaces would be reserved for greeneries, buildings strictly serve residential purposes, and public plazas would be the only spaces dedicated to the community. The concept of separation of activities in neighbourhoods such as St. James Town induced an urban form that disassociates building from sidewalks, sidewalks from streets. The lack of interdependency of urban components renders a homogenous environment that strictly offers a single function of a given space. There is no apparent reason for anyone to visit the site; hence it became a precinct which only the residents of the neighbourhood would access, thus further isolating St James Town from the rest of the city.

Fig. 1-4-2 Redundant fence condition

Fig. 1-4-3 Lack of pedestrian activities at the ground plane

The lack of programming in the Tower in the Park neighbourhood has demoted the vibrancy of street-level activities one would find in a mixed-use neighbourhood.[29] Instead, these activities are relocated to large shopping centres; it could be argued that the development of shopping centres are increasingly superior in the promotion of urban activities than one would see in the privatized neighbourhood.[30]

Fig. 1-4-4 Active retail frontage

Fig. 1-4-5 Monthly parking rental signage- indicates over supply of parking

The programmatic issues within these neighbourhoods have gain awareness over the last decade, owing to the contribution made by Graeme Stewart and ERA Architects who strongly advocated for the Tower Renewal initiative.[31] The launch of this initiative has prompt a new perspective towards these apartment neighbourhoods. Recognizing that the “single-use residential zones” which forbids commercial and institutional activities are barriers to the growth of these neighbourhoods.[32] The partnership with the City of Toronto has enacted the residential apartment commercial (RAC) zoning that beginning to revamp the neighbourhoods with small scale interventions.[33] These small scale interventions have progressively impacted the social life of the communities and promote neighbourhood resiliency. Even though these schemes currently have a modest impact on the overall population, but undoubtedly this incremental process could potentially have a much greater impact on the larger whole of the precinct in the long-run.

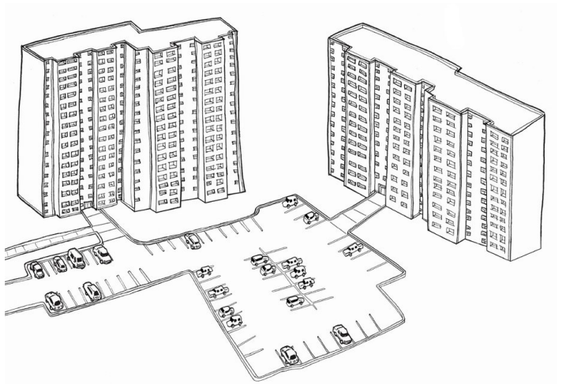


Fig. 1-4-6 R.A.C. Zoning illustration- pre-existing condition

Fig. 1-4-7 R.A.C. Zoning illustration- proposal

Fig. 1-4-8 R.A.C. Zoning- informal market in the “tower in the park” neighbourhood

Fig. 1-4-9 R.A.C. Zoning- temporary structures

Fig. 1-4-10 R.A.C. Zoning- shipping crates for small-scale businesses

1.5 Long-term deferred maintenance – deterioration of the building fabric

The rise of the extensive stock of modernist towers in the City of Toronto was a ramification of the immigration boom during the post-war period.[34] A noticeable portion of these towers have now passed 50 years of service life, reaching the end of their life cycle; they are in desperate need of renewal. Ted Kesik in the article “Durability is Only Skin Deep”, argued that these towers built in the 1960s have benefited from the durability of the reinforced concrete structural system.[35] Despite this fact, the deterioration of the towers is widely evident, and this is largely due to the building envelope system.[36] The outdated building envelope technology is not particularly suitable for the Canadian climate. The aging of these systems contributed to their failure, and now the cost of energy demands to sustain the tower has become increasingly significant.[37] These aging towers possess latent challenges, and the declining built fabric urgently calls for major renewal. However, incentives for restoration are yet to be devised, and tower-owners are yet to feel concerned and take the initiative to resolve the issue.

This situation is bound to cause serious problems. As a matter of fact, there has been a series of fire incidents that have recently occurred in St James Town. On August 20 2018, the tower on 650 Parliament St. in St James Town caught fire due to a major electrical failure. The fire caused the displacement of over fifteen hundred residents, leaving many families without a home to return to. The property manager eventually posted a notice claiming that residents will likely not able to move back to their apartments until early 2019.[38] Evidently, these towers are mostly at risk and in great need of a renewal strategy.

In the light of what has been previously discussed, we are now faced with a severe situation of building decay, as well as a clear disinterest from the owners and the authorities to act in regards to the issue. The future of St James Town is therefore largely at stake, and there is a great urge for the implementation of efficient, socially-inclusive strategies to be adopted towards the renewal of the neighbourhood, especially in a time where Toronto’s housing demands are wreaking havoc.

Fig. 1-5-1 Broken window in St. James Town apartment

Fig. 1-5-2 Apartment fire in St. James Town on August 20th 2018

1.6 Economic turn-around: the future of St James Town

Today, Toronto constitutes one of the fast-growing metropolitan regions, being the second city in North America with the most high-rise buildings over twelve storeys.[39] High-rise residential currently account for the dwelling of thirty percent of the population.[40] With the endless intensification of the downtown core, land supply is becoming increasingly scarce, hence increasing the demand for high-density residential structures. Therefore, urban development strategies and provincial planning policies catering to the Greater Toronto Area strongly advocate for high-rise development over single-family dwellings.[41] This short supply of single-family homes has significantly increased the value of the latter, and affordability is, therefore, an ever-growing problem.

Despite the abundant supply of condominium dwellings, the nature of the economic forces has taken advantage of the housing market as an opportunity to maximize profit. Instead of relieving the housing demand of its increasing pressures, an unusual amount of condominium units is being bought off by foreign investors, units which are then rented out at a tremendously high cost, or worse, remain tenantless. The financialization of housing is exploited by developers, using this highly competitive housing market for their capital growth and erecting more of the same typology of dwelling rather than supplying a healthy mix of building types.[42]

Fig. 1-6-1 Expanding condo market in downtown Toronto


Fig. 1-6-2 Regent Park before revitalization

Fig. 1-6-3 Condominium towers as catalysts for renewal

For the past decade, condominium neighbourhoods have been acting as catalysts for restoration and renewal, where the insertion of high-rise towers has revitalized older, decaying neighbourhoods. In some cases, like Regent Park in Toronto, the process of gentrification involves a complete demolition of existing post-war public housing, while brand new market housing and social housing are erected in its replacement. Planners and developers believe that the introduction of condominium towers and the attraction of different income groups will improve the quality of the urban environment.

Martine August, an urban planning professor, argues that mixed-income redevelopment also has its downsides, an aspect that should be brought to policy-makers' attention.[43] Through her research, she established that the most disadvantaged families do not generally benefit from the improvements of the neighbourhood since they generally tend to move out of the precinct due to the inflation of the cost of living.[44] Furthermore, tension is likely to emerge between different income and social groups, causing unforeseen conflicts between residents. These redevelopments may also dismantle the current networks and bonds of the community that exists prior to revitalization.[45] Altogether, August argues that, in practice, strategies for redevelopment and revitalization sometimes miss the intent for which they were devised due to a lack of consideration for the social fabric.[46] Furthermore, the influx of condominium high-rise could potentially disrupt the identity of existing neighbourhoods and trigger bigger issues in regards to social belonging. It is hence imperative that proposed re-developments for St James Town take special care into ensuring community inclusiveness and maximizing social participation.

While the criticism of condominium towers is common practice, it also feels important to acknowledge that the typology brings positive reinforcement to the built environment. The City of Toronto issued a “tall building design guideline”[47] in 2013 to help maintain a standard for design quality, and many recently constructed tall buildings have adopted these principles in their design.

The tower and podium combination is a typology that has also become very widespread in Toronto’s urban fabric. The promotion of the “base building” allows the design to “frame the public realm, articulate entrances, and assist in the creation of an attractive and animated public realm which provides, safe, interesting, and comfortable pedestrian experience.”[48] The quality of this building type enhances the character of the urban environment as well as the user experience by cause of the attentiveness to the human scale, which is precisely what post-war towers failed to do.

Even though these building types are generally branded to inspire the middle-class lifestyle, and tend to neglect lower-class residents, the capital gain from the developments represent a significant income for the city. The fact that developers are willing to provide additional maintenance to the surroundings of their building also contributes to improving the overall quality of the neighbourhood. The introduction of middle-class residents also introduces a higher purchasing power, which helps sustain local businesses. As a consequence, the flourishing of local businesses and commerce at street level increases the dynamics and the vitality of the urban environment.

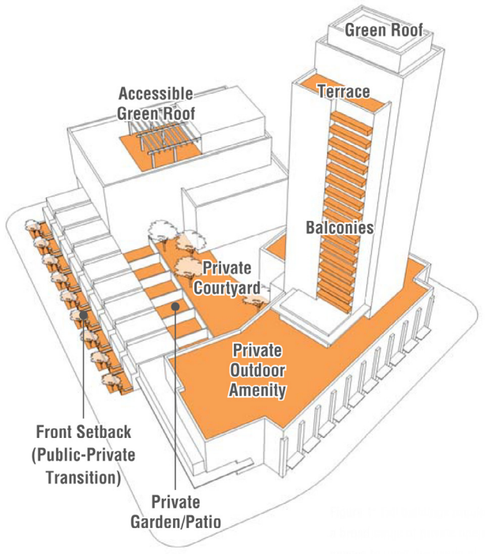


Fig. 1-6-4 Tall Building guidelines promotes variety of open spaces at the podium level

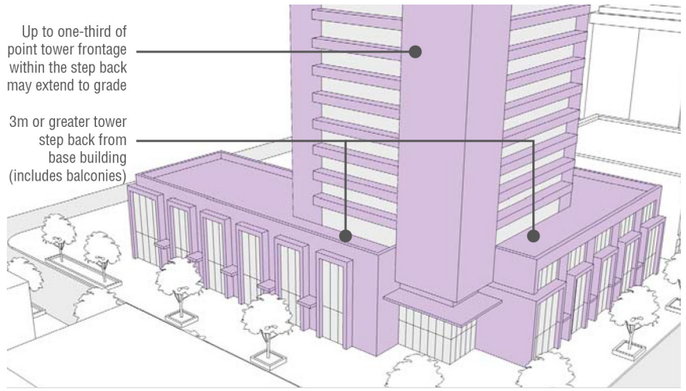


Fig. 1-6-5 Tall Building guidelines- setback requirements

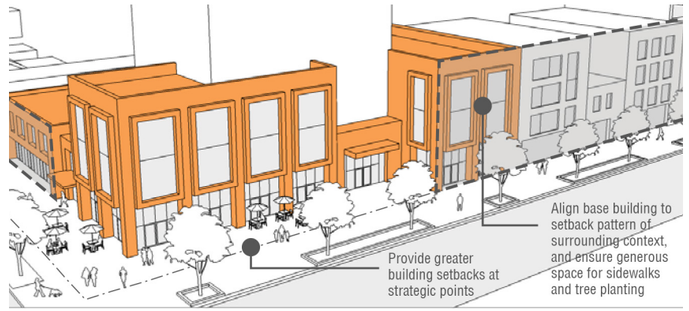


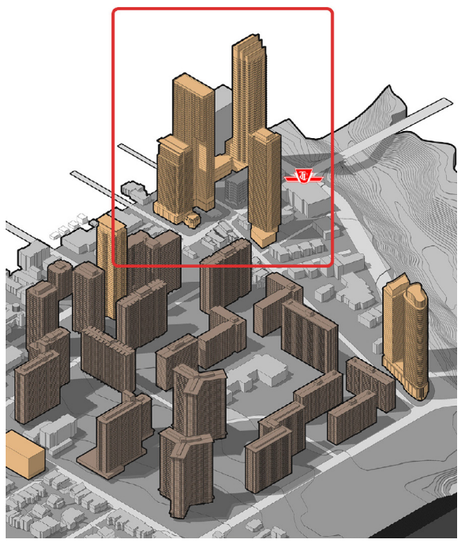
Fig. 1-6-6 Tall Building guidelines- street conditions

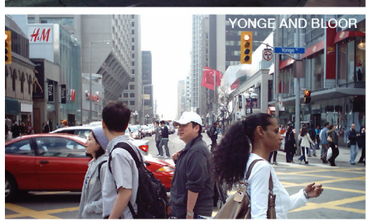
This model of intensification through high-rise developments has already been adopted in many parts of Toronto; this could be observed at major intersections such as Yonge Street/ Finch Street, Yonge Street/ Eglington Street and Yonge Street/ Bloor Street. A combination of extreme density, concentrated activities, middle-class population and most importantly, direct access to the city’s major public transportation system – Toronto Transit Commission (TTC) often will transform the area into a preeminent urban node. When observing the intersection of Bloor St. and Sherbourne St., a very similar trend has taken place. Within the last decade, there are four residential high-rises proposed/ constructed near this intersection, and a few undergoing the planning process.[49] With the increased density and proximity to the subway line, there is indeed tremendous potential for the intersection in manifest into a high-density urban node that would radically transform the neighbourhood as a whole.

Therefore, it can be drawn that, despite being widely criticized, condominium towers still contribute positively to the urban fabric. The following questions remain: how to maintain long-term stability in condominium neighbourhoods? Is the adaptability of this ownership structure a challenge for future changes, especially when consideration is given to building life cycle issues? With the extensive multiplication of the tower and podium combination, how to provide better design so that they do not end up as the next generation of the post-war residential towers?

All in all, the underlying problem of St. James Town stems from the planning principles conceived by dated functionalist theories, these underlying urban structure set up in the 1960s have failed to adapt to today's context. Little to no change occurred since the neighbourhood was developed, rendering it into an anomaly. The contemporary environment constitutes divergent forces that are often volatile; therefore, the urban form is required to be versatile and diverse. The revitalization of St. James Town should attend to the changing needs of the public realm and facilitates diversity and inclusion rather than exclusion.

Fig. 1-6-7 (left) condominium high-rise at Bloor and Sherbourne St., Fig. 1-6-8 (right-top) Yonge and Finch intersection, Fig. 1-6-9 (right-middle) Yonge and Dundas St., Fig 1-6-10 (right-bottom) Yonge and Bloor St.





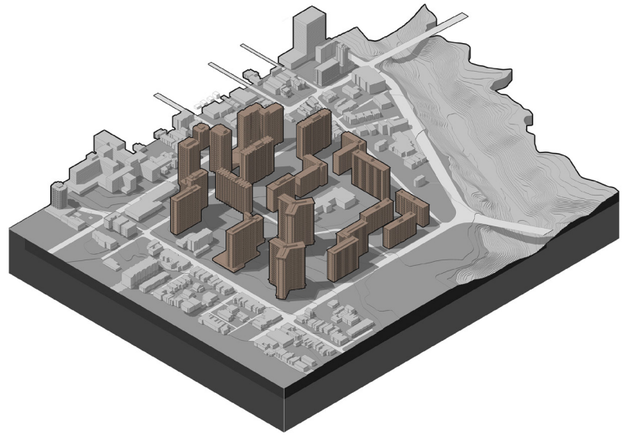


Fig. 1-6-11 St. James Town in 1970s

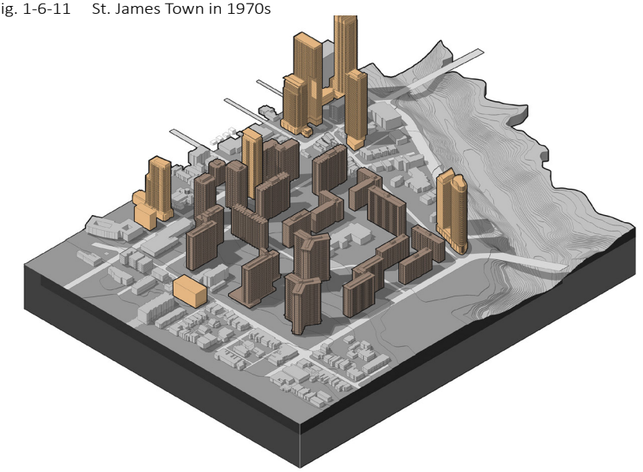


Fig. 1-6-12 St. James Town in 2010- 2019

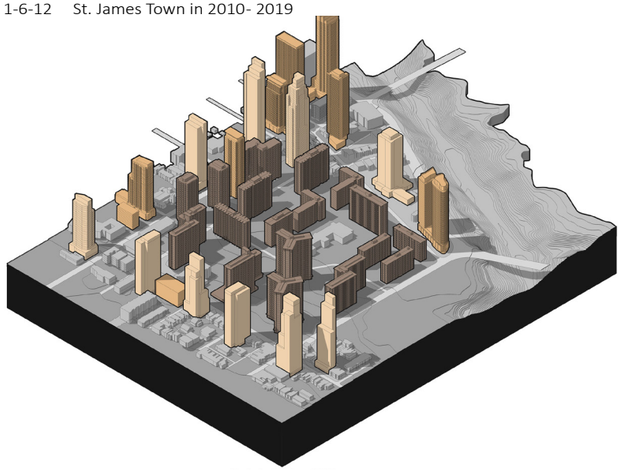


Fig. 1-6-13 St. James Town- Projected Future

CHAPTER 1 END NOTES

1. Mumford, Eric. 2000. The CIAM Discourse on Urbanism, 1928-1960. Massachusetts Institute of Technology.
2. Ibid.
3. Ibid.
4. Ibid.
5. Ibid.
6. Ibid.
7. Ibid.
8. Le Corbusier. 1967. The Radiant City: Elements of a Doctrine of Urbanism to be Used as the Basis of Our Machine-age Civilization. Orion Press: Minnesota.
9. Sewell, John. 1993. The Shape of the City. Toronto: University of Toronto Press Incorporated .
10. Hester, Randolph. 1976. Neighbourhood Space. John Wiley And Sons Inc.
11. Ibid.
12. Jacobs, Allan, and Donald Appleyard. 1987. “Toward an Urban Design Manifesto.” Journal of the American Planning Association (Journal of the American Planning Association) 112-120
13. Trancik, Roger . 19867. Finding Lost Space: Theories of Urban Design. Wiley.
14. Sewell, John. 1993. The Shape of the City. Toronto: University of Toronto Press Incorporated .
15. Jacobs, Allan. 1993. Great Streets. Cambridge: The MIT Press.
16. Stewart, Graeme. 2007. “The Don Valley Parkway and Suburban Growth.” In Concrete Toronto: A guidebook to concrete architecture from the fifties to the seventies, by Graeme Stewart and Michael Mcclelland, 242. Toronto: Coach House Books.
17. Ibid.

18. Mirabelli, Julian. 2018. TOcore: The Transformation Vision for the Future of Downtown. July 27. Accessed December 23, 2018. http://urbantoronto.ca/news/2018/07/tocore-transformative-vision-future-downtown.
19. Baird, George, and Barton Myers. 1978. “Vacant Lottery.” Walker Art Center 1-3, 6-51.
20. Caulfield, Jon. 1974. The Tiny Perfect Mayor. Toronto: James Lorimer and Company.
21. Ibid.
22. Ibid.
23. Ibid.
24. Ibid.
25. Barbour, Gordon, Ombretta Romice, and Sergio Porta. 2016. Sustainable plot-based urban regeneration and traditional masterplanning practice in Glasgow. Glasgow: University of Strathclyde.
26. Jacobs, Allan, and Donald Appleyard. 1987. “Toward an Urban Design Manifesto.” Journal of the American Planning Association (Journal of the American Planning Association) 112-120
27. Heritage Preservation Service. 2012. Heritage Conservataion Districts in Toronto: Procedures, Policies and Terms of Reference. Toronto: City Planning Division.
28. Jacobs, Allan, and Donald Appleyard. 1987. “Toward an Urban Design Manifesto.” Journal of the American Planning Association (Journal of the American Planning Association) 112-120
29. Jacobs, Jane . 1961. The Death and Life of Great American Cities. New York : Random House.
30. Müge, Rıza, Faslı Mukaddes, and Erbilen Mustafa. 2016. “The Assement And Impact Of Shopping Centers: Case Study Lemar.” Open House International (Open House Int) 98-103.
31. Tower Renewal Partnership. 2017. Tower Renewal Blog: Launching the RAC Zoning. July 6. Accessed January 29, 2019. http://towerrenewal.com/launching-the-rac-zone-event/.

32. The Centre for Urban Growth and Renewal. 2012. Strong Neighbourhoods and complete communities: A new approach to zoning for apartment neighbourhoods. Toronto: United Way Toronto.

33. Thorpe, Josh, Carl Shura, and Simon Rabyniuk. n.d. RAC Zone. Accessed January 29, 2019. http://www.raczone.ca/.

34. Canada Mortgage and Housing Corporation. 1987. Housing in Canada, 1945 to 1986 : an overview and lessons learned. Ottawa: Canada Mortgage and Housing Corporation.

35. Kesik, Ted. 2007. “Durability Is Only Skin Deep.” In Concrete Toronto: a guidebook to concrete archtecture from the fifties to the seventies, by Graeme Stewart and Michael Mcclelland, 312-313. Toronto: Coach House Books.

36. Ibid.

37. bid.

38. CBC news. 2018. Residents displaced by St. James Town fire search for housing as deadline to leave hotels rooms. August 31. Accessed January 28, 2019. https://www.cbc.ca/news/canada/toronto/650-parliament-street-fire-hotels-regent-park-1.4805719.

39. Daily Hive Toronto Staff. 2017. Toronto has more high-rise buildings than Canada’s next 10 biggest cities combined. February 02. Accessed January 29, 2019. https://dailyhive.com/toronto/toronto-high-rises-canada.

40. CBC News. 2017. Toronto highrise living by the numbers. May 23. Accessed January 29, 2019. https://www.cbc.ca/news/canada/toronto/toronto-highrise-living-by-the-numbers-1.4127019.

41. Williams, Mike Collins. 2012. The Changing Face of Urban Development in the GTA. February 7. Accessed January 29, 2019. http://urbantoronto.ca/news/2012/02/changing-face-urban-development-gta.

42. Mcmahon, Tamsin. 2016. Foreign buyers flocking to Toronto’s downtown condo market. April 7. Accessed January 29, 2019. https://www.theglobeandmail.com/real-estate/the-market/one-in-10-newer-toronto-condos-owned-by-foreign-buyers-cmhc/article29551058/.

43. August, Martine. 2018. “Urban Form and Social Energy of the City, presentations.” University of Waterloo.

44. Ibid.

45. Ibid.

46. Ibid.

47. City of Toronto. 2013. “Tall Building Design Guidelines.” Toronto.

48. Ibid.

49. Novakovic, Stefan. 2016. DRP Assesses 58-storey Rental Tower at 591 Sherbourne. http://urbantoronto.ca/news/2016/06/drp-assesses-58-storey-rental-tower-591-sherbourne, 17: June.

CHAPTER 2

2.1 Typology: Streets to Building relationship

Building typology is an essential component in the creation of urban form. The central concern about the development of Tower in the Park neighbourhoods is the invention of a new building typology, one that defies the nature of all pre-existing types vital to the morphology of the city. The typical lot in Toronto is defined as long and narrow, with a street frontage ranging between 20 to 50 feet. Its depth can span up to 150 feet on average and, in some cases, it faces a lane frontage at the opposite end. The other two sides of the lot are usually adjoined to adjacent lots.[1] The precise character of such parcel would only mean that a particular building typology was formulated at the same time the lot was conceived, with an assumption that these buildings would correspond to the arrangement of the lots.[2]

The relation between lot and building is crucial in the development of the urban form. Detached residential dwellings, semi-detached housing, row houses, stacked townhouses or mid-rise apartment buildings - they all work within the premise of the typical lot and establish a relationship between the parcel and the built form. Irrespective of the dwelling type, the relation between the streets to parcel frontage to building face is always established. This expresses the front and back of the built form and also defines what is public and private. This was a principle that constantly prevailed until the concept of Tower in the Park was established.

The lot separation strategy of Tower in the Park neighbourhoods is based on large parcels. In the case of St James Town, parcels can span over extents as large as 300 feet by 650 feet. Generally, the building footprint only takes up to 30 percent of the lot area. The towers are usually positioned on large islands, with the large tower blocks emerging straight from the ground. (Fig) The adjacent streets are closed off and not continuous through the site, disrupting the neighbourhood's circulation. Furthermore, buildings are set back far away from any related streets, hence establishing a clear disconnection between the buildings and surrounding urban activities. Thus, the front to back relationship is lost, and the relations between public and private are dissolved into one large privatized zone.

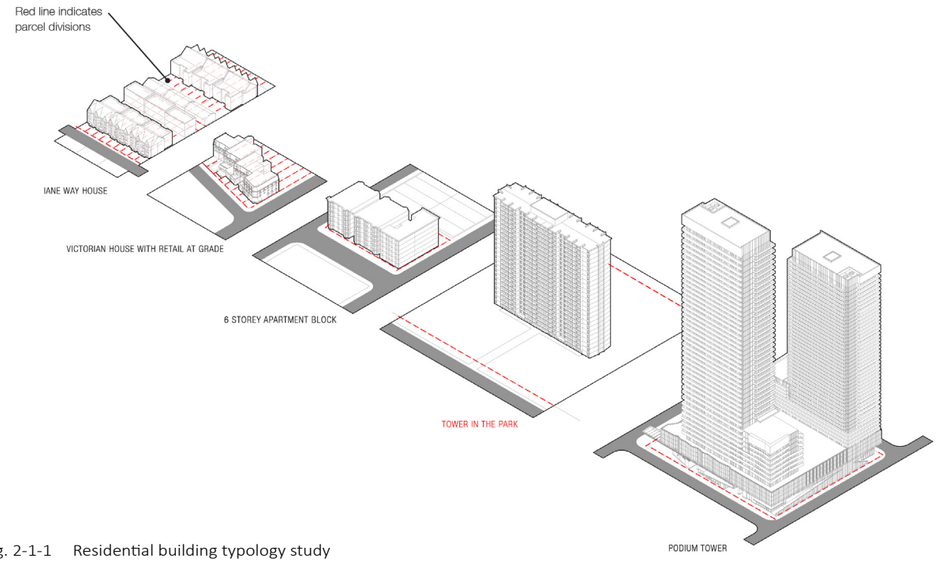


Fig. 2-1-1 Residential building typology study

With the aim of reviving and readapting this typology, George Baird in the article 'Vacant Lottery' described 4 essential principles: [3]

1. To reconstitute a formally effective relationship of building to lot, to land and to street
2. To reconstitute the public space of the street itself.
3. To establish a new formal hierarchy of open space in the precinct: private garden, collective garden and public garden
4. To reconstitute the formal relationship of street to park.

Fig. 2-1-2 Typical "tower in the park" condition- building block sitting in large open spaces

Recent developments of the podium-towers typology have attempted to re-establish previous relationships that were once present in prior typologies, thereby reinventing the post-war towers. As mentioned in section 1.5, the Toronto Tall Building Guidelines sets standards to enhance the design quality of the tower typology to promote vibrancy in urban environments. However, this type of development is highly driven by economic factors, where the efficiency of mass production is often the driving force behind most condominium design. While the intention of this typology tries to promote vibrancy on the street level, the endless repetition of architectural elements often alludes to a homogenous environment, which replicates the atmosphere of Tower in the Park neighbourhoods. (fig 2.1.3/ 2.1.4)

Fig. 2-1-3 (left) Design of 575 Bloor St. East in St. James Town
Fig. 2-1-4 (right) Proposed design of 609 Sherbourne St. in St. James Town

It is important to highlight that this thesis does not advocate for the complete prohibition of condominium developments. The latter is essential to the shaping of our urban environment, as it is a typology that can satisfy the demands for high-density housing. However, the question remains: how to integrate the immensity of those structures towards a more adaptive cityscape, one that embraces human connections and networks as a vital part of its driving mechanism?

Yorkville is a neighbourhood located in the heart of Toronto, which is also bounded by many condominium developments. Yet, the neighbourhood managed to maintain its vibrancy due to the synthesis of different building typologies. In contrast, St James Town is dominated by the repetition of the same tower block type, and hence lacks the diversity a neighbourhood requires. (fig2.1.5/ fig 2.1.6) When critiquing the liveliness of a neighbourhood, Jane Jacobs writes:

> *"No one way is a good way to house a city neighbourhood, no mere two or three ways are good. The more variations there can be, the better. As soon as the range and number of variations in building declines, the diversity of population and enterprises is too apt to stay static or decline, instead of increasing."* [4]

Fig. 2-1-5 Diversity at the street level in Yorkville neighbourhood

Fig. 2-1-6 Monotonous architecture in St. James Town

An eclecticism of building types and architectural styles is essential to the sustainable development of neighbourhood spaces. In fact, many residential developments have managed to blend different typologies into a single city block coherently. For instance, Sherbourne lane in Toronto, designed by Barton Myers, is an excellent example.

In 1971, a block of 16 aging semi-detached housing was scheduled to be demolished and replaced by a 28-storey post-war tower.[5] The distaste of the tower typology led to a big dispute between existing residents and the developer. With the help of the city council and activists, the protesters eventually managed to put the demolition to a halt.

Through a proposal drawn out by Diamond and Myers Architects, the developer was convinced that an alternative version for the site was possible: “The architects responded with a proposal for renovation of existing housing and a six-story ‘infill scheme’ of high-density but low rise in form, with accommodation equal to that of the towers.”[6] The infill strategy enhances the existing environment rather than replacing it entirely with new construction. The mixture of mid and low-density development tightly knitted together forms a new atmosphere within the complex and its surrounding neighbourhood.

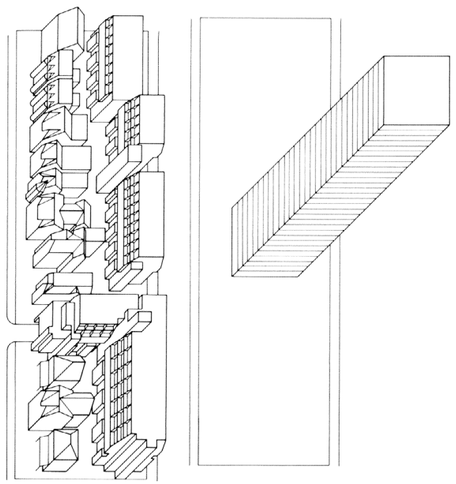


Fig. 2-1-7 (left) Axonometric drawing of Sherbourne Lane
Fig. 2-1-8 (right) Interior courtyard space between old and new built form at Sherbourne lane

The significance of this project is one that marks a paradigm shift in Toronto’s urban development. This infill proposal is an epitome of “the horizontal skyscraper”.[7] Rejection of the vertical modernist tower leads to a new hypothesis; it suggests a distribution of density along the horizontal plane that would achieve the same density of a freestanding high-rise.[8] The success of this experimental project served as an archetype for future developments within the city.

Following its predecessor, Hazelton Lane- designed by architect Boris Zerafa in the 1970s, in the Yorkville neighbourhood attempts to achieve a similar effect of the horizontal skyscraper. The area comprises a large condominium project which was built directly behind a block of existing semi-detached housing. The complex consists of a series of eight former homes topped by a series of terraced condominiums and accompanied by a mall at the podium level. A courtyard, located in the middle of the mall, was designated to be used as an ice-skating rink in the winter. This project is the result of efficient collaboration between the developer and existing residents, where developer Wooket had consulted with local residents and held community meetings to get opinions on the project, before submitting the project to the city.[9]

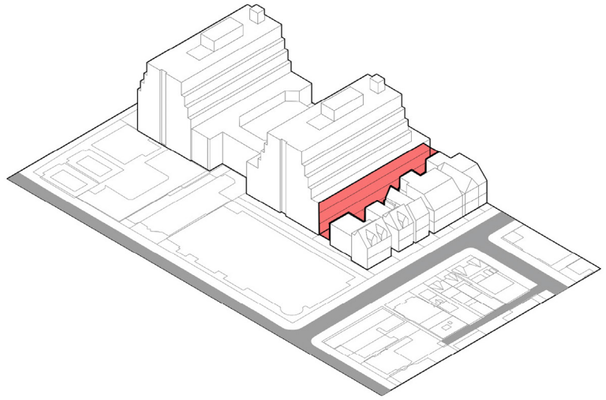


Fig. 2-1-9 (top) Hazelton Lane- Built form shaping courtyard space
Fig. 2-1-10 (middle) Hazelton Lane- Courtyard space view 1
Fig. 2-1-11 (bottom) Hazelton Lane- Courtyard space view 2

However, the project eventually took a fall, mostly due to the recession. The mall component was criticized for its vacancy since the upscale marketing of the area discouraged most of the public from visiting the place. The mall layout was described as being confusing, and ultimately the ice-skating rink was abandoned in the 1990s.[10]

Despite its drawbacks, there are valuable lessons that can be drawn from this project. Contrarily to the massive open areas, one would find in St. James Town, the layout of the complex on Hazelton lane is drastically condensed. Despite that, the design is still able to create meaningful spaces, by exploiting the negative spaces defined by the closely-knitted Victorian houses and condominium development, hence carving out a sanctuary in the busy urban environment. (fig2.1.10) Instead of creating buildings that are surrounded by ambiguous spaces, the buildings are responsible for shaping the spaces around it.

Along with this successful approach of amalgamation and diversity, the refurbished surrounding properties also combine different building types that are fundamentally different from the pre-existing buildings in regards to height, density, form, materiality and spatial syntax. One could argue that this drastic combination of differences within the built environment constitutes the bedrock of a vibrant neighbourhood.

Fig. 2-1-12 Yorkville neighbourhood- New building blends in with existing environment

Fig. 2-1-13 Walmer Road- Variety of housing types

To further investigate into other neighbourhoods in Toronto, Walmer Road in The Annex provokes an interesting conversation. Together with Yorkville and St. James Town, all three neighbourhoods bear a close connection to Bloor Street. However, the rudiment of their morphologies is rather distinct. All three areas house numerous high-rise towers, but the arrangement and dynamics of the built form bear completely different characteristic on each site. For instance, a healthier blend of housing typology can be found on Walmer Road. Single detached houses are interposed in between the towers, creating a real diversity in the streetscape. The nature of these detached houses as a typology closer to human scale helps create a fine-grained residential environment that could not be achieved solely with post-war towers. Positioning low-rise building closer to sidewalk reconstitutes the relations between building and street, thereby achieving a similar effect of the podium typology. Despite the contrast between the tower and the detached house, where one is significantly taller and denser than the other, the two appear to coexist in harmony. The detached house is practical due to its ability to conceal the monumentality and homogenous nature of the towers on the street level. (fig2.1.14)

The mixture of typology also facilitates the transition between different zones. Similar to the Yorkville neighbourhood, the seamless transitions between main avenues and interior roads are made possible by the use of a wide range of building of typologies. Contemporary cities like Toronto are perpetually undergoing rapid transformation, where architectural extremes can be found over a tight surface area: an urban high street like Bloor Street could be composed of condominium towers 50 storeys high, while within a short distance from that block, one could find buildings that are three to five storeys high. The endless variability of building typologies is a characteristic of avenues in Toronto. Neighbourhoods that comprise only one single building typology, in the like of St. James Town, create a harsh edge around the perimeter of the precinct. Yorkville, on the contrary, is able to blend perfectly with its surrounding context, making the transition with the urban fabric almost seamless.

Fig. 2-1-14 Walmer Road- Blend of post-war tower blocks and Victorian housing

Fig. 2-1-15 Walmer Road- Small-scale retail at grade along Bloor St.

2.2 The Dimensions of the City

Size and scale are fundamental components which profoundly influences the way users would experience the city. Parameters such as the width of streets, length of urban blocks, height of buildings, and scale of open spaces, all cohere towards a network of relations that radically impacts the impression a neighbourhood would make on those experiencing it. As opposed to the doctrines and principles embodied by the Tower in the Park concept, many urban theorists argue that the magnitude of the parameters as mentioned above matter greatly and that the city should constitute an assemblage of smaller parts which intimately relate with the human scale.[11]

Architectural theorist and urban planner, Leon Krier, suggests that shorter city blocks accentuate the intensity of the public, commercial frontage, as well as the accessibility within that small given area.[12] In that manner, the increased concentration of activity exploits the full potential of the urban ground plane.[13] Jane Jacobs is also a strong proponent of smaller urban blocks. She argues that longer blocks increase the isolation of paths, whereas short blocks provide a better mix of routes a person can take to travel from one point to another.[14] The increased fluidity and frequency of circulation along paths maximizes the potential for the integration of successful commercial locations. The nature of the long block, on the other hand, is similar to that of a superblock project

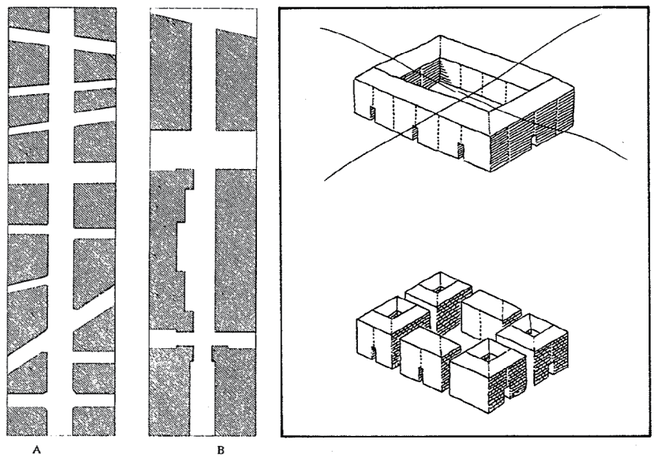


Fig. 2-2-1 (left) Leon Krier's diagram
A: Small blocks increases fluidity of circulation
B: Large building block limits urban layout

Fig. 2-2-2 (right) Perimeter block- The large-scale of perimeter blocks repetitive, disruptive and barrack-like.

even when integrated with malls and promenades.[15] Despite having reasonably wide streets that run through the large development, often the streets become meaningless due to their lack of activity and vibrancy, hence discouraging their use and creating lifeless urban voids.[16]

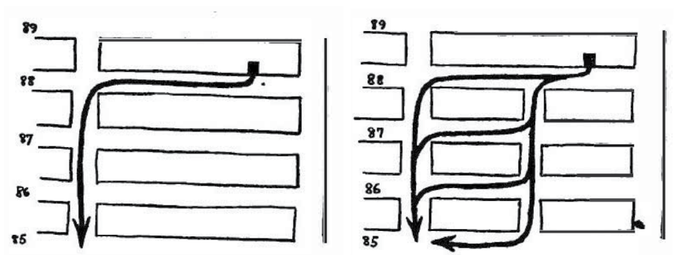


Fig. 2-2-3 Jane Jacob's urban block diagram - Small urban blocks facilitate circulations

The relationship between streets and blocks, therefore, becomes crucial in shaping sustainable neighbourhoods. The edge of two urban blocks shapes the street, while a network of streets forms the block. The dimension of a block dictates the length of a street and how often intersections occur. The width of the street also governs the closeness of building blocks.

In researching for successful streetscapes around the globe, Allan Jacobs relates through his book "Great Streets" that in some cases, conducive urban planning is not limited to a specific street, but instead alludes to a larger assemblage of smaller streets with particular characteristics.[17] It is when they all come together, just like the pieces of a jigsaw, that the formation of a memorable neighbourhood environment occurs.

His study of the streets in Bath, England revealed a series of very similar streets that appear quite ordinary on their own, but when assembled as an ensemble, they work efficiently and dynamically.[18] This network of streets is generally narrow in width, ranging between 8 metres to 16 metres. It is often accommodated by sidewalks that are only a metre wide, and the surrounding buildings range from two to four storeys high. The narrowness of the streets, in combination with the smaller scale of buildings, create a sense of domesticity that is intimate and homelike.[19]

The general morphology of the City of Bath, such as the finely scaled buildings, the narrowness of the streets and the consistency of the vertical street wall have attained a sense of physical unity.[20] In compliment, smaller details like the doorways, windows and frames, cornice details and fences, create variation along the street wall. In that manner, each individual street bears a unique character, but at the same time forms part of this greater organization. These detailed elements are huge contributors to generating a cohesive atmosphere within the neighbourhood.[21]

Fig. 2-2-4 West Gate Street, Bath

Fig. 2-2-5 Brock Street, Bath

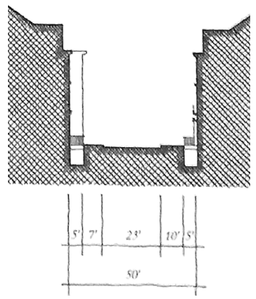


Fig. 2-2-6 Brock Street, Bath

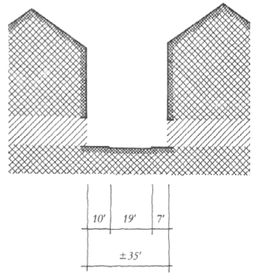


Fig. 2-2-7 West Gate Street

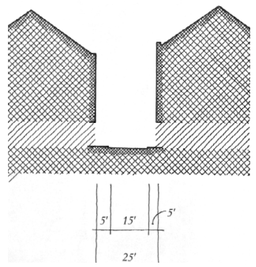


Fig. 2-2-8 Cheap Street, Bath

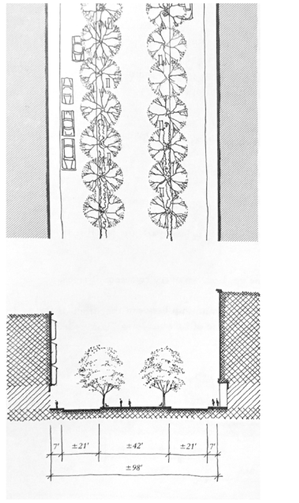
Fig. 2-2-9 Yanaka, Tokyo- narrow residential street

Fig. 2-2-10 Yanaka, Tokyo- narrow streets prioritize pedestrian over vehicles

Professor Andre Sorensen from the Department of Human Geography at the University of Toronto carried out a thorough study of the historical neighbourhood of Yanaka in Tokyo, Japan. His close investigation discovered how the “product of scale” develops neighbourhood resiliency.[22] Much like Allan Jacobs’ interpretation, Sorensen suggests that the narrowness of the streets in Yanaka triggers a sense of intimacy in the user. Accordingly, low rise shops and composite housing blocks from each side of the street are brought closer together. Homeowners, shopkeepers and strollers are in closer proximity, where the space between the buildings becomes a communal space shared by every user of the street. The sense of domesticity within the public realm is achieved by the intimate scale which ultimately allows the resident to take ownership of the space.[23] This is most evident in the narrow streets nearly unpassable by cars. These spaces are instead filled with potted plants, bicycle or motorcycle storages, and are often used as pedestrian walkways and children’s play space. [24] The finer-grained scale creates a unique quality of a collective communal space that could not be achieved in wider streets and large avenues.[25]

Beyond the two-dimensional element of the urban scale, a third dimension is to be considered: the building height. The vertical dimension of the city in relation to the planar dimension provides definition to the urban space. The character of urban arteries relies heavily upon the amalgamation of both horizontal and vertical elements. Through the investigation of existing quality streets, Allan Jacobs suggested an optimal 1:2 ratio for the building height to horizontal distance (building wall to building wall) when looking at a street cross-section.[26] At this ratio, the streets are well defined and provide visual comfort at a pedestrian level. On the other hand, when looking at streets with 1:5 height to horizontal distance ratio, the surrounding space appears empty and lifeless, and out of proportion with the human scale.[27] That is not to say that wider streets with low building height would not qualify as great streets; street definition can also be achieved by other vertical elements such as trees, light posts or street signs.[28]

Looking at the other end of the spectrum, Allan Jacobs also poses the question: what is the highest acceptable ratio in regards to tall buildings and narrow streets? Would such a space feel confined and oppressive? He then goes ahead to state the example of streets in European cities, such as Rome and Barcelona, which have a 1:0.3 height to distance ratio. His examination of such streets led him to declare that narrow streets with high definition could be quite distinctive and pleasant for pedestrians.[29] He also acknowledges that other crucial factors will affect the variability of the upper limit of street definition, for instance, the quality of sunlight, temperature, and wind velocity; these parameters could also determine the comfort level and livability of the street.[30]



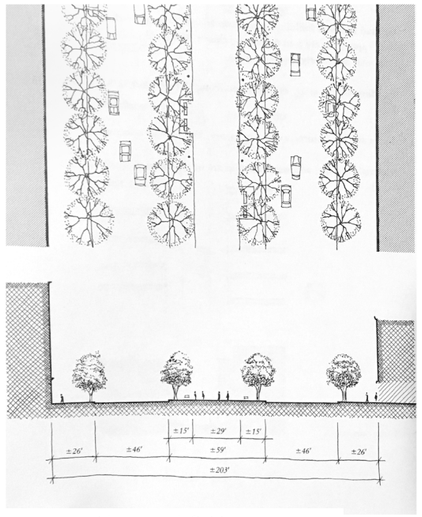


Fig. 2-2-11 (left,centre) Using trees to provide street definition
Fig. 2-2-12 (right) Via del Greci, Rome

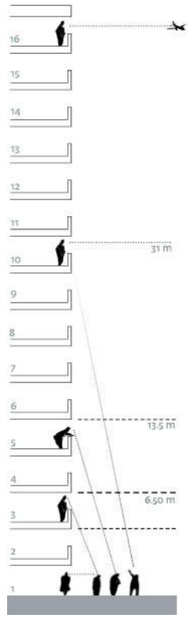


Fig. 2-2-13 Meaningful contact with ground level events

When discussing the vertical dimension of streets, Jan Gehl, a Danish architect and urban designer, in his book “Life Between Buildings”, strongly believes that the first five stories of a building constitute a crucial threshold between the building and the urban landscape.[31] The importance of the first five stories is largely related to the proximity between people on the street and the people that occupy the building. Within a 22 to 25 metre distance, people are able to identify each others’ facial expression and body language.[32] The closeness between people creates a sense of intimacy. Even though actors may not be directly interacting with each other, there is an underlying connection nonetheless.

Furthermore, Edward T Hall’s concept of proxemics also speaks to the hidden spatial scale that connects people from one another. Different proximity creates different cognitive responses by establishing a nonverbal communication.[33] The closer the proximity, the more intimate the connection is. He then classified this physical dimension into four different zones: intimate distance, personal distance, social distance and public distance.[34] In addition, the social distance is given a range of 1.3 to 3.7 metres, where this distance is comparable to space that separates one from familiar characters of daily life, such as coworkers and neighbours, hence creating a sense of communion between strangers on the street.[35]

Based on Hall’s deduction, one could suggest that the occupant on the second storey of a given building and pedestrians at street level are also connected within this social boundary. However, as the distance increases and further away from the street, the weaker the connection becomes. According to Gehl, this meaningful connection is completely disengaged at the fifth or sixth storey.[36] Therefore, the first few storeys of a building bear an essential contribution to the urban landscape as they closely relate to the human dimension.

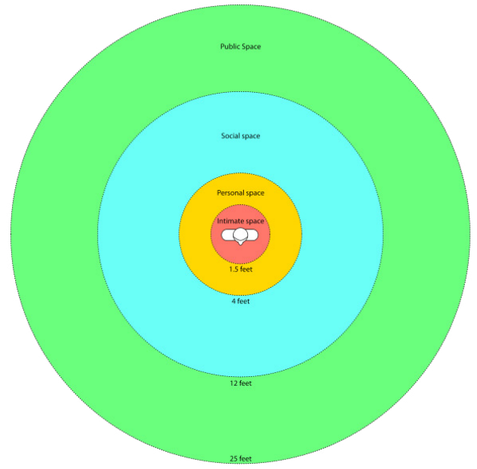


Fig. 2-2-14 Proxemics diagram

The human body reacts to environments by relating to objects with a familiar scale, finer details such as bricks, claddings, floorings, doors, windows, stairs, niches, furniture, signage, store windows, trees and columns; these elements all offer richness towards the pedestrian experience.[37] The different articulation of these elements provides a finer-grained rhythm along the sidewalk that is relatable to the 5km/hr walking pace of a human.[38] This sense of "slowness" in architecture intensifies our engagement with the urban environment. However, the loss of slowness in our contemporary city is exceedingly unequivocal. Due to the prevailing fast-paced, frugal lifestyle and the advent of technology, the current obsession with speed and efficiency has led to the emergence of a sense of flatness. Instead of the 5km/hr walking pace, contemporary urban environments are often designed to relate to a 60km/hr vehicular speed. These environments are not designed for pedestrian movement, and consequently, there is a noticeable decline in pedestrian activities in these spaces.[39]

Fig. 2-2-15 Bellair St., Yorkville, Toronto

Fig. 2-2-16 St. James Town, Toronto

Traces of walkable environments in the City of Toronto are found in major avenues like Queen Street West, Bloor Street, or neighbourhoods such as Kensington Market or Yorkville Village. A common thread among these places is the articulation of the intimate human scale that is present in each environment.

The rhythm of the finer-grained frontage along the blocks of the previously mentioned examples has a prevailing narrow quality, as narrow as 4 metres and not wider than 12 metres.[40] Many of these areas are filled with a variety of retail stores at ground level, where the ever-changing character of each storefront achieves a rhythm that works in harmony with the 5km/hr walking pace.

Preservation of the street wall at a pedestrian scale is a conscious act suggested in the 'Urban design guideline and neighbourhood studies' initiated by the City of Toronto.[41] All studies have suggested an upper limit of 4 to 6 storey high street wall, and new developments should respect the existing established height.[42] In some cases, where building height exceeds 6 storeys, a podium element is used to maintain the defined and continuous street wall and a setback is required for any levels above.[43] The Toronto City Council also adopted a mid-rise building performance standard in 2010 that recommended a ratio of 1:1 between the street wall to the horizontal street separation.[44]

Fig. 2-2-17 Bloor St., Toronto

Fig. 2-2-18 Queen St. W., Toronto

Fig. 2-2-19 Kensington Market, Toronto

Fig. 2-2-20 Yorkville, Toronto

Another parameter that contributes to walkability in these neighbourhoods is the fine-grained urban block subdivision. This is apparent in Kensington Market, where an uncoordinated subdivision of land property led to a diverse range of block dimensions.[45] This irregularity today constitutes the successful diversity of the neighbourhood. These short blocks created more opportunities for corner properties, where the frontage condition on the surrounding streets promotes higher quality for commercial activities.[46] A large number of T-intersections also creates a pedestrian-friendly environment that is coincidentally restrictive for vehicles.[47] This short block condition is also present in the district of Yorkville. In fact, to overcome long urban blocks, the Urban Design Guidelines promotes the use of midblock pedestrian connections.[48] This strategy was used repeatedly in Yorkville and is one of the key contributors to Yorkville's success.

Fig. 2-2-21 Parcel Study, Kensington Market

Through a thorough investigation into the various areas that constitute Toronto, it can be concluded that many urban design guidelines initiated by the City of Toronto are promoting principles that are in line with the beliefs of urban theorists like Jane Jacobs, Allan Jacobs, Jan Gehl, Leon Krier. These successful thinkers all promote the idea of human scale and pedestrian activities; this finer-grained dimension of the city is prioritized to promotes diversity on the street and increase vitality in neighbourhoods. In contrast to this paradigm, St. James Town and other Tower in the Park neighbourhoods are sitting in exact polar opposition.

This thesis aims to demonstrate that there is an opportunity to integrate the heterogeneous and interwoven character of the fine-grained dimension into Tower in the Park neighbourhoods. This could potentially create an assemblage of various interconnected urban typologies, where immensity merges with low-rise, where high street definition counterbalances the prevailing low street definition, and where the human scale is the prime focus and driver of any future urban development.

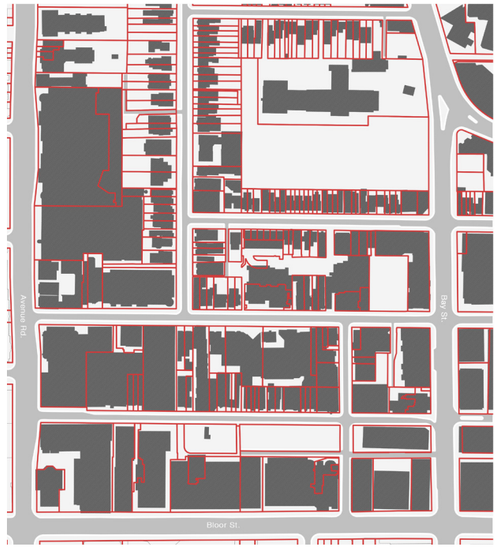


Fig. 2-2-22 Parcel Study, Yorkville

Fig. 2-2-23 Mid-block crossing, Old York Ln., Yorkville

Fig. 2-2-24 Eclectic architecture, Yorkville

2.3 Beyond the bounds of the physical

It is inevitable that, when considering the elements that define urban form, the matters of physicality and empirical assumptions are largely at question. Beyond the confinement of the two or three-dimensional space discussed in the previous section, a hidden fourth dimension also modulates the urban environment. Amidst many critics within the design sphere, there is an acknowledgement that the physical aestheticization of a place alone is not enough to guarantee vitality. Roger Trancik's book "Finding Lost Space: Theories of Urban Design", conceptualizes three main categories that designers should be concerned with in urban spatial design.[49] These three theories are Figure-Ground Theory, Linkage Theory and Place Theory.[50] For Trancik, the third category, Place Theory, surpasses the physical manifestation of urban form; it is one that is embedded in the development of cultural, sociological, geographical context.[51] History, craftsmanship, needs of the local community, are among the elements one must take into consideration when defining a place.[52]

Following the same line of thought, Peter Buchanan, in an article published in the Architectural Review in 1988, stated that "urban design is essentially about place-making, where places are not just a specific place, but all the activities and events that make it possible."[53] A real sense of place is "defined as relational, historical and concerned with identity."[54] When a place loses these fundamental elements, Marc Augé identifies it as a "non-place". It is "a world thus surrendered to solitary individuality, to the fleeting, the temporary and ephemeral."[55]

The physical form of the environment is inarguably a substantial determinant contributing to neighbourhood vitality. However, it is important to note that an effective physical urban form should not be considered as the master-key to success. Freshly renovated neighbourhoods sporting new planters, street furniture and pavements still bear a high risk towards vandalization. The prosperity of a neighbourhood over time requires the involvement of the community, which in turn requires an acutely induced sense of place and ownership.

With reference to Robert Hays' research published in the Journal of Environmental Psychology, the development of a sense of place offers residents the feeling of security, belonging and stability.[56] These elements allow an individual to form a close relationship with the built environment and such a bond is strengthened over an individual's lifetime and even across generations.[57] The obsession with speed and mobility in contemporary society triggers a perpetual and ever-growing

change in urban form. People are traveling between places at an unprecedented rate, which is highly influenced by an individual's daily activities. Hay argues that this phenomenon is happening at the expense of the stable connection between people and our built environment.[58] Ultimately, a deeply rooted sense of place is scarce, and our connection with places are only momentary. The infrequency of continuity in one's life is disintegrating the social cohesion in the community and society.

Undoubtedly, the formation of a prosperous neighbourhood environment requires a deeply ingrained notion of the sense of place. However, what influences the development of the sense of place? Researchers found that the development of place is greatly influenced by "place attachment". Brown, Perkins and Brown believe that place attachment is developed and sustained by the daily encounter among residents and by the environment which they inhabit.[59] This interaction between the inhabitant and the environment is also exchanged at various relations, such as biological, environmental, psychological and sociocultural, every one of which is essential to the creation of place attachment.[60] This is further supported by seasonal and annual celebrations, as well as the personalization of the physical environment which is maintained regularly by individuals and groups.[61] Jane Jacobs' description of the vibrant sidewalks in Greenwich Village, New York, exemplifies the idea of place attachment.[62] The frequent social interaction along daily routes, public spaces with intimate streets and sidewalks, and local retail stores, all help tighten this essential bond between the residents and their neighbourhood. Street activities should hence constitute the primary focal point of neighbourhood design.

Fig. 2-3-1 Greenwich Village, Manhattan, New York

Section 2.2 discussed the successful physical aspect of the Yanaka Neighbourhood in Japan. Furthermore, much like Jane Jacobs' understanding of neighbourhood spaces, Sorensen's analysis of Yanaka attempts to synthesize elements of physical form with sociological theories. His research induced the idea of "collective memory".[63] The "shared meanings of place are particularly important for place-making projects because of the way human memory works."[64] The concept of 'shared meaning of place' is part of the larger network of collective memory. This is encapsulated in the quotation from Michael Hebbert in his work on streets as the locus of collective memory:

> *"Human memory is spatial. The shaping of place is an instrument for the shaping of memory. A shared space – such as a street – can be a locus of collective memory in a double sense. It can be express group identity from above, through architectural order, monuments and symbols, commemorative sites, street names, civic spaces, and historic conservation; and it can express the accumulation of memories from below, through the physical and associative traces left by interweaving patterns of everyday life."*[65]

To illustrate this further, Sorensen claims that at a local scale, collective memories are facilitated by "newsletters, word of mouth, the gossiping barber, or a local club."[66] The local monthly magazine – "YaNaSen" initiated by residents was dedicated to educating citizens about the Yanaka neighbourhood. Due to the rich history of the precinct, there are many local shop owners and craftspeople each bearing their own captivating story to be told. The neighbourhood also includes local buildings that may not be of great architectural significance, but hold endearing value to residents who relate a lot of cherished memories to those particular edifices. The culture in Yanaka comprises long traditions of events and festivals that are held annually to activate the streetscape and boost the city's dynamics to the fullest.[67] These stories, which eventually made their way to the magazine, are part of the collective memory of the neighbourhood, and largely contribute to strengthening the resiliency of the community.

Fig. 2-3-2 (opposite page, top) Busy retail/ residential street, Yanaka
Fig. 2-3-3 (opposite page,centre, bottom) Small-scale local businesses

In light of the above, relationships, history and identity constitute the fundamental components that bolster the sense of place of a neighbourhood. This conclusion eventually endorses why the preservation of the somewhat distasteful architecture in St. James Town is important. These buildings are part of the larger network of collective memory that, in its own way, holds value to the development of the sense of place. In opposition to the tabula rasa approach that essentially gave rise to the development of St. James Town, alternative preservation, re-adaptation and infill strategy would be more appropriate.

This approach presented in this thesis concerns itself with:

1. *Transforming the ground plane of the precinct, which encourages activities at the street level and promotes the day-to-day encounter of residents, store owners and passers-by.*
2. *Preserving the history of the local context while adding new elements that instigate the creation of a new context.*
3. *Introducing smaller scale public spaces that allow for the informal customization of physical environments that provide identity to the neighbourhood.*

The strategies mentioned above capitalize on the fact that the physical shared spaces contribute to the overall creation of the sense of place in the neighbourhood. It also feels important to acknowledge the decisive role of urban governance, urban policies as drivers of change and indirect contributors to urban resiliency.[68] To this day, the governing bodies of the City of Toronto have introduced a set of schemes and guidelines that encourage the creation of relatively small, community-shared spaces, and the preservation of the built archives of the city.

Fig. 2-3-4 Temporary market, Thorncliffe Park

Policies such as the Toronto Tower Renewal Program[69], Community Land Trust and Inclusionary Zoning are all part of this series of incentives towards a more socially inclusive urban fabric. Furthermore, the new RAC zoning policy advocates for street-level commercial activities in Tower in the Park neighbourhoods.[70] These programs all form part of the main driving force behind sustainable urban development and eventually achieving the notion of belonging and attachment to a particular place.

Hence, the fourth urban dimension can be considered at two levels: the urban scale and the local scale. Comparatively, where the urban scale relates to the different governing actors and policies leading to urban change, the local scale touches on how local actors act as the crafters of placemaking, thus leading to urban change at another level. At a local scale, this process relies on initiatives from the community themselves, for example, local newsletters, community events and festivals, and entrepreneurship programs. The urban and the local are mutually inclusive of each other, where state policies influence the type of activities within the neighbourhood, accordingly adding a contribution to the highly sought sense of place. Even though the physical dimension of the urban form may be the most tangible, it "does not exist in isolation, but within a framework of rules and regulations, actors and agents, networks and local culture."[71]

Fig. 2-3-5 Community Events- celebrates cultural diversity

2.4 Urban morphology – towards an incremental approach to parcelization

The preceding sections of this chapter dealt with the reinterpretation of the point tower typology, the physical and empirical dimension of the city, and the impalpable aspect of the urban form, that is, the sense of place. These are structured towards forming a direct counter-proposal to the current model of St. James Town. Aligning with many urban theorists stated previously, this thesis argues for the importance of a finer-grained redevelopment strategy that is accurately tailored to the human dimension.

The prioritization of pedestrian activities at the ground plane is essential to cultivate the sense of place of a neighbourhood, whereby the urban space is concerned with communication and interaction in the public realm. Breaking down urban form into smaller components promotes customizability, adaptability and variability, where these detailed spatial relations and contexts regulate the homeostasis of the larger whole. Ultimately, these principles operate within a human-adapted domain, and they are concerned with the recombination of urban form with social cohesion, human geography, environmental psychology.

This section shall explore the rudimentary framework that encapsulates the urban morphology of a neighbourhood, and discuss how this approach attempts to synthesize these syntaxes and networks into a unified strategy. To further examine the development of a variety of urban structures, this thesis will review and analyze a few precedents. Let us begin with St. Lawrence Neighbourhood.

St. Lawrence Neighbourhood in Toronto

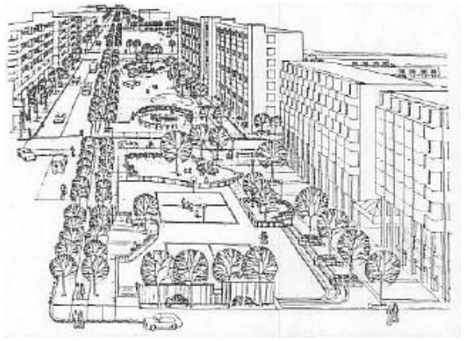


Fig. 2-4-1 David Crombie Park, St. Lawrence neighbourhood

The aftermath of the problematic Tower in the Park ideology has led to a reformation of urban theories among planners and architects in Toronto during the 1970s. St. James Town, in particular, marks the finale of that era.[72] At the same time, the development of the St. Lawrence neighbourhood embodies the critical evolution of urban design in the city and, to an extent, is still celebrated for its achievement today.[73]

With the intention of creating a new framework for neighbourhood development, a number of strategies were implemented when developing the St. Lawrence neighbourhood: [74]

1. Social blending – the rejection of private development that targets a particular social class.

2. Maintaining a grid street pattern – the elimination of the “superblock” idea and the re-introduction a street-related development that promotes street activities.

3. Preserving building characteristic – the use of architectural styles to connect the urban fabric of the precinct with its periphery.

4. High-Density – the provision a high-density of residential amenities within the downtown core, providing more than 3500 residential units in 44 acres of industrial wasteland.

5. Mixed use, tenure and building types – the regulation of a healthy mix of tenure types: 39% condominium apartments, 30% non-profit co-operatives and private non-profit rental, 27% municipal, non-profit rental, 4% ownership town-houses.

6. Open planning process – Involving 3 groups of planners: the professional planners, the decision makers and citizens, and community-based organization.

Fig. 2-4-2 Public housing in St. Lawrence neighbourhood

Fig. 2-4-3 David Crombie Park, St. Lawrence neighbourhood

In some measures, the St. Lawrence neighbourhood has achieved exactly what it was set out to do. First and foremost, it succeeded in attaining a true socio-economic mix: it harbours a wide range of housing typologies, from affordable housing to high-end condominium in the downtown core area. Furthermore, the neighbourhood seamlessly blends itself with the surrounding urban fabric, and building blocks provide retail at grade to promote street-level activities. A healthy mixture of programming is found within the area, where parks and green spaces, retail stores, educational, institutional and community amenities are perfectly blended with the predominating residential areas. In many ways, this new planning layout developed while devising the St. Lawrence neighbourhood is a triumph and a model for future developments. However, whether this model has achieved its full potential in creating a vibrant neighbourhood remains debatable. In comparison to some neighbourhoods in Toronto, such as Kensington Market and Yorkville Neighbourhood, the lot dimension and building scale of St. Lawrence neighbourhood is considerably out of scale. The architecture here is incongruous with the fine-grained urban fabric discussed in this thesis.

Fig. 2-4-4 Large urban blocks, St. Lawrence neighbourhood

The unusually large central park lacks vibrancy and intimacy that a small-scale park would promote. One reason might be that the density of the population is insufficient to take advantage of such a large open space. Urbanist William H. Whyte's idea of "self-congestion" suggests that people in public spaces are generally attracted to other people.[75] A central large open space generally promotes separation and solitude, and these spaces are only occasionally optimal for large gatherings and festivals. However, on a daily basis, they are often empty. On the other hand, small urban open spaces promote a concentration of activities that attract passers-by; these spaces are ideal for day-to-day usage. With a good connection to the street, heavy pedestrian flow and a concentration of activities, these small open spaces are constantly occupied by different users. According to Whyte's analysis, Paley Park in New York is the perfect embodiment of this.[76]

The lack of a finer-grained scale in the urban fabric of the precinct could be deducted from the rudimentary structure of its morphology. To a certain extent, the development of St. Lawrence neighbourhood is similar to that of St. James Town. Both precincts have been developed by acquiring a large piece of land and regenerated instantaneously as one large master plan. The nature of a massive redevelopment project targets overarching issues that often overshadows the finer details of the urban form. Even though the land was subdivided into smaller sectors, the 44 acres of land was only redistributed to 16 developers.[77] On average, each developer would have full control over 2 acres of land that shapes an entire urban block. Despite the intention of diversification, the variation achieved is rather fictitious. On the contrary, this is substantially different from the fine-grain developments, where an urban block would be further subdivided into small parcels, whereby the variety of parcels expresses their individual identities, hence producing an authentic sense of heterogeneity.

Fig. 2-4-5 Paley Park, Manhattan, New York

Fig. 2-4-6 David Crombie Park, St. Lawrence, Toronto

Fig. 2-4-7 (Below) Retail at Grade, St. Lawrence, Toronto

Borneo Sporenburg in Amsterdam

Akin to the St. Lawrence neighbourhood, Amsterdam in the 1970s was undergoing rapid expansion within the city core. Subsequently, there was a high demand for residential spaces. By taking advantage of an underutilized dockland, the city commissioned a housing initiative that would fill up the 60 acres of land with 2500 low rise residential units.[78] The masterplan was designed by West 8; the triumphant aspect was its success in achieving high-density with low-rise residential type. This was made possible by exploiting the network of narrow streets and open courtyards.[79] The framework set forth by West 8 demanded the involvement of 100 architects to achieve architectural variety. At the same time, it maintains unity and coherence by enforcing design guidelines which regulate "streetscape, parking, private open space, storey height and plot width".[80]

Nevertheless, despite the effort in creating variation, a large portion of the precinct consists of highly repetitive elements. Once again, we can observe the shortcoming of a neighbourhood wide redevelopment proposal. The difficulty is in the equal redistribution of ownership in a large sum of land: the land is generally allotted to a selected few. A fine-grained development is difficult to achieve when developers have ownership over a large portion of the site. While the guideline can mandate the parcelization of large urban forms into smaller components and insist on variability in term of building typology, in the developers' point of view, this would not be lucrative and cost-effective. This had turned out to be the case for Borneo Sporenburg, where it has been reported that,

"after the first 250 units were built, developers petitioned the city to limit the choices to only the six most popular unit types. The result is that some street fronts are lined with long, horizontally oriented slab-like structures rather than the fine-grained rhythm of vertical facades that West 8 planned."[81]

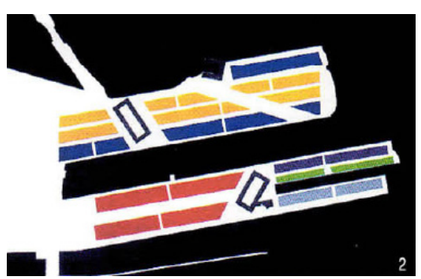


Fig. 2-4-8 Ownership diagram, Borneo Sporenburg

Fig. 2-4-9 Aerial view, Borneo Sporenburg

Fig. 2-4-10 Typical street wall, Borneo Sporenburg

Fig. 2-4-11 "Free parcel" street wall, Borneo Sporenburg

Perhaps the single greatest achievement of Borneo Sporenburg was not fundamentally the masterplan, but rather, what lies within a tiny strip of land at the northern corner of Borneo-Eiland. This undeveloped land was deliberately divided into 60 small parcels and redistributed for individual ownership through a municipal lottery system.[82] Following the guidelines set out by the masterplan, owners and their architects participated in collective workshops to develop the parcels.[83] This thus allowed the owners to insert their own unique identity into the design of the architecture which now contributes to the overall environment of the neighbourhood. Not only does this convey the most authentic sense of heterogeneity, but the engagement of owners during the planning process also empowers their sense of ownership. Interestingly, the outcome of this strip of architectural variability became the most iconic representation of the neighbourhood. This experimental development process was a triumph not just within its local neighbourhood but more importantly in its influence on a regional, national and potentially global level. It serves as the prototypical model for what is now called the “free parcels” that is often integrated into the planning of new neighbourhoods in the Netherlands.[84]

Fig. 2-4-12 Repetitive architectural details in large urban blocks of St. Lawrence, Toronto

The two aforementioned precedents revealed certain limitations to the operation of a large scale redevelopment when it comes to attaining heterogeneity. Firstly, there is the question of ownership. In terms of the fundamental urban structure, there is a clear difference between the division of 60 acres of land to 20 developers and 2 acres of land to 60 developers. The former ratio suggests that an urban block is overseen by one developer, due to economic concerns and construction methodologies, a repetition of architectural style, materiality and typology is often guaranteed. This was illustrated in the urban blocks of St. Lawrence neighbourhood, even when a strict code is governing the plot width within a block. As long as the block remains under the same ownership, the variety and diversity achieved is an empty rhetoric, where the recurring elements are often exceedingly overpowering. Most blocks in Borneo Sporenburg exemplify this notion as well.

Fig. 2-4-13 Repetitive architectural details in large urban blocks of Borneo Sporenburg

Fig. 2-4-14 Small-scale buildings creates a more diverse environment, Yorkville, Toronto

Secondly, there is the question of time. The passage of time is an essential constituent of urban morphology. In reference to neighbourhoods such as Kensington Market, the unique street and block arrangement is a consequence of a hundred years of transformation that dates back in the 18th century.[85] The evolution of a neighbourhood is volatile, where various changes occur according to the needs of the time. On the contrary, under the influence of Le Corbusier's planning principles, modernist proposals often favour radical changes and the complete obliteration of the pre-existing context.[86] This fixation on creating a divorce from the past and history proves to be detrimental to the growth of a neighbourhood.

Even though the precedents illustrated in this section are not products of massive demolition, the process of development certainly portrays as one that was aimed towards permanence, without leaving much space for flexibility, since they were developed and erected within a short span of time. Hence, those precedents do not allow for much opportunities for incremental growth, and there is little to no indication of how the urban form could transform and readapt in the future. Perhaps the true testament to its success would lie in the resiliency and adaptability over time.

In comparison, neighbourhoods such as Yanaka, Yorkville and Kensington Market are formed through an ad-hoc manner. They are adapted and readapted continually, thus allowing the subdivided nature of the urban form to be perpetually modified without interfering with the larger whole. The resulting urban form becomes the product of incremental accumulation and historical eclecticism.

The undeniable truth remains: the tabula rasa and modernist approaches that gave rise to St. James Town did not live up to their expectations. Today, the neighbourhood is suffering from the rigidity of its urban structure and architectural form. Restrictive zoning limitations have caused issues of programming. Therefore, the revitalization of St. James Town should imperatively concern itself with incremental strategies aiming towards preservation, and the preposterous idea of mass destruction and demolition should be eradicated from the agenda.

CHAPTER 2 END NOTES

1. Baird, George, and Barton Myers. 1978. "Vacant Lottery." Walker Art Center 1-3, 6-51.
2. Ibid.
3. Ibid.
4. Jacobs, Jane . 1961. The Death and Life of Great American Cities. New York : Random House.
5. Seno, Shireen. 2003. The people make the place. Accessed January 30, 2019. http://individual.utoronto.ca/shireen/project2.pdf.
6. Ibid
7. Baird, George, and Barton Myers. 1978. "Vacant Lottery." Walker Art Center 1-3, 6-51.
8. Ibid
9. Kasian Architecture. 2013. Making and Remaking Hazelton Lanes. August 26. Accessed January 29, 2019. http://kasian.com/news/making-and-remaking-hazelton-lanes/.
10. Ibid
11. Gehl, Jan. 1971. Life Between Buildings: Using Public Space. Island Press.
12. Krier, Leon , Demetri Porphyrios, and Jacquelin Robertson. 1985. "Leon Krier: Houses, Palaces, Cities." Architectural Design Profile.
13. Ibid
14. Jacobs, Jane . 1961. The Death and Life of Great American Cities. New York : Random House.
15. Ibid
16. Ibid
17. Jacobs, Allan. 1993. Great Streets. Cambridge: The MIT Press.
18. Ibid.

19. Ibid.

20. Ibid.

21. Ibid.

22. Sorensen, Andre. 2009. “Neighborhood Streets as Meaningful Spaces: Claiming Rights to Shared Spaces in Tokyo.” City & Society 207-229.

23. Ibid

24. Ibid

25. Ibid

26. Jacobs, Allan. 1993. Great Streets. Cambridge: The MIT Press.

27. Ibid.

28. Ibid.

29. Ibid.

30. Ibid.

31. Gehl, Jan. 1971. Life Between Buildings: Using Public Space. Island Press.

32. Ibid.

33. Hall, Edward T. 1991. The hidden dimension. Anchor.

34. Ibid.

35. Ibid.

36. Gehl, Jan. 1971. Life Between Buildings: Using Public Space. Island Press.

37. Jacobs, Allan. 1993. Great Streets. Cambridge: The MIT Press.

38. Gehl, Jan, Solvejg Reigstad, and Lotte Johansen Kaefer. 2006. “Close Encounters with Buildings.” Urban Design International, 11: 29-47.

39. Ibid.

40. City of Toronto. 2017. “BLOOR-YORKVILLE/NORTH MIDTOWN URBAN DESIGN GUIDELINES.” Toronto.
City of Toronto Planning Division. 2009. “Bloor Corridor Visioning Study:.” Toronto.
Heritage Preservation Services. 2007. “Queen Street West - Heritage Conservation District Plan.” Toronto.
Taylor Hazell Architects Ltd. 2017. “Kensington Market Heritage Conservation District Study.” Toronto.

41. Ibid.

42. Ibid.

43. City of Toronto Planning Division. 2009. “Bloor Corridor Visioning Study:.” Toronto.

44. Brook McIlroy Planning, Urban Design/Pace Architects , E.R.A. Architects, Quadrangle Architects Limited, and Urban Marketing Collaborative . 2010. Avenues & Midrise Building Study. City of Toronto.

45. Taylor Hazell Architects Ltd. 2017. “Kensington Market Heritage Conservation District Study.” Toronto.

46. Ibid.

47. Ibid.

48. City of Toronto. 2017. “BLOOR-YORKVILLE/NORTH MIDTOWN URBAN DESIGN GUIDELINES.” Toronto.

49. Trancik, Roger . 19867. Finding Lost Space: Theories of Urban Design. Wiley.

50. Ibid.

51. Ibid.

52. Ibid.

53. Buchanan, Peter . 1988. “What City? A plea for place in the.” Architectural Review, 11 01.

54. Ibid.

55. Augé, Marc. 1995. Non-places - Introduction to an anthropology of supermodernity. London, New York: Verso.

56. Hay, Robert. 1998. “Sense of Place in Developmental Context.” Journal of Environmental Psychology, March: 5-29.

57. Ibid.

58. Ibid.

59. Brown, Barbara, Douglas D. Perkins, and Graham Brown. 2003. “Place attachment in a revitalizing neighborhood: Individual and block levels of analysis.” Journal of Environmental Psychology, 259–271.

60. Altman, Irwin , and Setha Low. 1992. Place attachment: a conceptual inquiry. Springer US.

61. Brown, Barbara, Douglas D. Perkins, and Graham Brown. 2003. “Place attachment in a revitalizing neighborhood: Individual and block levels of analysis.” Journal of Environmental Psychology, 259–271.

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

63. Sorensen, Andre. 2009. “Neighborhood Streets as Meaningful Spaces: Claiming Rights to Shared Spaces in Tokyo.” City & Society 207-229.

64. Ibid.

65. Ibid.

66. Ibid.

67. Ibid

68. Marcus, Lars, and Johan Colding. 2011. “Towards a Spatial Morphology of Urban Social-Ecological System.” Presented at 18th International Seminar of Urban Form: Urban morphology and the post carbon city. Montreal .

69. Thorpe, Josh, Carl Shura, and Simon Rabyniuk. n.d. RAC Zone. Accessed January 29, 2019. http://www.raczone.ca/.

70. Tower Renewal Partnership. 2017. Tower Renewal Blog: Launching the RAC Zoning. July 6. Accessed January 29, 2019. http://towerrenewal.com/launching-the-rac-zone-event/.

71. Marcus, Lars, and Johan Colding. 2011. “Towards a Spatial Morphology of Urban Social-Ecological System.” Presented at 18th International Seminar of Urban Form: Urban morphology and the post carbon city. Montreal .

72. Baird, George, and Barton Myers. 1978. “Vacant Lottery.” Walker Art Center 1-3, 6-51.

73. Hulchanski, J. David. 1990. “Planning New Urban Neighbourhoods: Lessons from Toronto’s St. Lawrence Neighbourhood.” UBC Planning Paper.

74. Ibid.

75. Whyte, William H. 1980. The Social Life Of Small Urban Spaces. Project for Public Spaces Inc.

76. Ibid.

77. Hulchanski, J. David. 1990. “Planning New Urban Neighbourhoods: Lessons from Toronto’s St. Lawrence Neighbourhood.” UBC Planning Paper.

78. Commission for Architecture and Built Environment. 2011. Borneo SporenburgAmsterdam, The Netherlands. January 1. Accessed January 18, 2019. https://webarchive.nationalarchives.gov.uk/20110118150021/http://www.cabe.org.uk/case-studies/borneo-sporenburg.

79. Ibid.

80. Ibid.

81. Ibid.

82. Goody, Joan , Robert Chandler, John Clancy, David Dixon, and Geoffrey Wooding. 2010. Building Type Basics for Housing. Wiley.

83. Ibid.

84. Ibid.

85. Mumford, Eric. 2000. The CIAM Discourse on Urbanism, 1928-1960. Massachusetts Institute of Technology.

86. Taylor Hazell Architects Ltd. 2017. “Kensington Market Heritage Conservation District Study.” Toronto.

CHAPTER 3

This thesis explores design through a system of urban and spatial relations that operates at multiple scales. Each layer consists of a separate entity which defines urban parameters at various scales, while simultaneously functioning as a whole in a relational framework. The study of the first chapter revealed some fundamental flaws in the planning of the horizontal ground plane of St. James Town:

1. **Repudiation of the old city fabric** – Modernists viewed the pre-existing city fabric as chaotic and harmful. This had led to the reformation of planning principles that focuses primarily on the segregation between new neighbourhoods and existing city fabric.

2. **Undefined urban spaces** – The rejection of the urban block, under the influence of Modernist visions of planning has led to a free flow landscape that lacks definition and forethought.

3. **Excessive large privatized land under single ownership** – The eradication of the past entails the acquisition of assembled properties. Under a single ownership structure, the mega-parcel model lacks the flexibility to transform incrementally over time. The privatization of open spaces also discourages public activities and limits accessibility.

4. **Zonings singularity** – The obsession with precise organization and separation of activities has taken away work, commerce and leisure within the neighbourhood; a homogenous residential zone remains. This deficiency of programs and services in the area to sustain a dense population is evident.

5. **Rejection of streets for human interaction** – The modernist principles focus on the clear organization of functions, vehicle movements and pedestrian circulations are distinctly separated. Streets are then solely dedicated to transporting vehicles from one point to another. The dismissal of pedestrian activities resulted in the creation of a lifeless streetscape.

6. **Immoderate parking spaces** – Car-centric planning led to an overwhelming demand for parking spaces that monopolizes the majority of ground floor coverage. This single functional use of the ground floor intensifies the obstruction of human interactions.

7. **Condominium development** - The ever-growing condominium market around the neighbourhood is generating a suffocating effect. There has not been any detailed development as to how the new and existing city fabric could blend into a harmonious whole.

The proposed framework, therefore, addresses these existing problems at the following scales: Neighbourhood, Blocks, Streets, and Parcels. They are defined as a network of relations between parcels to building, building to streets, streets to block and block to neighbourhood. Across these various levels, this thesis will deploy a subdivision strategy to break down the urban form into smaller fine-grained components. The reconstitution of these spatial relations that were once lost during the up-rise of St. James Town, brings forth a new consciousness to the planning of the public realm. It re-establishes the emphasis of the human scale in the development of the neighbourhood and ultimately reanimates the urban ground plane of St. James Town.

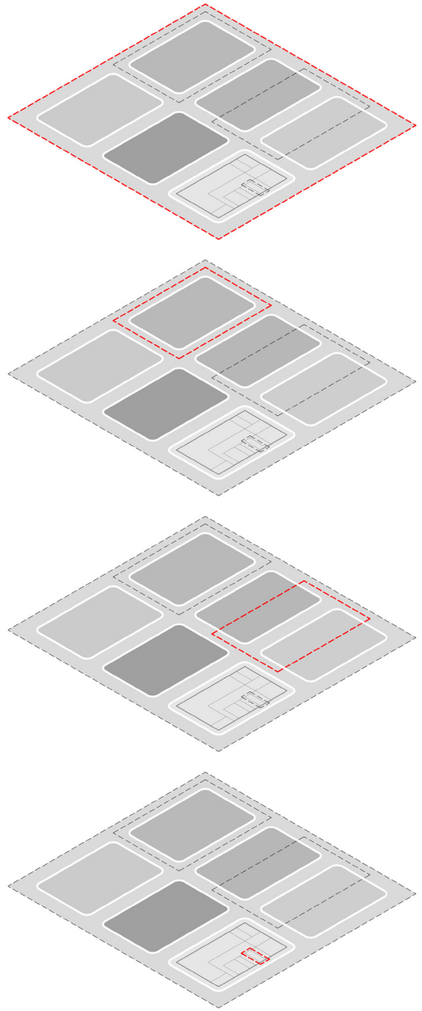


Fig. 3-0-1 Four different scale of urban component: Neighbourhood, block, street, parcel

3.1 The Neighbourhood – An Urban Network

Defined Site

Using St. James Town as a testing ground, this thesis has defined the north-west corner of the precinct as the overall scope of the project. This deliberate act is in response to the acknowledgment of the limitations associated with a massive master-plan proposal, such as the planning of St. Lawrence neighbourhood. In order to achieve a better understanding of the finer-grained elements, a confined scope is crucial. Meanwhile, the choice of the north-west corner relates to its proximity with the potential urban node at Bloor St. and Sherbourne St. intersection, as suggested in Section 1.6. The prospective economic upturn generated by the nearby condominium developments is almost a requisite to this redevelopment proposal, or more precisely, the relationship between the two is rather reciprocal.

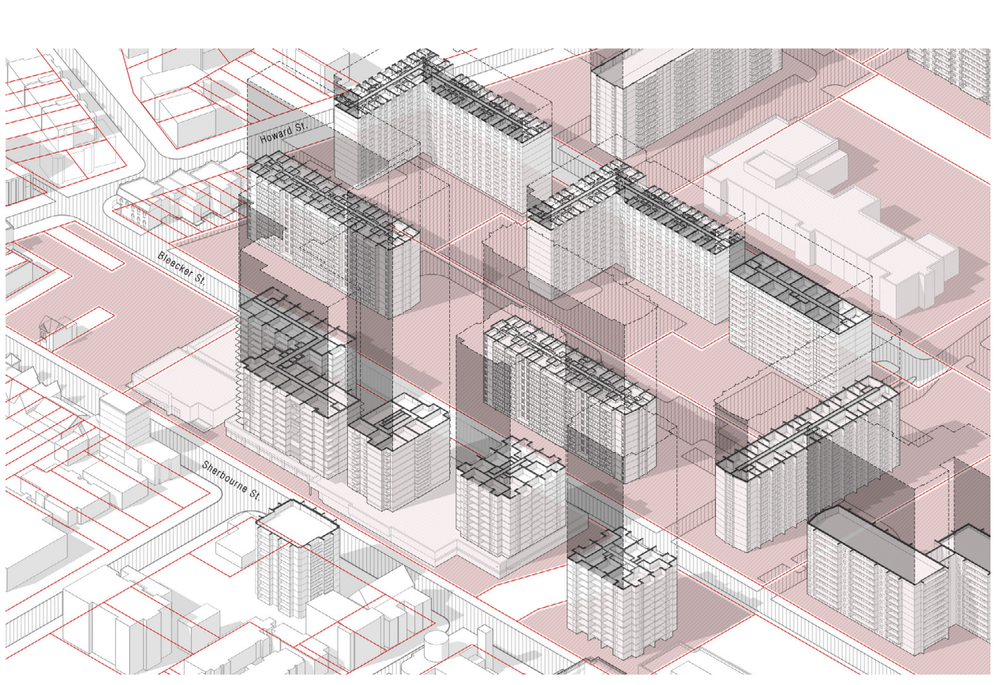


Fig. 3-1-1 Axonometric drawing of the existing condition of St. James Town

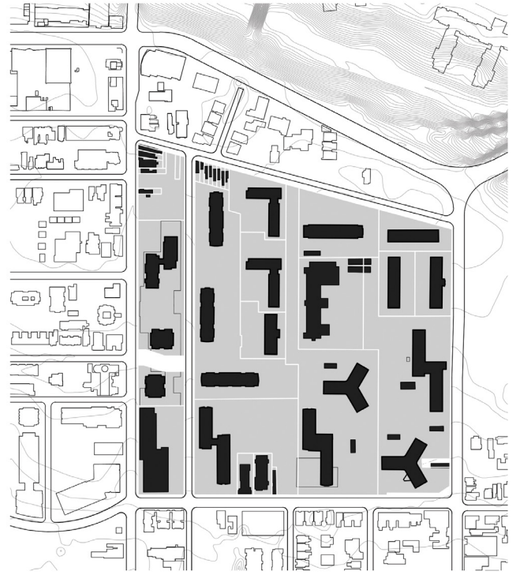


Fig. 3-1-2 Figure ground and parcel layout (existing)

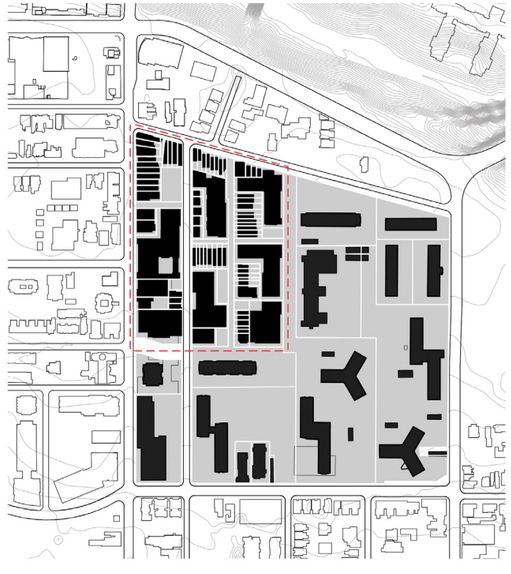


Fig. 3-1-3 Figure ground and parcel layout (proposed)

Block Organization

In order to rethink the rather illusionary free-flow landscape; that is ironically obstructed by property line fences and parking amenities, the thesis explores strategies to reopen and redefine the massive ground plane and reorganize the spaces as a network of relations. Urban blocks in the form of mid-rise infill structures and a street grid pattern are essential components part of this process. The impression of the superblock in the current model of the neighbourhood (approximately 400m x 500m in size) creates a sense of privatization that demotes accessibility and pedestrian flow. The proposal suggests a subdivision of the massive block into smaller urban blocks, as argued by Jane Jacobs, Leon Krier and many others.[1] Given the massive separation of the tower blocks, the space surrounding each individual tower could constitute a single urban block. Within this defined scope, the study area is subdivided into seven different urban blocks. Concurrently, the edge of the blocks will subsequently define the layout of the streets and vice versa. These relationships between the streets, the block and the neighbourhood are interdependent of one another. The re-emergence of the street grid and block that is a prominent urban structure in the City of Toronto will amalgamate the once anomalous neighbourhood with the surrounding urban context.

Further subdivision

This new division of the seven urban blocks has yet to achieve the fine-grained division this thesis is arguing for. As discussed through previous precedents, large urban blocks developed under single ownership inevitably suffers from repetitive elements due to the influence of the frugal economy and construction methodologies. The result of these developments is generally homogenous in its nature. Additionally, as observed from the surrounding urban structure, the formation of the built form consists of an accumulation of narrow and long parcels. This type of parcel has prevailed within the precinct before the 1960s which predates the modernist towers. It is imperative that the established blocks be subject to further division, in order to reinstitute this fine-grained nature of the urban structure that embodies the urban space of Toronto.

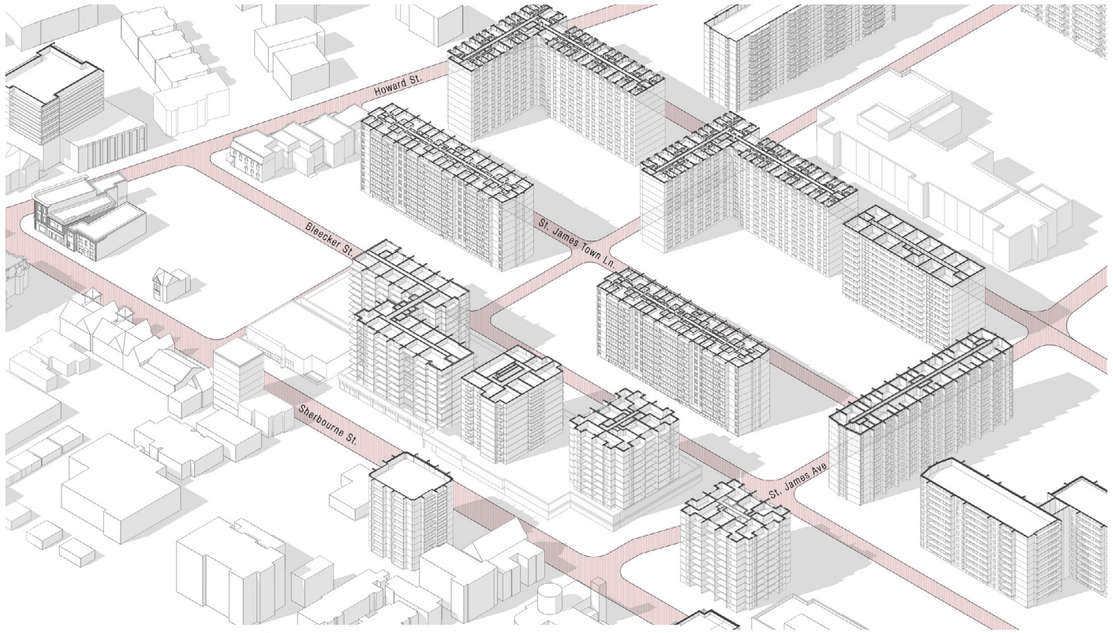


Fig. 3-1-4 Proposed street network

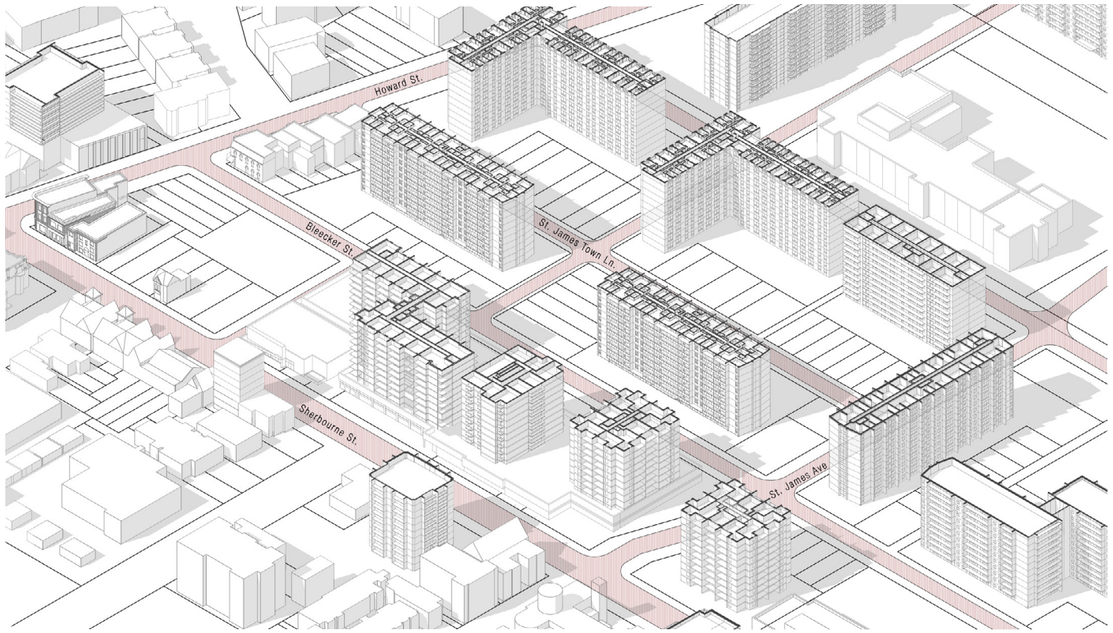


Fig. 3-1-5 Proposed parcel subdivision

3.2 The Urban Block – Block Parcelization

Built Form – Infill strategy

The proposal suggests transforming the ambiguous open spaces with an infill strategy within each defined urban block, similar to that of Sherbourne Lane (precedent discussed in Section 2.1). In the case of Sherbourne Lane, the goal was to preserve the existing low-rise residential. The design advocated through this thesis instead suggests the preservation of the existing high-rise towers, where infill structure consists of low to mid-rise building blocks. The notion of the horizontal skyscraper provides a gradual transition between different masses of built form. The infill proposal recognizes the unique juxtaposition of different building styles erected at various points in time and aims to preserve this historical eclecticism.

Built Form – Transition of point tower to podium tower

The fundamental problem of the point-tower type in St. James Town lies within the way the tower meets the ground; it takes the overall building floor plate and protrudes straight down. The towers sit in isolation, due to the deficiency in the articulation of transitional built form at the base of the tower. The adaptation of the podium-tower type has successfully dealt with this particular issue for Toronto's current condominium developments.[2] In reference to this model, the design proposes a podium expansion along the base of all existing towers. This podium block resonates with the notion of addition rather than subtraction, and in such manner, during the construction of the expansion, the integrity of the existing towers would not be compromised. Not only does the podium extension reconstitute a clear relationship between built form to parcel boundary and parcel to streets, but it also functions as a transitional medium between the tower and the proposed infill parcelized building type. The built form of the podium will have a direct influence on the configuration of parcelization, and thus by recognizing this, the design of the podium plays a significant role in the early design process.

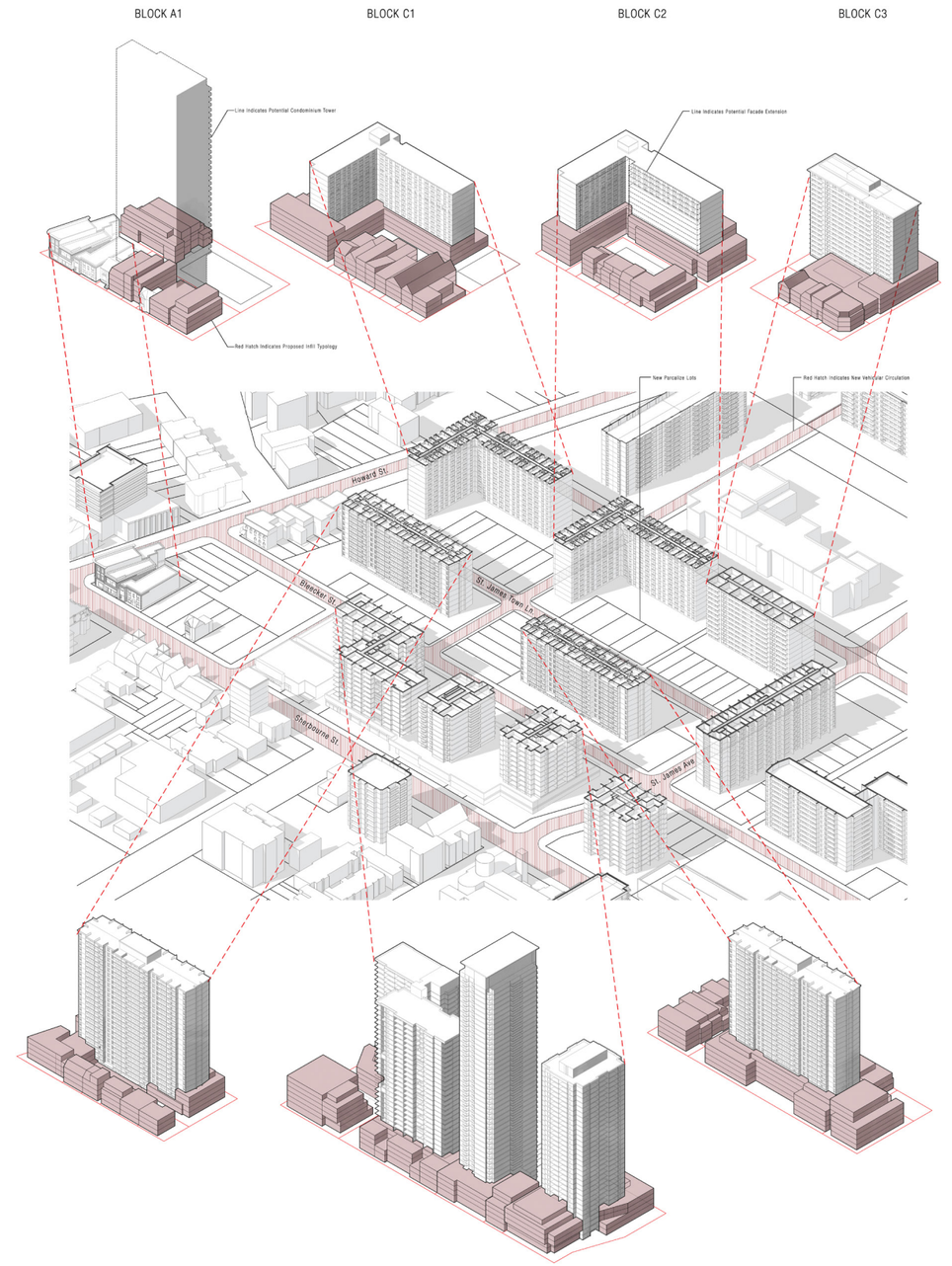


Fig. 3-2-1 Block massing development

A number of underlying principles should be respected when formulating the disposition of the podium:

1. The reconstitution of the street-to-building relation is the primary concern: the podium should extend towards the streets with a minimal setback, thus providing a street definition with the street wall.
2. The maximum height of the podium should not exceed five storeys.
3. An ideal 1:1 (building height: building to building horizontal distance) ratio should be achieved.
4. The podium serves as a function to consolidate the outdoor garbage storage and the underground parking garage entrance. Where possible, the positioning of the new entrance should respect the location of the pre-existing underground garage entrance.
5. Ultimately, the arrangement of the podium should maximize layout efficiency. This will ensure full exploitation of open areas that are dedicated towards a more fine-grained parcelized development.
6. Identify and preserve open spaces within the block.

Built Form – Fine-grained parcel

Each urban block consists of three essential ingredients: the existing tower, the podium expansion and infill parcelized lots. The established podium formation sets up the basic framework for the urban block, what is unoccupied by the podium will be subject to further subdivision. Sequentially, the development of the infill proposal will work within this parameter. Further lot subdivision is to conform to and mimic the generally small-scale parcel lots in the surrounding; a variety of narrow street frontage and long parcels are desired. This concept of a fine-grained parcel resembles the “free parcel” development in Borneo Sporenburg. Consequently, a large undeveloped lot of land is subdivided into smaller parcels and redistributed to various owners; they would then develop the lot under particular guidelines.

The following general rules are to be applied:

1. Parcelized lots should maintain a narrow street frontage of 5m to 12m wide
2. Unless specified, infill buildings should not exceed four storeys high
3. All units should be accessed from the street level to increase access points along the street wall, thus promoting porosity.
4. The infill form should respect the line of the street wall
5. Buildings should always abut against the edge of the adjacent parcel.
6. A separation between parcels is permitted when a midblock pedestrian path is required.

Fig. 3-2-2 Infill development, roof top plan

Sequence of Development

The development process will involve negotiations between a wide range of stakeholders. The city council, professional planners and community organizations, would have significant influence over the general master plan of the site at a neighbourhood scale. However, the implementation of the master plan could only be possible with the participation of private master developers who currently own a vast majority of properties in the neighbourhood. (In some cases, the master developer is represented by a public entity, for example, the Toronto Community Housing) Elements of the new street grid and urban block configuration would require the collaboration between the city and the master developers to devise the intricate details of land ownership. Once the street grid and urban block that reinforces the urban structure of the neighbourhood is established, further development of the block could commence.

A number of outcomes are possible depending on the course of action taken from this point onwards.

1) The block remains under the ownership of the master developers.

The following scenario implies that the master developer retains control over the management of the podium, underground parking and the infill development. All components would be designed under the codes of the masterplan and be constructed simultaneously. Upon the completion of the project, the units would either be rented out or sold as a condominium structure. This model is somewhat similar to the current condominium development as well as most urban blocks developed in St. Lawrence neighbourhood and Borneo Sporenburg (excluding the “free parcel” lot). This strategy is the most straightforward to implement and the most economically viable option.

However, as discussed earlier, there are fundamental problems to this methodology. Under single ownership, the urban block often lacks diversity. Even when the guidelines could regulate diversity, there is no real incentive for developers to comply.

2) Parcelized lots distributed to sub-developers

Instead of a single ownership structure, the podium tower would remain under the master developer. Meanwhile, the subdivided lots will be allocated to various sub-developers as freehold properties. This approach resembles the “free parcel” model, where a group of private owners, under the guidance of the master plan, will have control over the character of their parcel. By doing so, the urban block could attain true diversity.

In this scheme, the sub-developers are responsible for building and maintaining the freehold property, as well as providing their vehicular parking. The size of the subdivided lots is shaped to integrate and mimic the standard parcel size in the City of Toronto. Given the scale of the lot and freehold nature of the property, a single-family row house and the fine-grained parcel is, therefore, the ideal pairing.

As the city continues to grow, higher density is almost a requisite. Through land-assembly, these small lots are merged into a larger strip of land and redeveloped into multi-unit condominium townhouse. Such a proposal is the most logical and feasible strategy that could attain density within the given parameters. However, as discussed earlier, the diversity achieved from a freehold property is far more vibrant than what a condominium townhouse could provide. The question now arises: could the fine-grain parcel design achieve density while retaining freehold ownership?

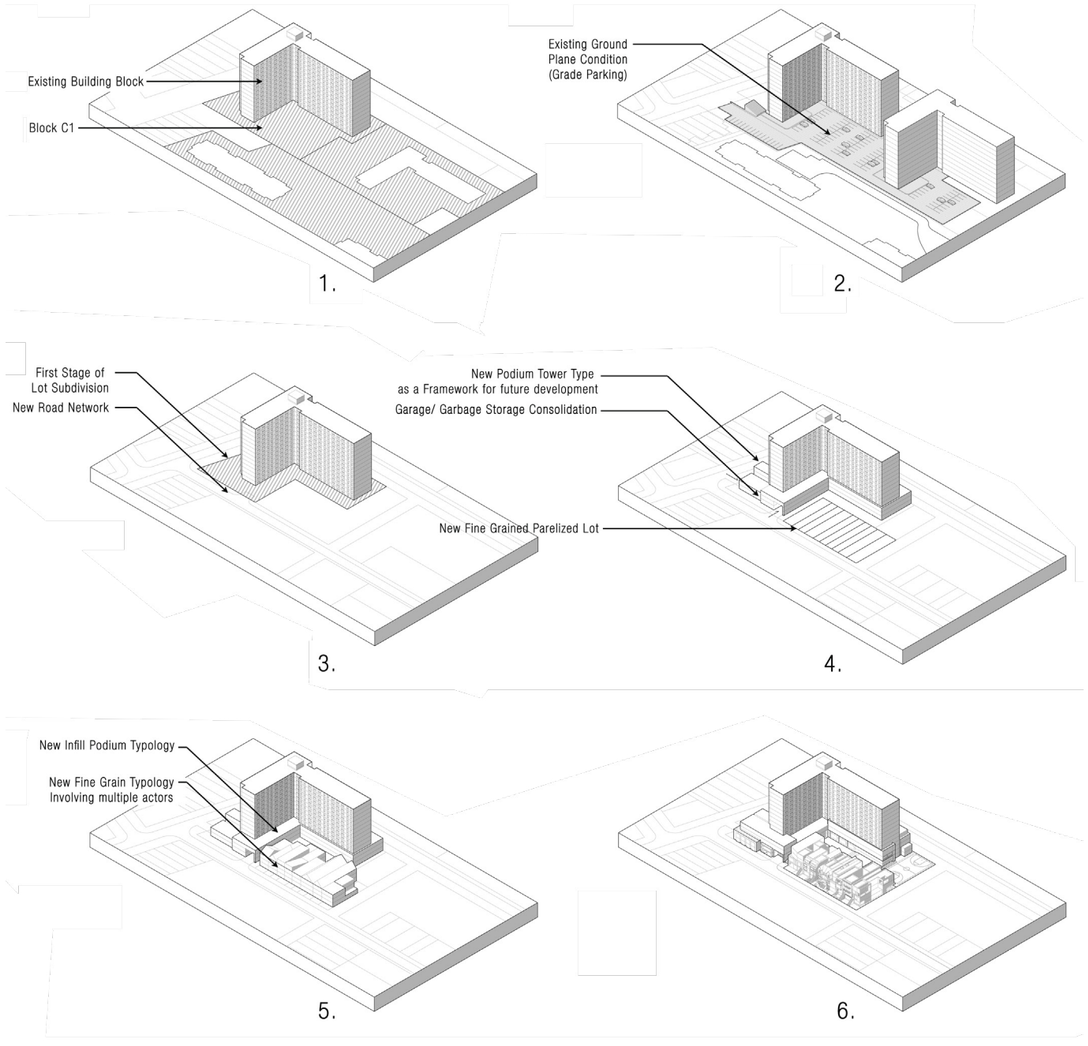


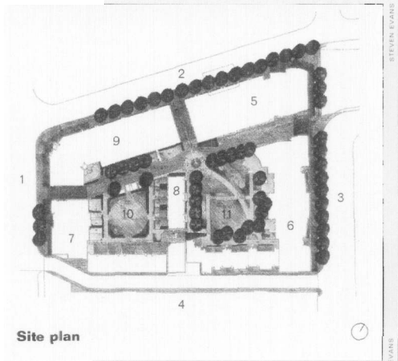
Fig. 3-2-3 Block and podium development

3) Collective ownership and shared amenities

In order to achieve a higher density, the first and second scheme have to be combined into a new scheme- a third option that incorporates a shared underground parking garage system. This strategy is not entirely unprecedented. The model of development with shared amenities among various developers was adopted in the final provincially subsidized urban block developed in St. Lawrence neighbourhood.[3] Four distinct developments, with different tenure, working together to form a perimeter block and shares the same underground parking garage as well as the communal courtyard. In the article published in The Canadian Architect, University Professor and Canadian architecture critic, Marco Polo described the project "as an example of how large blocks can be developed to accommodate a lively mix of residents. The economies realized by virtue of shared amenities, and the variety or architectural expression achieved within a single, coherent urban design strategy, provides an exemplary precedent for building and living in the city."[4]

In the case of St. James Town, two forms of ownership are proposed within each block, the podium tower remains as a proposed built rental apartment or a condominium ownership structure, and the fine-grain parcels are sold under freehold ownership; this guarantees maximum flexibility for sub-developers to develop their lots under the guidelines set out by the master plan. This approach also requires persistent communication between the master developer and sub-developers. Instead of the typical backyard fences that segregate properties, the various stakeholder should negotiate to envision a shared space where the property line abuts. The result is a communal courtyard space that all stakeholders could take ownership of, where each particular rear façade contributes to the overall character of the interior courtyard space. The master developer will be responsible for expanding the existing underground garage and constructing the podium expansion; this will set up a basic framework for the second phase (the "freehold parcels") of construction to commence. On top of the newly expanded garage, sub-developers will erect their building within their property. Under these circumstances, the sub-developers are now free from the burden of supplying parking amenities. Higher density building typology is feasible within these parameters; these could range from back-to-back housing, stacked housing and even back-to-back stacked housing.

The drawback of this scheme is the apparent intricacy of the differentiated vertical land ownership structure, meaning that the underground amenities will remain under the ownership of the master developer while sharing the same foundation, the small-scaled parcels above grade will be under the ownership of small-scale developers. There is also an ambiguity regarding the ownership of the communal space and problematic questions such as who will be responsible for the up-keeping of the space, and who will be financing the construction of the urban landscape? On the other hand, the ambiguous nature of this ownership structure will encourage all parties to contribute to the overall maintenance of the urban environment. Nonetheless, additional negotiation is required to formulate the detail of the financing and ownership rights.



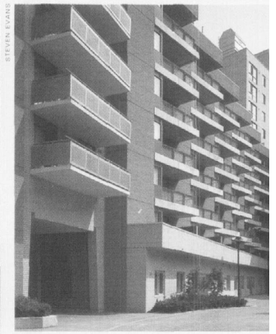


Fig. 3-2-4 (top) Older Women's Network Housing Co-op and Old York Tower face onto the Esplanade.
Fig. 3-2-5 (center left) Site plan
Fig. 3-2-6 (center right) private balconies of the Older Women's Network Housing Co-op
Fig.3-2-7 (bottom left) Courtyard view
Fig.3-2-8 (bottom right) Courtyard view

Block Diversification

The consequence of an explicit street grid system is the clear definition of urban blocks which, to some degree, operate as a modulated regime. Each block represents a distinct unit, and at the same time, they are formed under an overall urban structure governed by the street grid. The aggregation of all modules forms a larger complex system, yet if one fails, the integrity of the whole remains intact. This form of modularity is substantial to neighbourhood resiliency; the system of the urban components is capable of perpetual aggregation and disaggregation. The smaller the parts are, the easier for each component to be replaced and readapted as it fails, this fosters innovation and efficient transfer of knowledge between modules. This notion of modularity operates across multiple scales of the urban form. An assemblage of parcels forms a street wall, the aggregation of street edges/parcels manifest into a block and cluster of blocks forms a larger precinct. Ultimately, the precinct works in a larger network of the city. This notion of the city begins from the smallest fraction – the parcel and the block.

The proposal of the thesis encourages this idea of modularity; whereby every urban block is a unique assemblage of infill parcelized units. Each block could comprise many unique, similar or identical parts. At the street level, different configurations of parts create diversity across the network of urban blocks. To systematize this infill configuration, a taxonomy that categorizes these configurations is proposed.

This is separated into two main scales: Block scale and Parcel Scale.

The classification of the block scale is determined by the available distance between the street to the pre-existing tower block. Type A represents a general 18m separation; type B represents a 30m separation. The position of the existing towers dictates the nature of the separation; it both limits and allows for a specific possible layout. A shallow depth eliminates the possibility of internal courtyards. Whereas in the wide depth condition, the use of courtyards is almost a requisite to enhance the daylight condition in the otherwise deep building mass. Within Type A and B, the classification is further subdivided into a residential or mixed-used application.

At the parcel scale, the classification is determined by two main types of infill building. Type S represents the stacked building type. Type P represents the podium building type. Both types are comprised of a variety of street edge condition. Whether the function is either strictly residential or mixed-use, the dynamic interplay between the different setbacks and niche conditions offers a degree of private, semi-private, semi-public and public street edge treatment.

Infill Typology

TYPE A : 18m Building to Street Separation

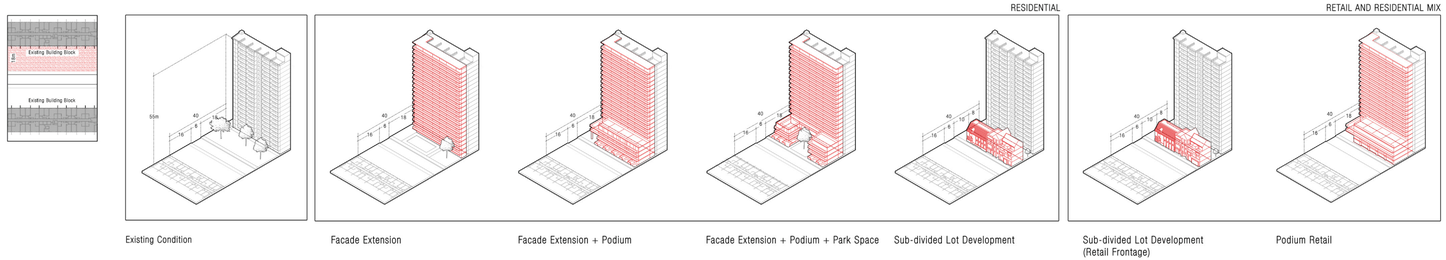


Fig. 3-2-9 Infill typology (type A)

TYPE B : 30m Building to Street Separation

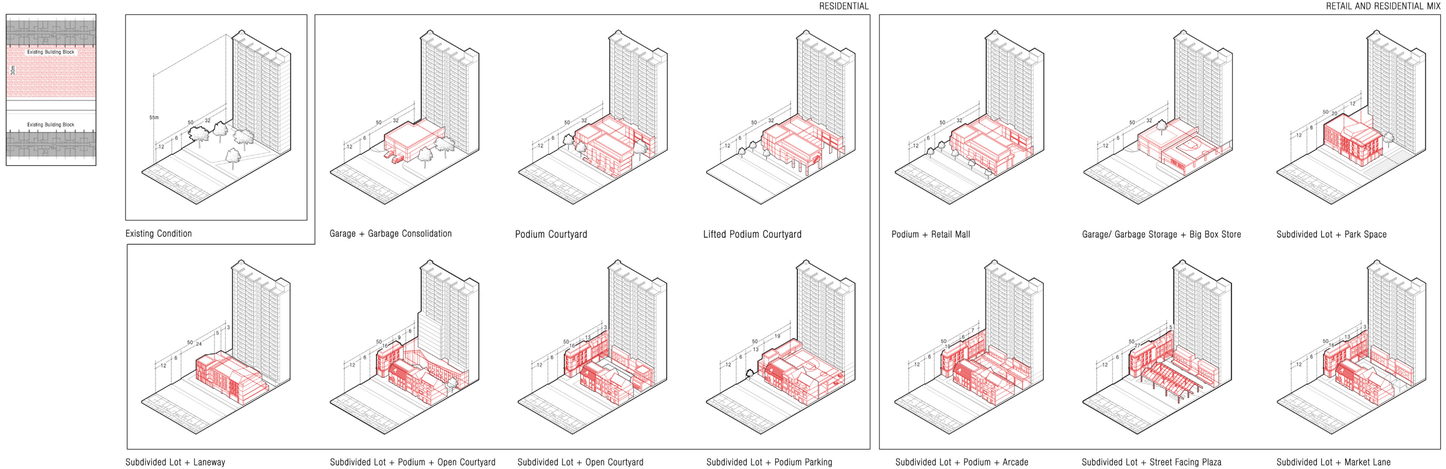


Fig. 3-2-10 Infill typology (type B)

SUB-CATEGORY TYPE S : Stacked Housing to Street Relationship 1:500

Fig. 3-2-11 Infill typology (type S)

SUB-CATEGORY TYPE P : Podium to Street Relationship 1:750

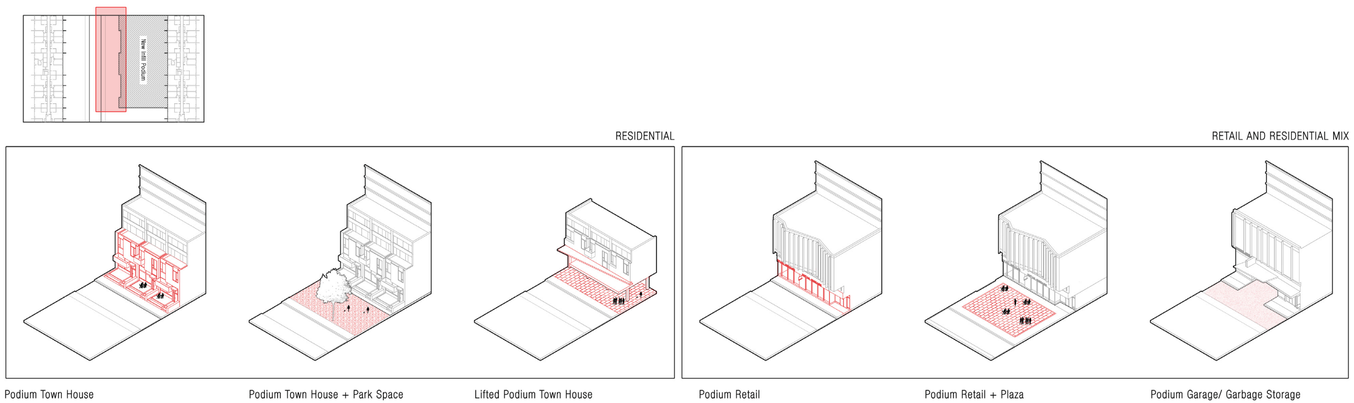


Fig. 3-2-12 Infill typology (type P)

3.3 The Street – Device for Place-making

Not only is the street the underlying structure of the urban form, but it is also a place in itself. However, the linearity of the street brings about a direct correlation with speed and motion, where it is perceived more as a means to travel rather than a place to linger. Rejection of streets in the planning of the privatized neighbourhood such as St. James Town is discernable. To break away from the linearity of a street, pedestrian paths of the neighbourhood were designed to be surrounded by vast open spaces instead of buildings and streets. This fixation on the separation of function and spatial separation hinders on the development of pedestrian life.

This thesis proposes the reintegration of streets as the critical bonding agent among the various urban components. It considers the street to be the primary element of the public realm that provides a linkage of all public activities. The strong interdependence between parcels and street edge, blocks and streets are required to re-establish the definition of urban form that was once lost during the massive redevelopment of the neighbourhood. This network of streets is conceived with a hierarchical organization; where streets are distinguishable by various characteristics. This is systematized by the primary quality: residential street, neighbourhood commercial street and the main avenue. Working under a set of parameters, the network of streets contributes to the overall quality of the neighbourhood.

Fig. 3-3-1 Streets

Residential Street

1) Building height to street width ratio (street wall to street wall):

A general 1:1.5 ratio should be preserved. The residential street should be wider, and building heights are moderately low. However, the ratio should remain below 1:2 to provide an adequate street definition.

2) Trees:

Due to the application of a slightly wider street, the use of taller trees is desired. This contributes to the overall street definition; as well as a traffic calming device. The abundant supply of trees brings about a new kind of Tower in the Park neighbourhood without the excessive use of open spaces.

3) Street wall:

The infill typology consists of a mixture of podium type and fine-grained stacked housing. Both building types should contribute to the reconstruction of the street wall.

4) Parcels to street relation:

Blocks along the street should consist of fine-grained parcelized characteristic. In addition, the street frontage of the parcelized lots should remain between 5 to 12m wide. Each parcel should consist of at least one access point to ensure a high level of permeability along the street wall and creates dynamic visual interests.

In the case of the infill podium type, despite developed under single ownership, the large street wall of the podium block should be articulated in the same rhythm of the 5 to 12m wide street frontage, with the same density of assessing points. Therefore, each ground floor residential units should have an entrance from the street level. Here we acknowledge the empty rhetorical diversity of the podium type. Due to this rather pseudo-nature, the podium type must be invariably counterbalanced by the fine-grained parcelized development on the opposite side of the street. The street walls from two urban blocks work in harmony to shape the overall character of the street.

5) Podium space

The increased depth of built form is the by-product of the podium expansion. Even though the expansion of building footprint grants supplemental interior spaces, often they lack access to daylight. To maximize layout efficiency, such spaces are perfect opportunities for gymnasium, interior sports, study room, game room amenities.

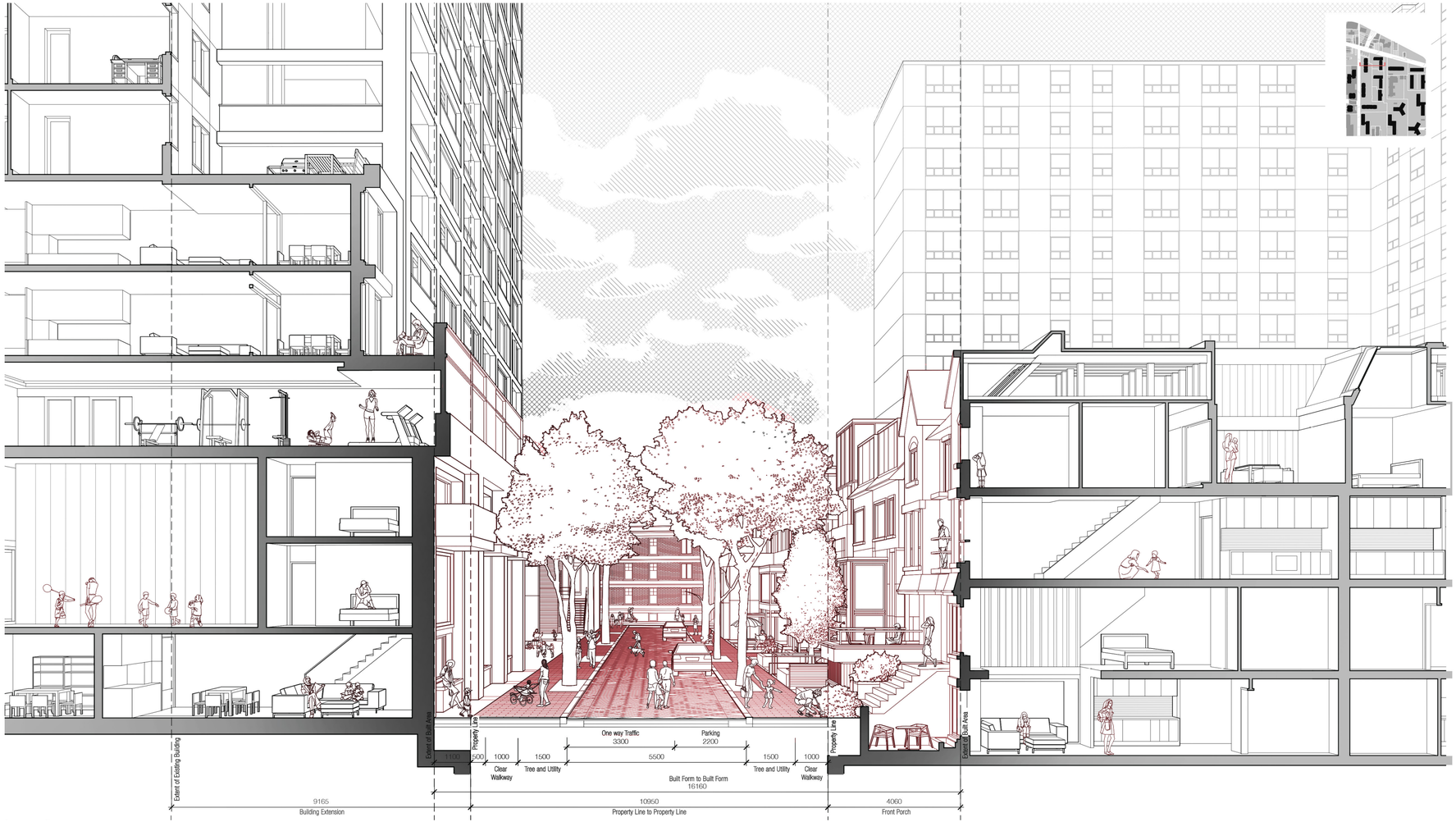
6) Setback

Setbacks from the public street should be adopted. This is regulated by a suggested "extent of built area" that is set back from the established property line defined by the street code. The setback could range from 1 to 4m wide; this is to ensure a proper transitional zone between the public and private realm. This semi public-private zone is ambivalent in its nature. The significance of this buffer is to allow private owners to take ownership of this semi-public area and customize their front porch by inserting their own unique identity towards their own space. By doing so, variation and diversity along the street are increasingly prominent.

7) Vehicular circulation

Paths for vehicular circulation should remain at 5 to 6m wide and serves only one-way traffic. Narrow streets are suggested to have a traffic-calming effect.[5] In addition, a 2.2m-wide roadside parking, as well as the continuous road pavement is implemented as an additional traffic-calming device.[6] What may seem as infinitesimal details have a great impact on the overall system to compose a vibrant neighbourhood environment.

Fig. 3-3-2 Street Section- St. James Town Lane (Residential Street)



Neighbourhood commercial Street

1) Building height to street width ratio (street wall to street wall):

Commercial streets should have an intimate ratio of 1:1, to establish a strong presence of the street wall.

2) Trees:

The combination of small-scale light posts and trees strengthen the street definition. At the same time, at a 1:1 height-to-street width ratio, the already bold street definition requires shorter tree height.

3) Street wall:

Similar to the residential street, the street wall here is established by the infill podium/ stacked housing type. Contrary to the residential street, the ground floor consists of a variety of small-scale retails. The code here mandates that built form must erect along the façade line to strengthen the element of a unified street wall.

4) Parcel to street relations:

The 5m-12m wide street frontage should be mandated to govern the small commercial frontage. This ensures that rental spaces remain small-scale, affordable, and encourages local retail rather than the big box commercial spaces.

5) Podium Space

To fully utilize podium space, the city should negotiate with master developers to dedicate portions of the podium interiors towards community spaces, while maintaining retail spaces at the ground floor and locating such spaces on the second to fourth storeys of the podium. These community hubs could provide public access at the street level distinct from the private entrance. Given the commercial nature of the street, the function of these community spaces should encourage public uses; these could range from a library, multifunctional spaces, schools, mini theatres, community hall, all of which promotes the increase of public pedestrian traffic.

6) Setback

The commercial street requires a minimum 1 to 2m setback from the property line. This minimal buffer zone allows for informal use of the space. The function of these spaces could range from restaurant café seating, outdoor retail display, outdoor planters. Each storefront has its unique identity, but together they contribute to the overall environment of the streetscape.

7) Vehicular circulation

The vehicular circulation, road ride parking condition and the choice of pavements remain the same as the residential street to achieve the same traffic calming effect. Pedestrian circulation has priority over the vehicle circulation, as shown in the widening of the sidewalks.

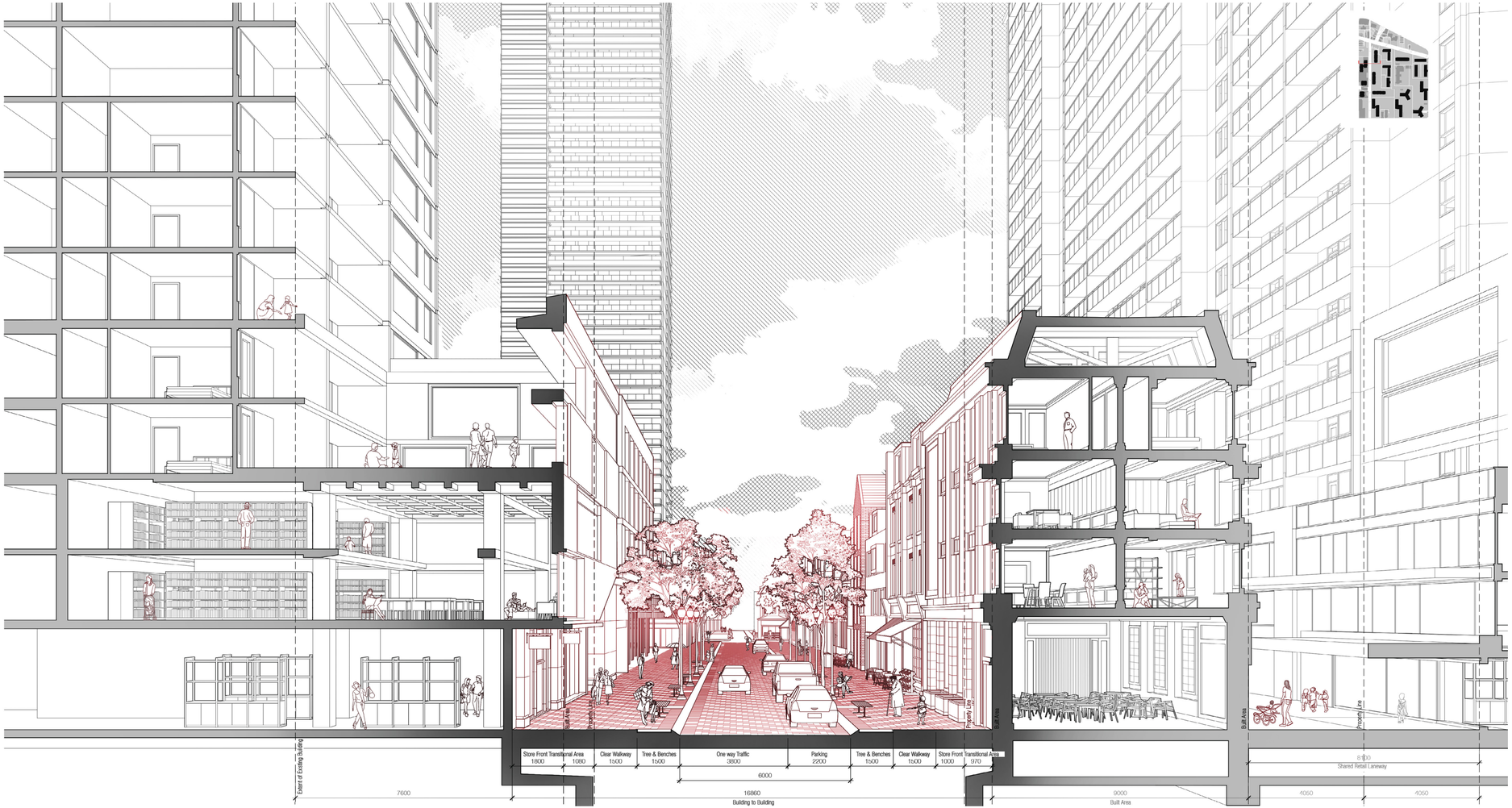


Fig. 3-3-3 Street Section- Bleecker Street (Commercial and Residential Street)

Main Avenue (Sherbourne St.)

1) Building height to street width ratio (street wall to street wall):

As discussed in previous chapters, an apparent trend of condominium tower development is concentrated at the intersection of Sherbourne St. and Bloor St. The potential growth of the surrounding indicates the possible re-adoption of Sherbourne St. into a major avenue. In the event of this projected growth, the building height to street width ratio is maintained at 1:1. Given that the distance between the street wall to street wall is roughly 20m, the required number of storeys along Sherbourne St. should be 6 to 7 storeys.

2) Trees:

In this scenario, the focus of the street definition is shifted toward the buildings on both sides.

3) Street wall:

The assemblage of the wall still consists of the podium type or the fine-grained stacked housing, with the addition of mid-scale buildings. Due to the nature of the avenue, the majority of the parcels will focus on the mid-scale buildings and podium- tower type.

4) Parcel to street relations:

The street frontage of each parcel is still prescribed as 5 to 12m wide. However, given the mid-scale attribute of the avenue, most parcels would be designed to reach the upper limit of 12m wide.

5) Podium space:

The podium spaces here are devoted to programs such as big box stores, groceries store, any large-scale commercial space and offices.

6) Setback:

There should not be any set back on the avenue; buildings are built right up against the property line to maximize the building footprint. It is important to note that, any proposed building that exceeds the limit of 7 storeys high should provide a set back at the 8th storey to align with the existing towers along Sherbourne St. In this fashion, the towers will not disrupt the defined 1:1 building height to street width ratio.

7) Vehicular circulation

The vehicular movement will play a more notable role in the avenue. After all, vehicle circulation still remains as a significant system within the city network. More importantly, the avenue will act as the main route for most public transportation, as well as the city's designated bicycle lane system that serves the surrounding communities.

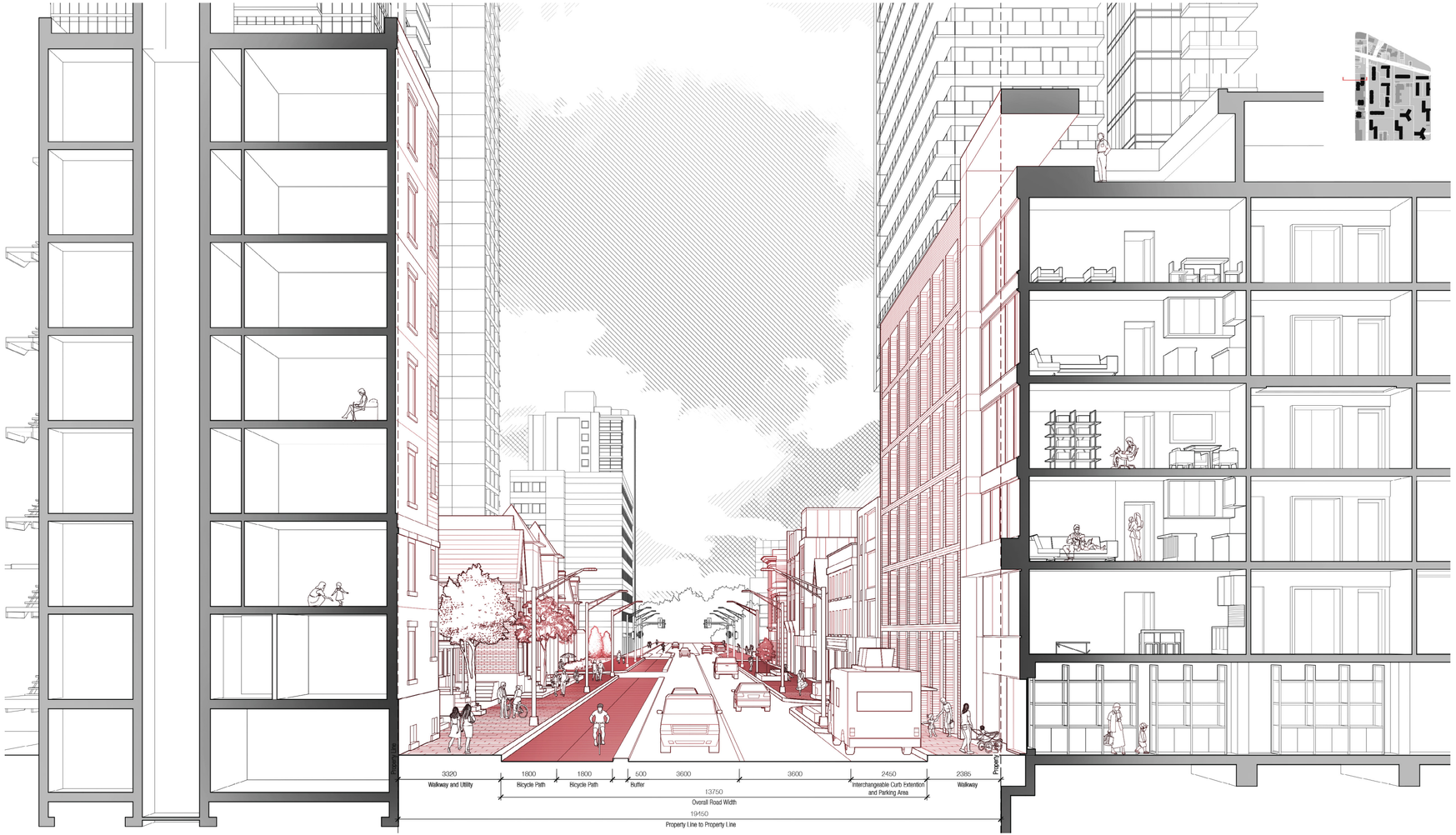


Fig. 3-3-4 Street Section- Sherbourne Street (Avenue)

3.4 The Parcel - Reinventing the Typology

Parcel Development

The critical methodology for the formulation of parcel layout is that the process must be conceived alongside the development of a building type. The parcel dimension and shape shares the very logic of the building that would sit on it. These relationships are interdependent and should be formed systematically.

The newly defined parcel of the podium tower is mainly dependent on the original floor plate of the tower and the possible layout of the podium that comes out from it. Multiple limiting elements such as existing structural components, daylight factors, the efficiency of layout and fire exiting also plays an important role. The built form of the podium expansion should put a focus on maximizing the footprint of the fine-grained infill developments. The arrangement of these components within the block will also affect the quality of the shared communal spaces. This entire network of relations is to be considered as a whole and conceived simultaneously. In order to establish the relationship between the parcel and built form, one must already have a preconceived notion of the building type and the intricate arrangement of the building layout.

Even though each tower block is unique by virtue of the different parameters, they are however grounded by specific guidelines set out by the master plan. This ensures a certain coherency within this unpredictable diversity. Working within this framework, the built forms and parcels can find a common underlying structure where the components work in harmony with one another. At the same time, the guidelines should not impose a rigid structure and allow for maximum flexibility where diversity could be celebrated.

Detailed Parcel Development – Podium type

1- As defined in the previous sections - 3.2 and 3.3. The podium should reconstitute the relationships between the built form, the parcel and the street. The design should respect the element of the street wall and set-back established by the type of street.

2- Design of the street wall façade should pay close attention to variation, niches, ornamentation. It should ensure the maximum use of doorways and window openings at the ground level.

3- Despite under single ownership and development, the podium should be congruous with the narrow width of the parcel layout in the surrounding. Design of the podium facade should attempt to break down the large canvas into 5m-12m wide compartments.

4- A wide variety of materials should be implemented, to enhance diversity and variability further.

5- Where applicable, ground floor should comprise of retail amenity (shops, cafe, restaurant), size limitation to each rentable space should be applied to guarantee small and affordable units. This also increases the number of ground floor entrances and offers a variety of retail functions that attract the general public.

6- Cut out courtyards along the perimeter of the podium could allow for better accessibility to day-light, opportunities to increase the supply of residential units and enhances the efficiency of the tower layout. (Fig, 3-4-2)

7- Ensures the built form of the podium provides a proper transition between new and existing buildings.

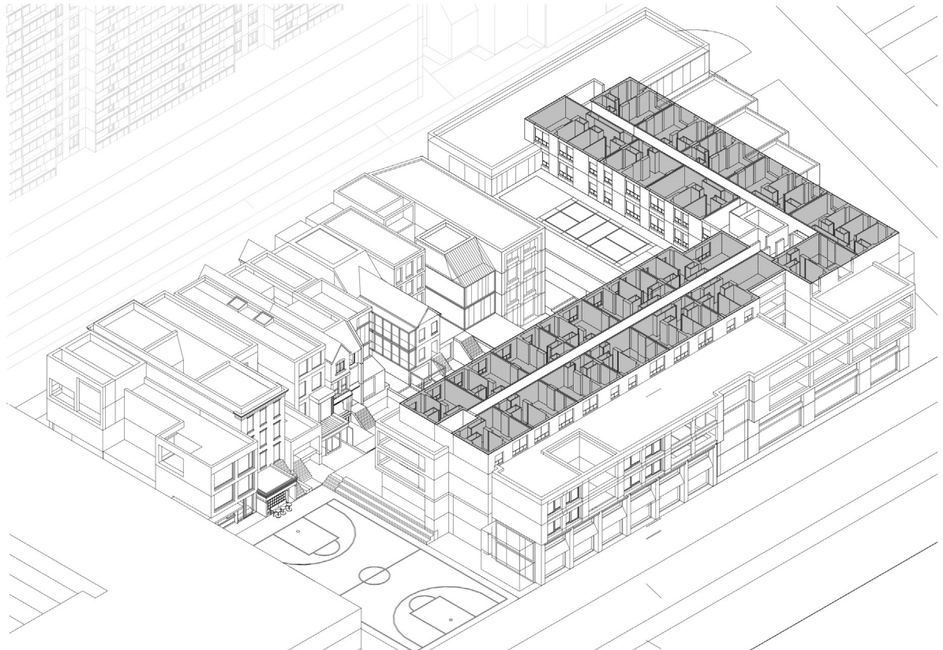


Fig. 3-4-1 Horizontal Section (Tower layout)

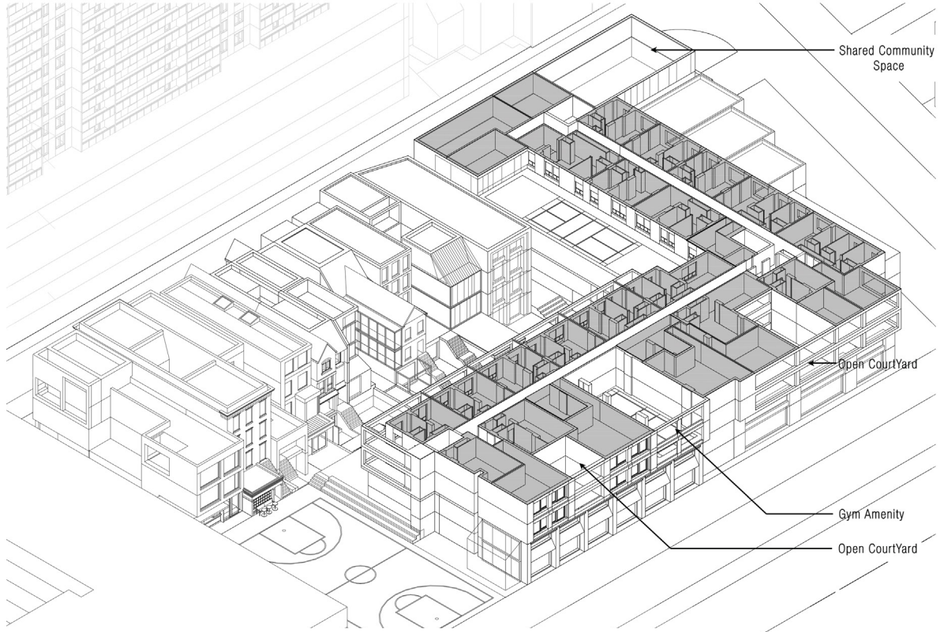


Fig. 3-4-2 Horizontal Section (Podium Layout)

The study “Toronto Housing Market Analysis” initiated by the Affordable Housing Office of the City of Toronto in 2019 has indicated that Toronto “will experience accelerated population growth over the next 20 years and vulnerable groups and low- and moderate- income households will experience increasing difficulty accessing suitable and affordable housing.”[7] Currently, nearly one in three families in the city are found living in unsuitable housing. (defined as housing that does not have sufficient bedrooms to support the make-up of the family) [8] The lack of affordable housing within the city is increasingly alarming, and this is especially detrimental for families which often requires larger size units. The city has pushed forward strategies like the “Changing Lanes” in 2018[9] as a remediation plan for the housing crisis. This initiative supports the mild increase in density within Toronto laneway houses; adding residential units on top of the existing city fabric.

By the same token, the design of the fine-grained lots within the St. James town block aims to provide an alternative infill model for densification. Despite the small property footprint, these fine-grained lots have the potential to fit various unit types that houses families with different makeup. The modularity of the typology allows for a virtually limitless combination of unit types and accounts for future renovation or re-adaptation tailored for the changing needs of the families. These infill model can be managed under the ownership of the sub-developer, and other units can be rented out to families. Additionally, given the nature of the multi-unit property, the lot can be under co-ownership of various families to increase the affordability of the property.

To promote diversity, these parcels are designed to operate as “free parcels”, sub-developers are free to erect any building styles of their choice. However, to counterbalance this unpredictability and avoid disorganization, the development of the parcels is to be grounded by a set of loose guideline that gives structure to the overall block. Master planner, the main developer who has the ownership over the podium-tower and the sub-developer will collaborate and develop the block as a cohesive unit.

Detailed Parcel Development – Fine-grained lots

1- The parcel must be made up of 2 or more residential units.

2- Each parcel should consist of 5 or more bedrooms; higher density is encouraged.

3- Each parcel should have at least one access at the street level.

4- Building face should respect the element street wall.

5- The building should respect the set-back defined by the overall street character guidelines.

6- Buildings should abut against the edge of the adjacent parcel unless overridden by a mid-block connection.

7- No construction of more than four storeys and must be more than a single storey.

8- The difference of the overall height with the adjacent building could not exceed 3meters.

9- Sub-developers are encouraged to explore various building materials as a way to create diversity along the street wall.

10- While not mandatory, datum of adjacent property's window and door opening, eave height, roof slope should be coordinated.

11- All houses should integrate a form of outdoor space such as roof-top terraces, patio spaces and balconies.

CATEGORY 1 - 7m W x 28m D Parcel -

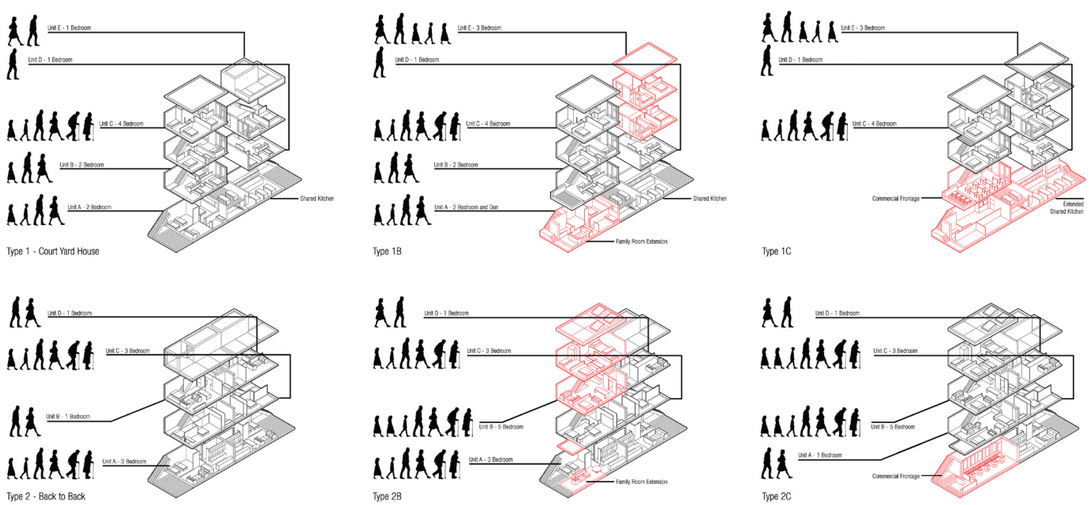


Fig. 3-4-3 Unit layout (Category 1)

CATEGORY 2 - 5m W x 28m D Parcel -

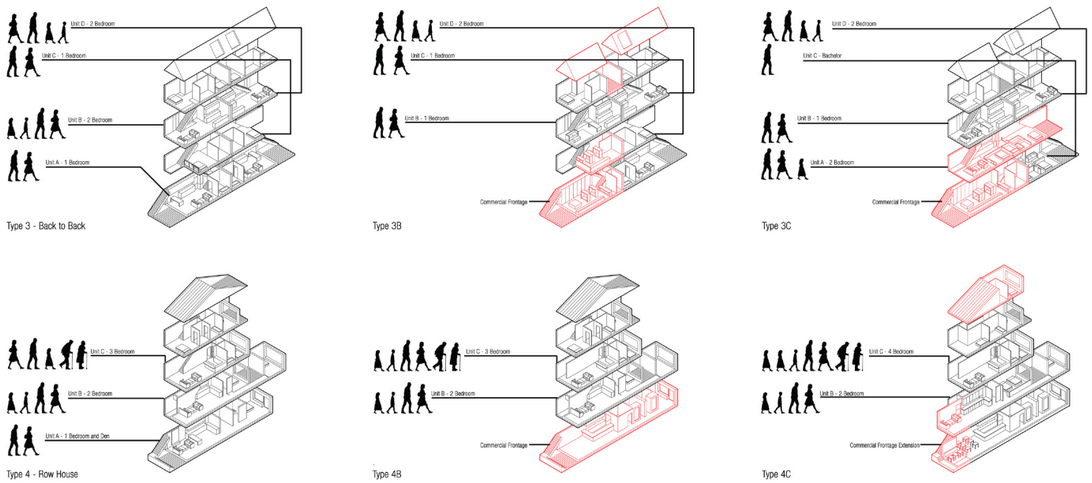
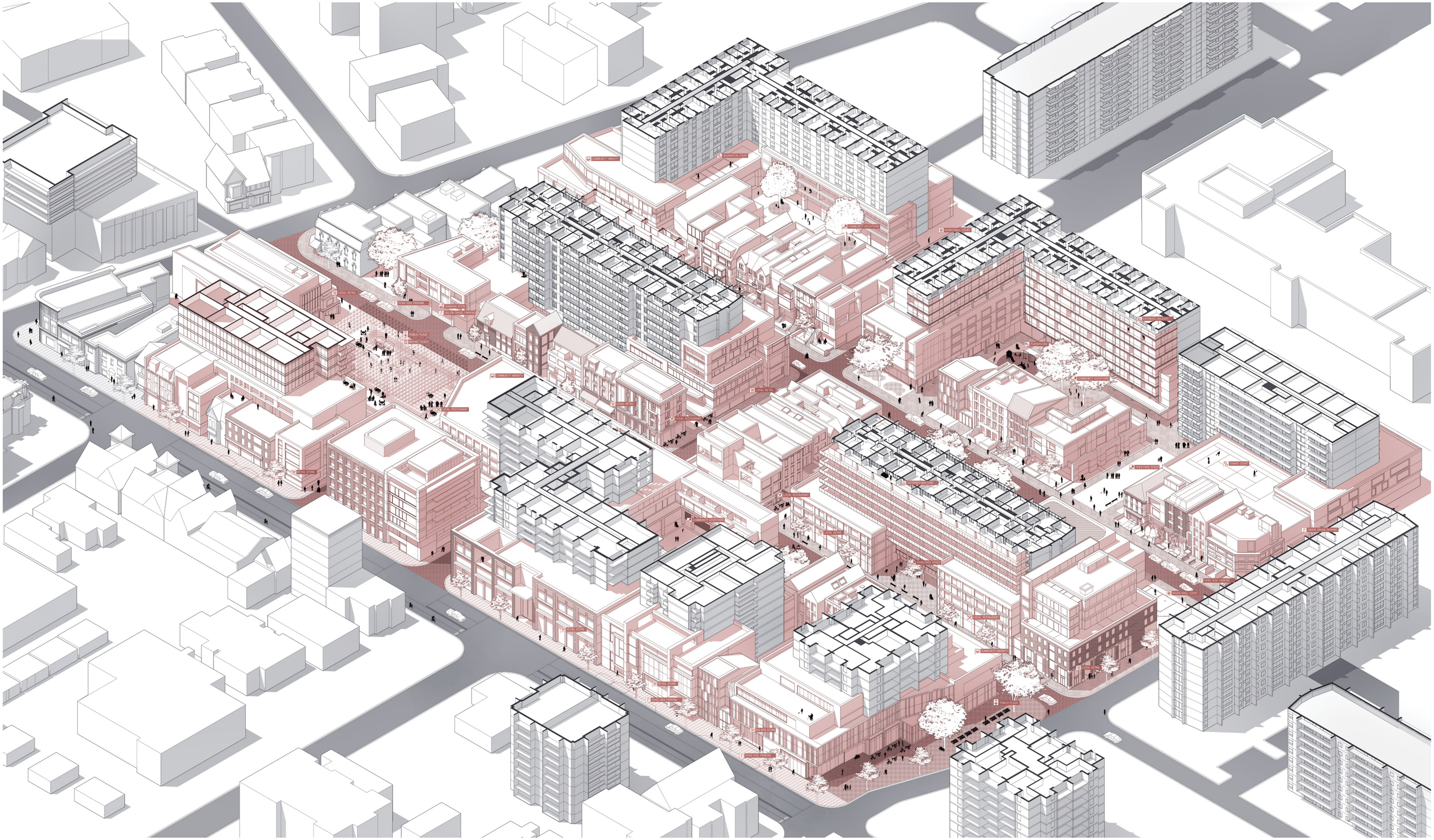


Fig. 3-4-4 Unit layout (Category 2)



Axonometric Horizontal Section - 1:300

CHAPTER 3 END NOTES

1. Jacobs, Jane . 1961. The Death and Life of Great American Cities. New York : Random House.
   Krier, Leon , Demetri Porphyrios, and Jacquelin Robertson. 1985. “Leon Krier: Houses, Palaces, Cities.” Architectural Design Profile
2. City of Toronto. 2013. “Tall Building Design Guidelines.” Toronto.
3. Polo, Marco. 1999. “Downtown prototype.” Canadian Architect, August: 19.
4. Ibid.
5. Sucher, David. 1994. City Comforts: How to Building an Urban Village. City Comforts Inc.
6. Ibid.
7. Canadian Centre for Economic Analysis. 2019. Toronto Housing Market Analysis from Insight to Action. City of Toronto.
8. Ibid.
9. City of Toronto. 2019. Changing Lanes: Overview. June 28. Accessed April 03, 2019. https://www.toronto.ca/city-government/planning-development/planning-studies-initiatives/changing-lanes-the-city-of-torontos-review-of-laneway-suites/overview/.

4.0 CONCLUSION

In view of the discussion carried out through the previous chapters, 'Reanimation' is a work that challenges contemporary practices of urban planning, while redefining existing urban networks towards a truly inclusive, resilient, humane and sustainable cityscape. The capitalization of under-utilized spaces has been established as a fundamental pillar of urban revitalisation, with a large focus on preservation and bolstering the sense of place.

Undoubtedly, methods of modernists planning have been doomed to failure: the renouncing of the old city fabric, combined with large single-ownership plots of land and a car-centric model of urbanisation, provide the ultimate ingredients for undefined urban spaces, the rapid deterioration of the built, and the annihilation of human interaction at street level. Hence, this thesis furthers a proposal that counteracts the suffocating effect of post-war condominium development, with the precinct of St. James Town as a testing ground for urban revitalisation strategies.

The design approach presented through this work puts forward the adaptation of an infill typology program, that applies a systematic subdivision strategy that operates across multiple scales, ranging from the finest plot to the overall neighbourhood. The array of conscientiously arranged, shaped and dimensioned building parcels act as ideal incubators for fine-grained activities, therefore promoting a notion of urban planning that is adapted to human scale.

The extensive review of urban literature and precedents carried out through this thesis fundamentally demonstrates the ability of fine-grained parcels to foster social and architectural diversity, as well as a great variability in urban patterns, as shown through the cases of Yanaka, Tokyo and Yorkville neighbourhood, among others.

Another vital aspect highlighted through this thesis is the importance of good urban governance towards achieving a successful course of action towards revitalization. The adaptation of urban frameworks and design guidelines as regulatory tools are crucial to facilitate the design and building process to form an unshakable underlying structure for the neighbourhood. Successful frameworks also need to account for flexibility, while also anticipating for future building typologies to reduce developmental risks, due to the ever-evolving nature of the urban fabric.

The aforementioned strategies shall ultimately have a transformative effect on the pedestrian realm, urban form, neighbourhood vitality. In addition, this approach bears the capacity of generating great financial savings in terms of large-scale demolition costs, energy efficiency and social dislocation. Most importantly, the proposal advocates for adaptability and acknowledges that urban form is the product of the accumulation of historical eclecticism. Urban development hence becomes a cycle of gradual investment, rather than a perpetual demand for a new, experimental masterplan that often eradicates the remnant of the past; like in the case of the tower in the park ideology.

Furthermore, speaking of the importance of the collective memory, despite its intangible character, it should not be perceived as trivial, but rather it should be cultivated in order to direct and modulate the evolution of the built form to produce a dynamic urban realm, one that continually resonates with the culture of its time.

As opposed to the principles furthered by the modernist doctrine that advocates towards wiping the slate clean, the key question for contemporary planners and designers is how to re-adapt and revitalize the existing built form into catalysts of urban transformation. This thesis is not about drawing new lines and re-inventing the wheel, but about issues of renewal, adaptive re-use and working with current urban systems to create a megalopolis where the built, the social and the collective co-exist in a perfectly balanced manner.

BIBLIOGRAPHY

Altman, Irwin , and Setha Low. 1992. Place attachment: a conceptual inquiry. Springer US.

Augé, Marc. 1995. Non-places - Introduction to an anthropology of supermodernity. London, New York: Verso.

August, Martine. 2018. “Urban Form and Social Energy of the City, presentations.” University of Waterloo.

Baird, George, and Barton Myers. 1978. “Vacant Lottery.” Walker Art Center 1-3, 6-51.

Barbour, Gordon, Ombretta Romice, and Sergio Porta. 2016. Sustainable plot-based urban regeneration and traditional masterplanning practice in Glasgow. Glasgow: University of Strathclyde.

Barnes, Steve . 2011. Wellesley Institute: Canada’s densest neighbourhood, St. Jamestown, to possibly get new condos. March 11. Accessed January 29, 2019. http://www.wellesleyinstitute.com/housing/st-james-town-residents-feel-powerless-in-light-of-new-development-in-one-of-north-americas-densest-neighbourhoods/.

Brook McIlroy Planning, Urban Design/Pace Architects , E.R.A. Architects, Quadrangle Architects Limited, and Urban Marketing Collaborative . 2010. Avenues & Midrise Building Study. City of Toronto.

Brown, Barbara, Douglas D. Perkins, and Graham Brown. 2003. “Place attachment in a revitalizing neighborhood: Individual and block levels of analysis.” Journal of Environmental Psychology, 259–271.

Buchanan, Peter . 1988. “What City? A plea for place in the.” Architectural Review, 11 01.

Canada Mortgage and Housing Corporation. 1987. Housing in Canada, 1945 to 1986 : an overview and lessons learned. Ottawa: Canada Mortgage and Housing Corporation.

Canadian Centre for Economic Analysis. 2019. Toronto Housing Market Analysis from Insight to Action. City of Toronto.

Caulfield, Jon. 1974. The Tiny Perfect Mayor. Toronto: James Lorimer and Company.

CBC news. 2018. Residents displaced by St. James Town fire search for housing as deadline to leave hotels rooms. August 31. Accessed January 28, 2019. https://www.cbc.ca/news/canada/toronto/650-parliament-street-fire-hotels-regent-park-1.4805719.

CBC News. 2017. Toronto highrise living by the numbers. May 23. Accessed January 29, 2019. https://www.cbc.ca/news/canada/toronto/toronto-highrise-living-by-the-numbers-1.4127019.

City of Toronto. 2017. “BLOOR-YORKVILLE/NORTH MIDTOWN URBAN DESIGN GUIDELINES.” Toronto.

City of Toronto Planning Division. 2009. “Bloor Corridor Visioning Study:.” Toronto.

City of Toronto. 2013. “Tall Building Design Guidelines.” Toronto.

City of Toronto. 2019. Changing Lanes: Overview. June 28. Accessed April 03, 2019. https://www.toronto.ca/city-government/planning-development/planning-studies-initiatives/changing-lanes-the-city-of-torontos-review-of-laneway-suites/overview/.

Commission for Architecture and Built Environment. 2011. Borneo SporenburgAmsterdam, The Netherlands. January 1. Accessed January 18, 2019. https://webarchive.nationalarchives.gov.uk/20110118150021/http://www.cabe.org.uk/case-studies/borneo-sporenburg.

Daily Hive Toronto Staff. 2017. Toronto has more high-rise buildings than Canada’s next 10 biggest cities combined. February 02. Accessed January 29, 2019. https://dailyhive.com/toronto/toronto-high-rises-canada.

Gehl, Jan. 1971. Life Between Buildings: Using Public Space. Island Press.

Gehl, Jan, Solvejg Reigstad, and Lotte Johansen Kaefer. 2006. “Close Encounters with Buildings.” Urban Design International, 11: 29-47.

Goody, Joan , Robert Chandler, John Clancy, David Dixon, and Geoffrey Wooding. 2010. Building Type Basics for Housing. Wiley.

Hall, Edward T. 1991. The hidden dimension. Anchor.

Hay, Robert. 1998. “Sense of Place in Developmental Context.” Journal of Environmental Psychology, March: 5-29.

Heritage Preservation Service. 2012. Heritage Conservataion Districts in Toronto: Procedures, Policies and Terms of Reference. Toronto: City Planning Division.

Heritage Preservation Services. 2007. “Queen Street West- Heritage Conservation District Plan.” Toronto.

Hester, Randolph. 1976. Neighbourhood Space. John Wiley And Sons Inc.

Hulchanski, J. David. 1990. “Planning New Urban Neighbourhoods: Lessons from Toronto’s St. Lawrence Neighbourhood.” UBC Planning Paper.

Jacobs, Allan. 1993. Great Streets. Cambridge: The MIT Press.

Jacobs, Allan, and Donald Appleyard. 1987. “Toward an Urban Design Manifesto.” Journal of the American Planning Association (Journal of the American Planning Association) 112-120.

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

Kasian Architecture. 2013. Making and Remaking Hazelton Lanes. August 26. Accessed January 29, 2019. http://kasian.com/news/making-and-remaking-hazelton-lanes/.

Kesik, Ted. 2007. “Durability Is Only Skin Deep.” In Concrete Toronto: a guidebook to concrete archtecture from the fifties to the seventies, by Graeme Stewart and Michael Mcclelland, 312-313. Toronto: Coach House Books.

Krier, Leon , Demetri Porphyrios, and Jacquelin Robertson. 1985. “Leon Krier: Houses, Palaces, Cities.” Architectural Design Profile.

Le Corbusier. 1967. The Radiant City: Elements of a Doctrine of Urbanism to be Used as the Basis of Our Machine-age Civilization. Orion Press: Minnesota.

Marcus, Lars, and Johan Colding. 2011. “Towards a Spatial Morphology of Urban Social-Ecological System.” Presented at 18th International Seminar of Urban Form: Urban morphology and the post carbon city. Montreal .

Mcmahon, Tamsin. 2016. Foreign buyers flocking to Toronto’s downtown condo market. April 7. Accessed January 29, 2019. https://www.theglobeandmail.com/real-estate/the-market/one-in-10-newer-toronto-condos-owned-by-foreign-buyers-cmhc/article29551058/.

Mirabelli, Julian. 2018. TOcore: The Transformation Vision for the Future of Downtown. July 27. Accessed December 23, 2018. http://urbantoronto.ca/news/2018/07/tocore-transformative-vision-future-downtown.

Müge, Rıza, Faslı Mukaddes, and Erbilen Mustafa. 2016. “The Assement And Impact Of Shopping Centers: Case Study Lemar.” Open House International (Open House Int) 98-103.

Mumford, Eric. 2000. The CIAM Discourse on Urbanism, 1928-1960. Massachusetts Institute of Technology.

Novakovic, Stefan. 2016. DRP Assesses 58-storey Rental Tower at 591 Sherbourne. http://urbantoronto.ca/news/2016/06/drp-assesses-58-storey-rental-tower-591-sherbourne, 17: June.

Polo, Marco. 1999. “Downtown prototype.” Canadian Architect, August: 19.

Seno, Shireen. 2003. The people make the place. Accessed January 30, 2019. http://individual.utoronto.ca/shireen/project2.pdf.

Sewell, John. 1993. The Shape of the City. Toronto: University of Toronto Press Incorporated .

Sorensen, Andre. 2009. “Neighborhood Streets as Meaningful Spaces: Claiming Rights to Shared Spaces in Tokyo.” City & Society 207-229.

Stewart, Graeme. 2007. “The Don Valley Parkway and Suburban Growth.” In Concrete Toronto: A guidebook to concrete architecture from the fifties to the seventies, by Graeme Stewart and Michael Mcclelland, 242. Toronto: Coach House Books.

Stewart, Graeme. 2007. “Toronto’s Modern Suburbs and the Concrete High-Rise.” In Concrete Toronto, by Graeme Stewart and Michael Mcclelland, 212. Toronto: Coach House Books.

Taylor Hazell Architects Ltd. 2017. “Kensington Market Heritage Conservation District Study.” Toronto.

The Centre for Urban Growth and Renewal. 2012. Strong Neighbourhoods and complete communities: A new approach to zoning for apartment neighbourhoods. Toronto: United Way Toronto.

Therrien, Marie-Josee. 2007. “The Rise of Parking Garage.” In Concrete Toronto: a guidebook to conrete architecture from the fifties to the sevenites, by Graeme Stewart and Michael Mcclelland, 186. Toronto: Coach House Books.

Thorpe, Josh, Carl Shura, and Simon Rabyniuk. n.d. RAC Zone. Accessed January 29, 2019. http://www.raczone.ca/.

Tower Renewal Partnership. 2017. Tower Renewal Blog: Launching the RAC Zoning. July 6. Accessed January 29, 2019. http://towerrenewal.com/launching-the-rac-zone-event/.

Trancik, Roger . 19867. Finding Lost Space: Theories of Urban Design. Wiley.

Whyte, William H. 1980. The Social Life Of Small Urban Spaces. Project for Public Spaces Inc.

Williams, Mike Collins. 2012. The Changing Face of Urban Development in the GTA. February 7. Accessed January 29, 2019. http://urbantoronto.ca/news/2012/02/changing-face-urban-development-gta.