Revisiting Markham's Town Plan:
An Asian Canadian Settlement

by

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I dedicate this thesis to them.

Abstract

Since the second part of the nineteenth century, waves of Chinese immigration have left a deep and transformative imprint on Canadian society. Traditional Chinatowns in every Canadian metropolitan region signal the presence of Asian communities in the commercial built environment, but the question of Chinese society's physical imprint on the residential landscape is yet to be fully considered. While the number of Chinese commercial developments and "ethnic malls" (the new "Chinatowns") in urban and suburban areas of major immigrant areas has increased in recent years, adjacent residential neighbourhoods tend to be designed according to conventional North American models and their English and European antecedents. This thesis examines the question of cultural hybridity in contemporary architecture, and, more specifically, the possibility of an urban planning and of an architectural language inspired by Asian built culture, noting that China is itself in the midst of a huge transformation. Focusing its research on the proposed master plan for Markham Ontario, this thesis explores traditional Asian spatial and temporal conceptions regarding built form and the garden, and the theme of "integration." The counter-proposal for Markham Town Plan presented in this thesis offers a critique of the proposed master plan by the Remington Group, with a view to better serving a community who cherishes walk-ability in a dense environment and fluid relationships between generations. The proposal seeks to provide a built setting for the integration of daily domestic life with social ritual and the spaces of shared cultural memory.

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Introduction

Canada has undergone a substantial demographic transition since the end of World War II. The population has aged, the birthrate has decreased, there has been a massive move first toward suburbanization then toward urbanization, and the source of immigrants has shifted several times in response to a changing global political climate and the country's willingness to accept new peoples. A notable municipality experiencing this change is Markham, Ontario. Modern Markham has experienced unprecedented transformation, growing from a rural small town to the third most populated municipality in the Greater Toronto Area. Markham today has the highest proportion of visible minorities in any Canadian suburb.¹ In addressing its significant population growth, the Town of Markham is embarking on a path of intensification. Markham now possesses a complete master plan, designed by the Remington Group according to the tenets of the New Urbanism, to meet this agenda. The question is here posed: does the Remington Group's plan – with its overly simplified interpretation of the new urbanistic language -- appropriately reflect Markham's diverse communities?² And what form might take an alternate proposal inspired by the social practices of the communities who have largely settled in Markham, in particular, the Asian Canadian one? While the quest to "match cultures to architectural forms" undoubtedly oversimplifies the question of building relevant and open-ended environments for all Canadians, and while it is here recognized that societies are dynamic and in flux, this thesis argues that the search for cultural hybridity in architecture is relevant and necessary. Simply put, Markham is today an established Asian Canadian settlement: why should its buildings and arrangements not draw from Asian built traditions as much as

¹ Canada.com "Majority of Canada's visible minorities live in just two cities" Canwest News Service. 02 Apr, 2008. Web. 08 Aug 2012. <<http://www.canada.com/vancouversun/news/story.html?id=6fe57abe-0628-4164-aa29-005e9a7c87ef>>

² Duany Plater-Zyberk and Company was involved in the initial stages of this project. The final version, by the Remington Group, however, greatly simplifies DPZ's proposal. Duany Plater-Zyberk & Company official website. "Practice: Project Map." 2002. Web. 17 February 2012. <<http://www.dpz.com/Practice/Overview>>

they do from European ones? Chapter 1 outlines a brief history of Markham and its ever-changing demographics in modern days. The theory of New Urbanism shall also be questioned and critiqued through an assessment of Markham's proposed town plan. Making a case for the need for a more culturally-sensitive master plan, the 1992 Cornell development in Markham will be studied and examined. Chapter 2 examines the three waves of Asian immigration to Canada from an urban and architectural point of view and provides an inventory of examples of Asian influence on Canadian architecture, in particular, in the Toronto region. Drawing on the work of cultural anthropologist Richard Thompson in *Chinatown: the Changing Social Organization of an Ethnic Community*, this chapter examines how the arrivals of Asians to Canada, at different times, resulted in new ways of inhabiting and practising existing housing stock and neighbourhoods, as well as in the production of new built environments. Chapter 3 studies the spatial order and forms of traditional Chinese cities, and their related qualities, including the intergenerational household *siheyuan*, the connectivity of the *hutongs*, the density and multi-functionality of the shop house, and the coexisting qualities between human and nature in the Chinese garden. These studies of precedents yield design principles for a more culturally-sensitive planning model that takes into account the notion of a close-knit, trans-generational community. Along with the implementation of the Asian themes, the design for a new town center for Markham must follow an urban planning logic. Chapter 4 outlines a master plan strategy inspired by the Asian spatial configurations that will create a more fluid connection between the landscape and its users than in the current proposal, while meeting the basic criteria set out by the Town of Markham. The project *Yuanlin Town: Living in the Garden* is here presented and described.

The aim of this thesis is to find a better suited housing development pattern in response to the culture of Markham, which should not only celebrate the cultural identity of its inhabitants, but also implement the dwellers' migration experiences in its layout and its architecture. However, to explore architecture for a population of people in transition, we will need to thoroughly understand their cultural and social needs.

“Stability and continuity are the backbone of all cultures and civilizations but societies must also be able to transform themselves, or calcify and decline.”³ Certainly, the words of the Chinese-American humanist geographer and philosopher Yi-Fu Tuan ring true as we consider that the maintenance of certain habits and routines satisfies our desires and is essential to good health, we also wish for change and growth. In the interest of harmonizing the world and its people, the theme of growing capacity with the focus on space and community will be explored as a manifestation in architecture. Whether for a primarily Asian community settled in Markham or any other, this thesis advances that there is much to be gained by exploring alternative urban traditions in our built environment.

³ Tuan, Yi-Fu. *The Good Life*. Wisconsin: University of Wisconsin Press, 1986. P.79

Chapter 1 Markham's Master Plan: a New Urbanist Proposal

There is a significant need to redefine Markham's town center in order to accommodate the rapid growth that has taken place in the last decade. This chapter outlines a brief history of Markham and its rapidly changing demographics in recent days. Markham's town plan as currently proposed ascribes its form and planning principles to the theory of new urbanism. In short, modelled on European urban traditions, the Remington Group's new urbanistic approach borrows old world blueprints for self-contained neighbourhoods offering daily essentials in a high density, street oriented, and pedestrian friendly urban setting. New urbanism's forms might suffice for the Town of Markham to curb urban sprawl. One must ask, however, does the new urbanistic language chosen for the current proposal appropriately reflect Markham's diverse communities? What is more, the new urbanist proposition, for all its merits, does not always succeed. There are examples of so called "new urbanist" developments where the public spaces are not highly used and sometimes, even, deserted. New urbanism's homogeneous facades are, at times, more unified in appearance than in practice, and, as total neighbourhoods, they sometimes function as isolated settlements rather than as the well-integrated and active urban centers that they aspire towards. This would certainly be the case for Markham: as implied by the Remington's plan, the new center turns inward, away from its surrounding context, as will be seen in more detail in Chapter 4. To further understand and address these issues, and in order to argue for the need for a more culturally-sensitive master plan, the 1992 Cornell development in Markham will be studied and examined.

1.1 Markham, Ontario

Figure 1.1.1 Markham in the Greater Toronto Area

The history of the Markham Township began in the late 1700s, as a rural and agricultural community. After World War II, Markham began to change rapidly with significant population growth, and it turned into one of Toronto's bedroom communities.⁴ In the past two decades, with changes to immigration policy, Markham has come to represent the multifaceted influences of the new waves of immigration to Canadian metropolitan areas. Markham's population was approximately 56,000 in 1976, and has tripled since that time. Today, Markham counts 220,000.⁵ This population growth reflects not only expansion, but also, ethnic diversity. According to the 2006 Canadian Census (Figure 1.1.2), 57% of the population of Markham was foreign-born,

⁴ Priesnitz, W. *Markham: Canada's Community of the Future. A Contemporary Portrait*. Windsor: Windsor Publications Ltd. 1990.

⁵ Town of Markham. "About Markham: A History of the Town of Markham." 2011. Web. 28 Sep 2011. <<http://www.markham.ca>>

with 65% visible minorities.⁶ The largest ethnic minority group was Chinese, representing 34.1% of the population. South Asians were the second largest visible minority group (17.2%). Understanding that familial and social networks are high priorities in the decision of where to live for the Chinese immigrants, the number of

The makeup of Markham

As with many areas of the GTA, Chinese and South Asians account for a growing percentage of Markham's residents.

Figure 1.1.2
Markham's demographics
(Source: Toronto Star)

Ethnic enclaves in the GTA

Neighbourhoods with high proportions of immigrants from South Asia and China have been expanding in the GTA.

Figure 1.1.3
Immigrant Settlement Patterns
in the GTA, 2006
(Source: Toronto Star)

⁶ Statistics Canada. 2007. Markham, Ontario (Code3519036). 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007.
<<http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>>

Chinese immigrants settling in the Town of Markham is likely to keep growing (Figure 1.1.3).⁷ Modern Markham has experienced unprecedented transformation, growing from a rural small town to the third most populated municipality in the Greater Toronto Area; Markham is the municipality with the highest proportion of visible minorities in Canada, and “one of the most affluent and fast growing municipalities in Canada”.⁸ On one hand, the rural roots of the township have endured the preservation of fertile farmland and heritage areas (Figure 1.1.4).

Figure 1.1.4 Markham's Land Distribution

Neo-traditional neighborhoods, such as the well-known residential development in Cornell, Ontario, are being planned to respect Markham's small town past. On the other hand, its commitment to growth attracts businesses and people. For instance, Markham brands itself as the “High-Tech” capital of Canada, and has attracted over 900 high-tech and life sciences companies, including IBM, Hewlett-Packard, Johnson & Johnson and

⁷ Longitudinal Survey of Immigrants in Canada. "Summary of changes over time". Released 04 Sep, 2003. Web. 28 Sep 2011 <http://capla.ca/conference/PDFs/p/Mary_Grant_e.pdf>

⁸ Priesnitz, W. *Markham: Canada's Community of the Future. A Contemporary Portrait*. Windsor: Windsor Publications Ltd. 1990. P.16; and Canada.com "Majority of Canada's visible minorities live in just two cities" Canwest News Service. 02 Apr, 2008. Web. 08 Aug 2012.

<<http://www.canada.com/vancouversun/news/story.html?id=6fe57abe-0628-4164-aa29-005e9a7c87ef>>

Motorola, who have located their offices in town.⁹ With the influx of capital and people, Markham also faces various challenges caused by its explosive growth. The ever emerging Asian theme mall phenomenon, notably, has triggered racial tensions between Asian and non-Asian residents of Markham. The question of new format for mercantile spaces such as Pacific Mall will be discussed as one of the case studies later in this thesis.

Figure 1.1.5 Downtown Markham Master plan in relation to the rest of Markham

⁹ Town of Markham “2007 Budget” published in 2006. Web. 28 Sep, 2011.
<http://www.markham.ca/wps/wcm/connect/2a42d58045b72aa6b1ccbff1ec6ef6d6/2007GFOA_Bookmarks.pdf?MOD=AJPERES&CACHEID=2a42d58045b72aa6b1ccbff1ec6ef6d6>

1.2 The Proposed Master Plan by the Remington Group

Figure 1.2.1: Downtown Markham master plan

With a population of 310,000, Markham is now Canada's 16th largest municipality.¹⁰ In response to Markham's rapid population growth, the Town has decided to redefine its urban center. Markham's new downtown core, designed according to the principles of new urbanism and Smart Growth, is to be named "Markham Centre."¹¹ The proposed master plan implements a rapid-transit system to move people to and throughout the downtown core. The 900-acres of largely undeveloped land, located in the geographic heart of Markham, will have a distinctly urban character, with higher density, mixed-use built form, strong streetscapes and

¹⁰ "Census Profile". 2011 census. (Code 3519036). Statistics Canada. 2012. Retrieved 02 Aug 2012.

¹¹ Town of Markham. "The Markham Centre Story." 2011. Web. 28 Sep 2011.

<<http://www.markham.ca/wps/portal/Markham/BusinessDevelopment/MarkhamCentre>>

“world-class” parks and public amenities.¹² Of the many housing developments underway in the Markham Center development, Downtown Markham is the most ambitious housing proposal.

The Town of Markham already possesses a complete master plan for Downtown Markham developed by the Remington Group in 2006, which the town intends to implement over the next fifteen years.¹³ The site encompasses the 243-acres of open land between Warden Avenue to the West, Rouge River Valley to the North, Highway 407 to the South, and the GO Transit line to the East. Downtown Markham is a \$3 billion project built around a 10-acre urban park, to include nearly 4,000 mid- to high-rise condominiums and townhouse units, 3,700,000 square feet of office space and business park, as well as 515,000 square feet of commercial space, set out to house 10,000 residents and 16,000 employees.¹⁴ The key commercial hub just south of the urban park will contain a hotel and a movie theater as the main elements to attract visitors onto the site. The master plan calls for a concentrated, intensive centre for the town that provides housing of all types, especially townhouses and apartments; work places and shops within a short walk or transit ride; a new “main street” extending from Warden Avenue to the GO station; streets where cars, buses and pedestrians are equally welcome; vistas to open space and important civic buildings; and centrally located parks, schools, places of worship and social services.¹⁵

The Remington Group has planned Downtown Markham so that it reflects the fundamental successes of community as they relate to interconnectedness and urban

¹² Ibid.

¹³ Town of Markham. “The Markham Centre Story.” 2011. Web. 28 Sep 2011.
<<http://www.markham.ca/wps/portal/Markham/BusinessDevelopment/MarkhamCentre>>

¹⁴ Downtown Markham website, The Remington Group press release
<<http://www.downtownmarkham.ca/media>>

¹⁵ Ibid.

design. Their vision, titled “the community experience,” is based on the eleven Guiding Principles established by the Town:¹⁶

1. *Protect and Enhance the Rouge River Valley*

The Rouge River and Beaver Creek waterway is a powerful influence on Markham Centre. The downtown core will be designed to protect and enhance this natural environmental system.

2. *Support Public Transit*

A rapid transit system will facilitate movement to and around the Centre.

3. *Transform Highway 7 into an Urban Boulevard*

Highway 7 will be transformed from an inter-regional highway to a major urban boulevard with a concentration of activity, mixed uses and high-quality urban design and landscaping.

4. *Develop an Effective Street Network*

A grid of major and minor streets will provide easy access to support the mix and intensity of activity and define the structure of Markham Centre.

5. *Provide a "Sense of Place"*

Markham Centre will provide high-quality public spaces, pedestrian-friendly streets and courtyards to contribute to a strong "sense of place."

6. *Enhance Pedestrian Activity*

¹⁶ The Remington Group. “Downtown Markham Project Description.” 2011. Web. Sep 2011 <<http://www.remingtongroupinc.com/>>; and “Downtown Markham: the Place to Be.” *The Remington Group*. 2011. Web. Sep 2011 <<http://downtownmarkham.ca/>>

Ten of these guiding principles were developed and agreed to by Markham residents, businesses, consultants, politicians and Town staff through a series of public meetings and workshops held in the early 1990s. The eleventh principle was adopted by Markham Council on April 1st to highlight the value placed on quality of life for residents and communities not only within and adjacent to Markham Centre, but also throughout the Town.

In Markham Centre, the pedestrian will gain equality with the automobile. Well-defined streets, architectural design, parks and trails will create a "walkable" downtown.

7. Ensure Ecological Sustainability

Lands will be developed to protect and enhance the natural processes of the landscape. The cogeneration energy plant will further support environmental goals.

8. Provide Cultural and Social Focus

Markham Centre will provide a town wide focus for arts, cultural and social activities. The Centre already houses the Markham Civic Centre, Markham Theatre, and will be home to Markham YMCA.

9. Manage Traffic and Parking Issues

Parking and traffic will be controlled to maintain quality of life.

10. Deliver a Financial Framework

A new financial plan will be developed to build and sustain a superior public environment.

11. Respect Quality of Life in Markham

The value placed on the quality of life in existing, adjacent communities is recognized, respected and supported.

Based on the principles of new urbanism and Smart Growth, these guidelines are developed to ensure that Markham Centre continues to promote a vibrant, family-oriented, people place with pedestrian-friendly streets, high quality parks and buildings.¹⁷

¹⁷ Town of Markham's definition of "Smart Growth" refers to land use and development practices that enhance the quality of life in communities and preserve ecological integrity. Smart Growth is a way of

However, the public viewed the proposal in a less than enthusiastic manner, specifically with respect to how it responds to the huge Chinese population within Markham. Comments were found on many blogs online, some of the examples are as follows:¹⁸

"Who wants to bet me that this will become Toronto's new urban Chinatown. They'll build all this and it will fill up and then become covered in garbage and dirt just like Spadina."

"The reality will probably be quite a bit different than the renderings, and the scenes of urbanity will probably turn out to be something closer to an aging opened roof shopping mall."

"The only things that are missing from the renderings are the dim sum restaurants and the bubble tea shops serving the Chinese population!"

"If this is ever built I can guarantee it will look nothing like the rendering, it will look a whole lot more like Pacific Mall."

Following the general public and the future residents' comments on the proposed master plan, the goal of this thesis is to figure out how to improve the current proposal by celebrating its cultural identity and its dwellers' migration experiences in its layout and its architecture.

managing growth to create strong communities, a strong economy and a clean, healthy environment. Traditional development patterns are dominated by what some call "sprawl"-extensive, low-density land development that fosters high dependence on automobiles, increasing the pollution and damage that they cause. Sprawl also consumes open spaces, farmlands and damages watersheds.

Town of Markham. "The Markham Centre Story." 2011. Web. 28 Sep 2011.

<<http://www.markham.ca/wps/portal/Markham/BusinessDevelopment/MarkhamCentre>>

¹⁸Urban Toronto. "Rouge Bijou (Downtown Markham, Remington, 10 + 3x 7s, Quadrangle)." Blogs dated 2006-2008. Web. Sep 2011. <<http://urbantoronto.ca/forum/forum.php>>

1.3 The Remington Group's "New Urbanist" Proposal for Markham's Master Plan

Adopting the new urbanist mantra, the Downtown Markham master plan completed by the Remington Group aims to skip the sprawl phase and go straight for densification by building a community around a small, but vibrant, commercial core evoking a *main-street*.¹⁹ The developer looked to European neighbourhoods for inspiration for their rich combination of retail, residential, and commercial life.²⁰

New urbanists, whose inspiration is deeply rooted in pre-industrial and pre-automobile urban landscapes, contrast "traditional" neighbourhoods and Main Streets with the post-World War II suburb, which they claim is responsible for the loss of public life and urbanity.²¹ The essential goal of new urbanism is to reconfigure North American cities and recover a sense of "place", in response to the failures and abuses of the urban renewal program. New urbanism idealized, and strove to create urban settlements that were modelled on, traditional European towns, where dwellers work, shop and entertain themselves in the vicinity of their places of residence. The movement promotes environmental sustainability by reducing urban sprawl and dependence on the automobile. By developing neighbourhoods that discourage vehicle use, communities can recover the walk-ability of a medieval town in a modern setting, reintroducing the dynamics of a street life. The new urbanist model is designed to have a distinctive focus on the town centre or urban park, and an edge with distinct boundaries that are used to curb sprawl development. New urbanism emphasizes the clarity of urban boundaries and the importance of the street in creating strong built fabrics. Edges may be defined by other neighbourhoods, or by open spaces, depending

¹⁹ Congress of the New Urbanism. "Charter of the New Urbanism" 2001. Web. 05 Apr 2012. <<http://www.cnu.org/>>; and NewUrbanism.org "New Urbanism: Creating Livable Sustainable Communities." *New Urbanism*. 2011. Web. Sep 2011. <<http://www.newurbanism.org/>>

²⁰ The Remington Group. "Downtown Markham Project Description." 2011. Web. Sep 2011 <<http://www.remingtongroupinc.com/>>

²¹ P. Katz, ed., *The New Urbanism: Toward an Architecture of Community*. New York: McGraw Hill, 1994. ; and N. Ellin, *Post Modern Urbanism*. Oxford: Blackwell, 1995.

on location in the urban framework.²² Unfortunately, many interpretations of new urbanism follow the logic of an enclave. The Congress of the New Urbanism established a set of guidelines in its Charter published in 1993. In accordance with the new urbanist design principles provided in “Live in Markham Centre”, in which the Town of Markham overtly referring to its stated principles for the new town plan, the following excerpt, taken from the Charter of the New Urbanism, summarizes the salient principles of this urban planning theory:²³

Neighbourhood Size

The neighbourhood size should be one quarter mile from its centre to its edge. This size allows its residents to be within a five minute walk of many basic needs and services.

Uniform Pattern of Development

The neighbourhood structure should ensure a uniform pattern of development, which is divided into a series of blocks where streets with narrow widths are generally straight and cul-de-sacs are used sparingly, if at all.

Modified Grid Pattern

A modified grid pattern forms a network of possible routes and spreads traffic evenly throughout the neighbourhood.

Mix of Uses

The basic mix of uses for Neighbourhood Transit oriented Development should consist of 10 to 15 percent for public uses, 10 to 40 percent for employment type uses and 50 to 80 percent for housing use.

²² An enclave is a territory whose geographical boundaries are entirely surrounded by the boundaries of another territory.

²³ Congress of the New Urbanism. “Charter of the New Urbanism” 2001. Web. 05 Apr 2012.

<<http://www.cnu.org/>>; and

Town of Markham “Performance Measures Document” 2009. Web. 21 Dec 2011.

<<http://www.markhamcentre.ca>>

View Corridors and Orientation

Within the neighbourhood structure, streets of importance are tree lined, and laid on geometric angles terminating with views of public buildings and public spaces, such as town squares, and parks. Buildings of importance are designed to be prominent structures, such as the town hall, theatres, community centres, rail stations, schools, places of worship, are used for landmarks of orientation.

Location of Public Spaces

A variety of public spaces are situated throughout the neighbourhood, with the larger spaces being located at the edge. Public spaces should reflect the character of the street, and the type of public space.

Integrated Uses in Town Centre

The town centre is the focus of the neighbourhood with mixed use development, and higher density housing types, Public Square, located at the centre, and within easy walking distance of many of the residents. A public square, plaza, or village green should be located in the town centre and acts as the physical and social focus for the community. Other key features of the town centre with integrated mix of uses containing such things as a variety of small retail, grocery stores, professional offices, personal services, and amenities such as libraries, and community centres. The town centre would also support higher density housing, such as townhome units, and apartments above street-level retail and office uses.

Core Commercial Configuration

The configuration of shops in the core area must balance pedestrian comfort and automobile use with visibility and accessibility. Anchor stores could be used to orient an arterial, and smaller shops would be designed orient pedestrian main streets

Distance of Residential Areas from Town Centre

From the core commercial areas and transit stop over an area that is an average of 2000 feet in radius represents a 10 minute walking distance along streets.

Block Shape

Blocks should be generally rectilinear in shape or a modified rectilinear shape.

Irregularly shaped blocks should be used in response to topographic or unique open space conditions, or to achieve distinctive neighbourhood character.

In new urbanism, European blueprints of the self-contained neighbourhoods are extracted and updated to create new North American housing developments with greater or lesser refinement. It must here be asked, can the new urbanistic language chosen and reinterpreted by the Remington Group for the current proposal properly respond to the concerns of Markham's diverse communities, the future inhabitants who will be residing and working in the area? Given that 65% of Markham's citizens are Asian persons, how appropriate is the use of new urbanism here? Can Markham's town plan be more influenced by Asian sensibilities?

1.4 The Hopes and Flaws of New Urbanism: How Cornell sunk into driver culture

Following the new urbanism principles, the Cornell Development was a bold plan aiming to transform a plot of Ontario farmland into a bustling urban utopia. In 1992 the Town of Markham retained Duany Playter-Zyberk & Company (DPZ), designers of new urbanism communities to design a "new urbanist" community for the eastward expansion of Markham covering over 2,400 acres immediately east of 9th Line, south of 16th Avenue and north of Highway #7.²⁴ DPZ held a series of public charettes between 1992 and 1994 and eventually came up with a master-plan for the "Cornell" community. Approximately half of the land has been preserved as permanent open space, with the remaining property divided into ten distinct neighbourhoods along a comprehensive transportation system allowing every resident to be within a five-minute walk of convenience retail and a bus stop.²⁵ Cornell's homes are currently comprised of townhomes, semi-detached (with rear lane garage housing), or detached houses (non rear lane garages housing). Within Cornell, the municipality encourages new development to be built with central amenities in order to contain suburban sprawl.²⁶ The project shares many new urbanist characteristics, such as: higher density than most suburban developments; non-hierarchical gridded street patterns; neighbourhood focal points created by parks, churches or civic institutions; "pedestrian-friendly" streets created by small setbacks, placement of back lanes with detached garages, and use of interactive facade elements such as porches, balconies, and bay windows.²⁷

²⁴ Talbot, Richard. "Cornell Town Center, Markham, Ontario, Canada" An article written in 2004 for the Urban Land Institute's new "Shopping Center Development Handbook" to be published in 2005.

Note: Richard Talbot is the President & CEO of Talbot Consultants International Inc.

²⁵ Cornell Gates by IBC (International Business Consortium, Inc) "About Markham and Cornell District" 1999. Web. 05 Apr 2012. <<http://www.cornellgates.com/markham/location/about-markham-and-cornell-district.html>>

²⁶ Ibid.

²⁷ Katz, ed., *The New Urbanism*; I. Audirac and A. Shermeyn, "An Evaluation of Neotraditional Design's Social Prescription: Postmodern Placebo or Remedy for Suburban Malaise?" *Journal of Planning Education and Research* 13, 1994: p. 161-73; A. Duany and E. Plater-Zyberk, "The Second Coming of the American

Figure 1.4.1 Cornell Master Plan

However, the result is less than ideal. Cars today zip up and down the narrow avenues and there is not a pedestrian, charming coffee shop, or restaurant in sight. On weekdays, the main street's two beauty salons are inexplicably closed for the day, not a single pre-school aged child is playing in Mews Park, and the convenience store sees only a trickle of residents. Here and there a York Region Transit bus rolls along, but public transportation to, from and within Cornell is far from comprehensive.²⁸ Cornell was not the vibrant dense urban community it promised to be. Urban in facade only, Cornell functions much like other suburban neighbourhoods. But what factors contributed to making Cornell susceptible to this outcome? Was it the formal regularity of the new urbanism approach, and its overly rigid built-forms? Did Cornell's new urbanism formula not resonate with the area's inhabitants? Did representational obligations take precedence over more finely tuned spatial and functional concerns?

Small Town," *The Wilson Quarterly* Vol.16 No.1, 1992: p. 19-50; and J. Kunstler "Home from Nowhere," *The Atlantic Monthly*. September 1996: p.43-66.

²⁸ I visited Cornell on November 26, 2011 as well as May 16, 2012; these are the personal observations from those visits.

Figures 1.4.2 – 1.4.4
Photographs taken by author on November 26, 2011
and May 16, 2012

1.5 Conclusion

The “traditional North American town” recuperated by the new urbanists is arguably disconnected from the changed social and historical conditions of a new, post-technological era. In striving to produce places, new urbanism is, in the case of Cornell, is arguably responsible for reproducing the same kind of generic “placeless-ness” often ascribed to the suburbs, with non-dynamic and under-populated sidewalks and car-dominated streets, and where regional and local cultures do not inflect the built fabric in any recognizable way. The new urbanism’s attempts to preserve and reproduce essential European qualities by “freezing” buildings in time, do not record the processes of change that shape the post modern city. When completed, its neighbourhoods are inevitably endowed with a kind of rigidity that denies spatial flow from the public to private realm, as well as from the natural landscape to the built environment. The formalistic gestures, notably, leave no room for gradual transformation or natural growth. There is also a risk of financial failure as the eighteenth- and nineteenth-century spatial patterns can be unsuitable for twenty first-century social practices. The outcome in the case of Cornell - a neighbourhood with great homogeneity and uniformity in its configuration and chosen fabric – is a town that does not provide any mechanisms to express and celebrate the multiplicity of the identities of its citizens. Might one be able to envision a revised new urbanism that could be modified and transformed through the participation of its citizens? Could the fact of multiple groups coexisting side by side, maintaining their own identities, lifestyles and values while living together, not become activated in new urban arrangements, languages and forms? This thesis hypothesizes that the Remington Group’s proposed master plan follows a pre-ordained set of arrangements, building massings and facades, without accounting for the social relations of inhabitants and future settlers. The Remington Plan, in this sense, is likely to run counter to the expression of social diversity, and consequently, to the vitality of community life and civic participation.

In *New Urbanism and American Planning: the Conflict of Cultures*, Sustainability Scientist Dr. Emily Talen wrote:²⁹

"All goals and principles [of new urbanism] were based on scientific, 'rational' decision-making devoid of recognition of the importance of culture and symbolism, and as if progress were a matter of geometric order. The narrow focus on speed and efficiency caused an inability to appreciate past urban forms, since traditional urbanism was unlikely to have been motivated by such modern considerations. A focus on utilitarian needs meant not only separation but a rejection of amenity and aesthetics. Planning in the 'grand manner', for example, was rejected because, although likely to 'achieve magnificence', it failed to function 'structurally in the life and movement of the city'."

Rather than relying on a generic "North American" urban form which has no particular place or time, a more appropriate approach is to seek precedent for design in specifically regional and local urban history, recognizing changing economic and social conditions of production. Because people seek identity in their environments, it is important that the history of various ethnic groups be visible, and perhaps even tangible, in the city. As Dolores Hayden has eloquently argued in *The Power of Place*, a more inclusive public history needs to be presented in the urban landscapes of American cities. Hayden advocates the making visible of forgotten or unofficial histories, including ethnic histories, in the official public realm, in order to create environments with a sense of belonging to the broader culture – a "more inclusive cultural citizenship." For Latinos, Asians, or other ethnic groups to feel fully part of the city, Hayden reasons, the built environment must embody and impart their cultures.³⁰

²⁹ Talen, Emily. *New Urbanism and American Planning: the Conflicts of Cultures*. New York: Routledge, 2005: p. 59.

Note: Dr. Emily Talen is currently a Professor of Geographical Sciences and Urban Planning at Arizona State University, who did extensive research focusing on the exploration of the spatial patterns of American cities. Her education includes: Ph.D., Geography, University of California, Santa Barbara; M.C.R.P., City and Regional Planning, Ohio State University; B.A., Sociology, Calvin College.

³⁰ D. Hayden, *The Power of Place: Urban Landscapes as Public History*. Cambridge, MA: MIT Press, 1993: p. 8-9.

Building on Hayden's call for built environments that speak on behalf of marginal subjects, this thesis explores the potential of alternative urban environments to the European Main Street, that register multicultural representation in the urban landscape more overtly. As design precedents, this thesis will examine the spatial order in the traditional Chinese cities, the intergenerational household *siheyuan*, the connectivity of the *hutongs*, the density and multi-functionality of the shop house, and the coexisting qualities between human and nature in the Chinese garden.

Markham's hybrid culture comprised of original inhabitants, and first and second generation Chinese immigrants, deserves a sensitive design approach. Short of one, a merely formalistic neighbourhood might easily follow the fate similar to that of Cornell. Models of Asian settlements happen to offer solutions to some of these problems, and thus are appropriate sources of inspiration for a town plan for a community anticipated to be largely of Asian heritage.³¹ Whether for a primarily Asian community settled in Markham or any other, there is much to be gained by exploring alternative urban traditions. Chapter 3 will examine on some of these Asian traditions with the understanding that the approach employed here advocates a synthetic methodology, so that the conclusion may be generalized and opened up for other interpretations. But before examining Asian urban forms, it is important to consider Markham's "Asian-ness" more deeply. With a fuller grasp of Markham's cultural identity today, decisions regarding the language and planning of its new town center will be more grounded.

³¹ Markham has the highest proportion of visible minorities in Canada. 65.4% of the town's population of 260,760 self-identifying as a visible minority, with 35% of the population being Chinese and 18% being South Asian. Statistics Canada. 2007. Markham, Ontario (Code3519036). 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. <<http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>>

Chapter 2

Markham, Ontario: an Asian settlement

“Whether we are first, second, third or more generation Canadians, each of us brings unique memories of living from around the globe. These migrated memories modify and transform as we settle into unfamiliar landscapes and architectural contexts. The resulting forms are neither of our memory nor of our present. They are unique forms of dwelling-landscape that resonate with both local condition and personal cultural memory. MLO (Migrating Landscapes Organizer) is fascinated by this ‘settling-unsettling’ dynamic as a form of contemporary living.”

– Migrating Landscape Competition³²

When people migrate, they bring with them cultural memories of a place, and unique cultural heritages, which affect individual identity and inform personal values. These migrated memories, either from another place or another time, transform as they settle into new contexts. New memories are forged, through processes of layering, erasure and juxtaposition, as the migrated memories negotiate with the unfamiliar in the context of new landscapes and architectural environments. In this sense, one never really settles or unsettles, and the resulting built form is neither of the former nor of the present. Instead, unique forms of un/settlement result that resonate with both local conditions and one's own migrated cultural memories.³³

Recently, Johanna Hurme and Sasa Radulovic, founding partners of 5468796 Architecture, along with Jae-Sung Chon, initiated a project to call for and collect a multitude of designs for dwelling designs inspired by cultural experiences. The

³² From the Migrating Landscapes project brief: This project is authored by Johanna Hurme (Founding Partner, 5468796 Architecture), Sasa Radulovic (Founding Partner, 5468796 Architecture) and Jae-Sung Chon (Instructor, University of Manitoba Faculty of Architecture), and will be Canada's official entry at the 2012 Venice biennale this fall from August 29 – November 25, 2012.

³³ Ibid.

Winnipeg-based group's call to "young Canadian architects and designers" asks that the residential designs be guided by cultural memories of migration, be these recent or temporally distant. Significantly, the insightful project was selected to represent Canada at 2012 Architecture Biennale in Venice, and makes official Canada's identity as a country of migration. The fact that a jury selected the Migrating Landscapes project as national winner further underscores the need to reconsider urban and architectural forms for dwellers across Canada who do not all uniformly emerge from the same cultural circumstances. The MLO project gives importance to the multiple "other" voices that comprise Canada's national identity. It implies a radical critique of formulaic approaches to urban and architectural design, and indeed, a critique of new urbanism for places like Markham, Ontario.

In *Toronto's Chinatown: The Changing Social Organization of an Ethnic Community*, cultural anthropologist Richard H. Thompson explains that Asian immigration to Canada occurred in three waves, summed up in three periods: the traditional community (1880- 1947), the transitional community (1947-67), and the contemporary community (1967 to present).³⁴ The following chapter examines each of these waves from an urban and architectural point of view: how did the arrivals of Asians to Canada, at different times, translate into new ways of settling within existing housing stock and neighbourhoods, and or, in the production of new built environments? The aim here is to inventory examples of Asian influence on Canadian architecture, in particular, in the Toronto region.

³⁴ Thompson, Richard H. *Toronto's Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p. 6.

2.1 The Asian Migration (Immigration and the Impact on Architecture)

When we walk through Canadian cities nowadays, it is apparent that ethnicity and multiculturalism are alive and well in many neighbourhoods from coast to coast. Across the country, the influx of locally born descendants of the original immigrants has altered not only the social composition but also the physical environment of previously homogeneous neighbourhoods. This is because environments can have a profound impact on human behaviour and feelings, as many environmental psychologists and geographers have documented, that people are deeply affected by the sense of place. During the 1960s and 1970s, the idea of place in determining people's behavior was at the forefront of human geography and replaced any attention previously given to space. In 1974, Yi-Fu Tuan, a Chinese-American geographer, produced his most influential work called *Topophilia* which looked at the love of place and people's perceptions, attitudes, and values surrounding their environments.³⁵ The term of *Topophilia* which means 'love of place' was used to describe the existing remarkable bonds between people and the physical settings.³⁶ Tuan further defined *Topophilia* as a strong and impressive relationship between people and places.³⁷ In parallel, Canadian Geographer Edward Relph explained that sense of place, which is the ability to recognize places and their identities, can be created and develop through long-time connections between users and places.³⁸ Sense of place is an important issue that can strengthen the relationship between human and place. It can be influenced by personal and collective's values, beliefs, and behaviors. In other words, how one understands the notion of space is strongly rooted in their cultural values and cultural experiences.

³⁵ Tuan, Yi-Fu. *Topophilia: A study of environmental perception, attitudes, and values*. Englewood Cliffs, NJ: Prentice-Hall, 1974.

³⁶ Ibid.

³⁷ Tuan, Yi-Fu. *Space and place: The perspective of experience*. London: Edward Arnold. 1977.

³⁸ Relph, E. *Place and placelessness*. London: Pion. 1976

In order to provide a framework to understand the Chinese population in Markham, one must have a general understanding of the long history of Chinese settlement in Canada dating back to the 1870s. Over the past century, Chinese settlements developed by different Chinese communities have evolved in Toronto and metropolitan region. From the traditional form of enclave, Chinatown, to the more contemporary “ethnoburbs” - a term coined by American geographer Wei Li³⁹ and discussed in more detail later on in the chapter -- the Chinese Community in Canada, according to Richard H. Thompson has taken shape following three waves of arrivals. More precisely, Thompson articulates the three phases as such:⁴⁰

1. *The Traditional Community - extending from Chinatown's origins in the late 1870s to the repeal of the Chinese exclusion act in 1947;*
2. *The Transitional Community, which covers the period from 1947 to 1967, the latter being the year of the Order in Council Amendment to the 1952 Immigration Act which permitted widespread Chinese immigration.*
3. *The Contemporary Community, which began in 1967 and continues to the present.*

A study of why and how these Chinese enclaves were formed by the early Chinese immigrants and their Canadian-born descendants can help provide insights towards constructing a new urban planning model that would reflect the hybrid culture of the people in Markham.

³⁹ Li, Wei. *Anatomy of a New Ethnic Settlement: The Chinese Ethnoburb in Los Angeles*. Urban Studies, 35(3), 1998: p. 479-501.

Li, Wei. *Los Angeles's Chinese Ethnoburb: From Ethnic Service Center to Global Economy Outpost*. Urban Geography, 19(6), 1998: p. 502-517.

⁴⁰ Thompson, Richard H. *Toronto's Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p.6.

2.2 The “Traditional Community” 1880 - 1947

Toronto's Chinatown had its beginnings at the turn of the 20th century when a significant number of ethnic Chinese, who had settled in Vancouver and Victoria for the duration of the Fraser Canyon Gold Rush of 1858, migrated eastward to construct the Canadian Pacific railway. By the mid-1920s, the area known as “Chinatown” in Toronto, centered on Elizabeth Street between Queen Street West on the South and Dundas Street West on the North, was quite well established with several hundred Chinese living in the area near the current City Hall. In the following decades, including during World War II, Chinatown continued to expand.⁴¹ This was the period of the “traditional community.” This community was made up of Chinese, overwhelmingly male, who spoke little English, and as a result, its members remained confined to service occupations such as laundryman and restaurateur.⁴² For the Chinese residents of Toronto, life in Canada was thought to be a temporary journey.⁴³ Even those who recognized that they might spend twenty, thirty, or more years in Toronto, nevertheless directed their psychological and economic energies to the cultural traditions and families left in their homeland.⁴⁴

At this time, both the migration from China and within North America was widely governed by extended family relations.⁴⁵ The potential Chinese immigrant was required

⁴¹ Censuses of Canada, 1911-1951

⁴² In 1943, there were 316 laundries and 85 restaurants owned and operated by Chinese recorded in the 1943 City of Toronto Directory.

⁴³ In both the United States and Canada, severe restrictions were imposed on the Chinese population, which ultimately banned them from white occupations and prohibited the immigration of wives and children. (Thompson, Richard H. *Toronto's Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p.8)

⁴⁴ Writers such as Standford M. Lyman (1974) and Paul C.P. Siu (1952) emphasize the importance of the certain characteristics of the early immigrants for the formation of the distinctive Chinese enclaves – their peasant backgrounds, their “sojourning orientation” (their view of immigration as temporary rather than permanent), and the tendency for Chinese to emigrate from the same villages and counties. These characteristics were seen as inhibiting Chinese assimilation and leading to a Chinatown social structure based on traditional Chinese descent groups.

⁴⁵ Some ethnic Chinese moved to Toronto from other Chinatowns on the U.S. west coast, such as San Francisco, due to poor treatment and poverty; others came directly to Toronto from China, mostly from Guangdong or Toisan.

to be sponsored by someone was a landed Canadian citizen who originated from the same village or lineage to guaranty the head tax. Additionally, the sponsor was responsible for the living quarters and employment for the new immigrant.⁴⁶ Naturally, these older male immigrants were organized into an ethnic social system based on the homeland ties of clan and locality of origin, most of them from a single lineage, connected to the emigrant village of Toisa, making Toisanese the most common language in Chinatown.

2.2.1 Architectural Translations

The aforementioned Chinatown at Elizabeth Street was the outcome of this wave. However, due to limited resources and economic means — the traditional community, as seen above, was generally poor — the first wave did not produce new built architecture (see Figure 2.2.1). At this time, Chinatown may be viewed merely as a social system; on the other hand, many traces of migration are visible in ephemeral architectural forms, such as the signage and ornaments chosen to decorate storefronts, and the installation of awning as an attempt to extend the mercantile space into the sidewalk (see Figure 2.2.2).

Figure 2.2.1
48 Elizabeth Street
(dated May 28, 1912)
Mr. Lee Hong, age 20, rented
the unit and converted it into a
laundry mat in 1908.

(Source: City of Toronto
Archives)

⁴⁶ Thompson, Richard H. *Toronto's Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p. 50.

**Figure 2.2.2 60 & 62 Elizabeth Street
(Dated 1937)**

**Figure 2.2.3 60 & 62 Elizabeth Street
(Dated 1958)**

Figure 2.2.2 & 2.2.3

Show changes on Elizabeth Street over time.

In 1940, owner George Ying added a second floor and rented the space to the International Chop Suey House. Both photos show the grocery store Sang Hong Sang at 64 Elizabeth Street, which remained unchanged.

(Source: City of Toronto Archives. "Local Chinese History")

2.3 The “Transitional Community” 1947 – 1967

New legislation was established in the late 1940s permitting the immigration of the wives and dependent children of the Chinese men already residing in Canada. Other legislation such as voting rights and educational policies were also passed during that time allowing the Chinese population to fully participate as members of the Canadian society, for the first time. The “transitional community” generally describes the life experienced by the typical second generation Chinese who were born in North America (locally born, or *tusheng*) or who had immigrated as young children. Most of the offspring of the original immigrants suffered badly from an inferiority complex, according to sociologists, related to the experience of marginalization, in which persons are uncomfortable in both white and Chinese societies.⁴⁷ What the Chinese experienced during the transitional period shows is that once the Chinese were permitted access to the institutions of the dominant society, they did not follow in their immigrant fathers’ footsteps, and broke attachments to the Chinatown subsociety. They quickly learned the dominant society’s social rules, and played the game with considerable success.⁴⁸

With job opportunities, social life, and cultural options beyond Chinatown becoming more accessible to the Chinese population, the locally born Chinese generally looked beyond the ethnic boundary for economic and symbolic resources to nurture their sense of identity and autonomy.⁴⁹ This adaptation was not without its costs, however, as many Chinese suffered psychological and cultural dislocations. On the one hand, those making the transition to mainstream Toronto society perceived themselves to be cultural brokers or mediators on behalf of the new arrivals. Their transitional position between Chinese and Canadian society would help bring the Chinese minority ever closer to mainstream Canada. By the same token, this group’s way of thinking couldn’t help but be westernized; they mixed with westerners in their social life and

⁴⁷ Thompson, Richard H. *Toronto’s Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p. 118.

⁴⁸ *Ibid.*, p. 18.

⁴⁹ *Ibid.*, p. 118-121.

inevitably began to lose touch with the Chinese traditions. The progressive loss of Chinese cultural memory and skills progressively rendered them more vulnerable to disparagement from the Chinese communities from their native land than the older native-born Chinese.⁵⁰

Richard Thompson and Canadian Geographer David Ley wrote about the fact that locally born Chinese, having never lived in the country of their ancestors, are not equipped to distinguish between relevant Chinese cultural phenomena and cultural imitations and clichés.⁵¹ In short, the locally born Chinese person is liable to mistake things in Chinatown as falsely representative of Chinese culture. Alternately, they may perceive the lack of authenticity of overly-stated Chinese iconographies employed in Chinatown facades, and shy away from them or even feel ashamed of these representational forms. Older members from the “traditional community” see this detachment of the locally born generation as a cultural deficiency.

⁵⁰ Thompson, Richard H. *Toronto's Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p. 27.

⁵¹ Ibid., p. 121-138 based on twenty-one interviews with Canadian-born Chinese adults conducted by Thompson. Ley, David. *Mistaken Identity? Re-thinking Canadian Chinatowns*. London, ON.: Canadian Association of Geographer Annual Conference Presentation, 2005. Note: David Ley is the Research Chair of Geography at the University of British Columbia.

Figure 2.3

Location of Immigrants settlements Comparison Between 1970s and 2000
(Source: Toronto Star)

Many locally born Chinese moved out of Chinatown to the suburbs once they had the financial means to do so. Many former Chinatown residents originally from mainland China, Taiwan and Hong Kong soon followed and moved outside the City's boundaries to live closer to their descendents (Figure 2.3).⁵² Unfortunately, the migration of Chinese immigrants to the suburbs led to the closure of some of the local restaurants. Many of these voids have been filled by ethnic Chinese people from Vietnam in the late 1980s and 1990s.⁵³ As a result an increasing number of store signs are now in Vietnamese, in addition to the well-established Chinese stores.

⁵² Contenta, Sandro & Rankin, Jim. "A Markham street reveals much about GTA ethnic enclaves." The Toronto Star. Published on 30 June, 2012.

⁵³ City of Toronto Archives. "Local Chinese History" Research Guide 13 <
<http://www.toronto.ca/archives/>>

2.3.1 Architectural Translations

From an architectural point of view, the transitional community is associated with two contrasting legacies affecting built form. Firstly is the move to the suburbs, associated with the locally born Chinese's rejection of Chinatown, as well as their desire to establish life beyond that ethnic boundary. Secondly is the locally born revitalization of Chinatown: not all locally born Chinese aspired to leave Chinatown. Some business owners saw their future in Chinatown: as bilingual persons, they could not only live an assimilated Canadian life, but also, cater to the more recent Asian immigrants in their business life.⁵⁴ The architectural manifestation of this movement is evident. At first the physical changes were relatively subtle, as illustrated in Figure 2.3.1, the facade at 24 Elizabeth Street was altered when the property was bought by the Lung Kong Brotherhood.⁵⁵ Gradually, built structures such as the Chinese archway to Toronto's

Chinatown were erected to express ethnic pride and to identify the neighbourhood among other neighbourhoods as one where Chinese specialties, services and restaurants would be found. Toronto's Chinatown also developed new building morphologies as a result of intensification. In 1940, owner George Ying added a second floor to the original single storey building at 60 and 62 Elizabeth Street (See Figure 2.2.3 in the previous section). Over

Figure 2.3.1 24 Elizabeth Street (right-hand side). The facade of the building has been altered. The Lung Kong Brotherhood building once had a balcony similar to that of its neighbour. (Source: City of Toronto Archives)

⁵⁴ Thompson, Richard H. *Toronto's Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p. 121 – 136.

⁵⁵ City of Toronto Archives. "Local Chinese History" Research Guide 13 notes that the 1922 Assessment Rolls show a change of ownership at 24 Elizabeth Street.

time, this particular typology advanced to the split ground floor mercantile form, with steps up and down from sidewalk level to stacked businesses (see Figures 2.3.3 & 2.3.4). This two storey form devoid of direct street level access is not visible in any other Toronto neighbourhood, and can be called a new, hybrid form, resulting from the meeting of Canadian and Chinese cultures.

When the new City Hall was built in the 1960s, the Chinese population was displaced from Elizabeth Street and moved to the area around the intersection of Spadina and West Dundas Streets, which is now referred to as "the original Chinatown". At the focal point of Toronto's present-day Chinatown, the intersection of Dundas Street and Spadina Avenue and all along both streets, there is evidence of Chinese infiltration of North American built forms. Captivated by the colourful and unusual variety of overhanging store signs, the visitor to Chinatown walks through streets filled with goods, from fresh fruits and vegetables to clothing and general merchandise, spilling out of the split-level storefronts onto the sidewalks. Many of the stores in this area are in multi-storey buildings. Some of Chinatown's buildings have retail use at the street level and housing above, while in others some of the upstairs residences have been converted into business offices, travel agencies and even restaurants, resulting in vertical intensification which one might call "Asian."⁵⁶ Amidst the towering skyscrapers of a technically advanced Canadian metropolis, Chinatown, with its small, cramped

buildings, presents a colourful but sharp contrast to its surroundings.

Figure 2.3.2 Signage in Chinatown
(Source: www.hicker-stock-photography.com)

⁵⁶ Wang, S. *New Development Patterns of Chinese Commercial Activity in the Toronto CMA*. Centre for the Study of Commercial Activity. Ryerson University, 1996: p. 14.

Figure 2.3.3 **476 – 478 Dundas Street West, Toronto**
(Taken by author)

Figure 2.3.4 **461 - 465 Dundas Street West, Toronto**
(Taken by author)

2.3.2 Cultural and Social Issues of the Representational Form in Chinatown

David Chuen-yan Lai comments on the fact that most Torontonians believe Chinatown can be defined as “basically an idiosyncratic oriental community amidst an occidental urban environment.” This prevalent conceptualization of Chinatown as a colony of the East in the West is however erroneous.⁵⁷ Historically, Toronto’s Chinatown is layered with multiple meanings across different periods of time, from an isolated ghetto in its early years, a slum in the peak of urban renewal (between the 1950s and 1960s), to a tourist destination and well- recognized ethnic residential and commercial neighbourhood, and finally, to a symbol of the recent age of multiculturalism.

Contrary to this school of thought, Australian geographer Kay Anderson argues that the creation of Chinatowns in the western world is a physical manifestation of “a comparable cultural abstraction that belongs to the beliefs and institutional practices of white European society.”⁵⁸ One example is the case of the archway in East Chinatown. The Chinese Chamber of Commerce, East Toronto (CCCET) initiated the China Gate project in 1998, to promote local business, boost tourism development, revitalize the business environment, and compete with other Chinese commercial areas.⁵⁹ In the Chinese architectural tradition, an archway is used to glorify or commemorate famous figures or events. It is treated as an imposing monument, preserving the essence of a family or a clan. However, outside of China, it serves more as a popular symbol, and even a stereotypical one announcing the presence of Chinese culture in a western society. In the article “Constructing Pacific Mall,” Cecilia Chen describes the archway as

⁵⁷ Lai, David Chuen-yan. “Socio-economic Structures and the Viability of Chinatown.” *Residential and Neighbourhood Studies in Victoria*. Ed. Charles N. Forward. Department of Geography, Western Geographical Series. Vol.5. Victoria: University of Victoria, 1973: p. 101.

⁵⁸ Anderson, Kay. J. *Vancouver’s Chinatown: Racial discourse in Canada, 1875-1980*. Montreal & Kingston: McGill-Queen’s University Press, 1991: p. 8.

⁵⁹ Toronto “Zhong Hua Men” Archway Organizing Committee. *Toronto “Zhong Hua Men” Archway Project Introduction*. Toronto: Chinese Chamber of Commerce, East Chinatown. 2004

“a well-recognized aesthetic, used in many places to indicate a tourist-friendly Chinese ethnicity.”⁶⁰

In East Chinatown, the construction of the new gate reflects certain aspects of both schools of thought (Chinatown as an eastern colony, and as a European creation). The gate reflects the internal and external factors that determine how local businesses and society at large tend to define the image of Chinatown and the expression of Chinese ethnicity in the landscape. The idea of the archway imitates a well-recognized or stereotypical Chinatown image, indicating, as Anderson argues, “residues of past conceptions of identity and place continually shaped practices that sedimented their image within later formulations and practices.”⁶¹ On the other hand, in a highly commercialized era, “Chinatown” has become a marketing brand that is molded and packaged in fixed forms and exploited for the tourist industry by Chinese merchants and other interest groups. Similar to components of a theme park, forms such as archways, lanterns, and dragon and lion patterns, are generally considered symbolic cultural heirlooms of the Chinese community. This is how Anderson made the argument that: “‘Chinatown’ is not ‘Chinatown’ *only* because the Chinese—whether by choice or constraint—have lived in enclaves. Rather ‘Chinatown’ is in part a European creation.”⁶² The author admits that her work only represents a western perspective on how Europeans perceived the “race” of Chinese and defined and controlled the “place” of Chinatown through the western cultural hegemony and political and legitimate means. Regardless of the exclusion of the perspectives of Chinatown residents, this new approach creates a “discourse” with conventional wisdom.

One may question the authenticity of the “Chineseness” reflected in Chinatown; again referring to David Ley’s text where he describes it as a “mistaken identity,”

⁶⁰ Chen, Cecilia. “Constructing Pacific Mall.” *Journal for the Arts, Sciences, and Technology* 3(1), McGill University, 2005: p. 93.

⁶¹ Anderson, Kay. J. *Vancouver’s Chinatown: Racial discourse in Canada, 1875-1980*. Montreal & Kingston: McGill-Queen’s University Press, 1991: p. 33.

⁶² *Ibid.*, p. 9.

attractive to tourists but not to the locally born Chinese, nor to recent immigrants.⁶³ However, it is necessary to consider that, after all, Chinatown is a hybrid cultural form from China and Canada; it represents a cultural metamorphosis. The creation of this hybrid cultural form reflects the dynamics of a fluid diasporic Chinese culture.

⁶³ Ley, David. *Mistaken Identity? Re-thinking Canadian Chinatowns*. London, ON.: Canadian Association of Geographer Annual Conference Presentation, 2005.

2.4 The “Contemporary Community” 1967 to present

While the traditional period was characterized by its homogeneity, in that not only were its Chinese immigrants’ origins similar, but also, their lifestyles and their isolation from mainstream Canadian society. The transitional community was a period of positive change with gradual stabilization politically, socially and economically in the ethnic community.⁶⁴ Immigration during this period was limited to the spouses and dependent children of Chinese residents, as well as a small class of professionals classified as “in demand” by the Canadian government. During the 1970s, due to the Hong Kong riot in 1967 and the introduction of Canada’s new immigration policy, a new wave of Hong Kong immigrants arrived in Toronto. By this time, 30 per cent of Chinese immigrants in greater Toronto lived outside the city limits. Within a decade, with the impending 1997 takeover of the British colony by the People's Republic, the figure jumped to 65 per cent.

These new Chinese immigrants from Taiwan, and in particular, Hong Kong, differ considerably in almost every aspect. From education level, occupational skills, age, family life, sex ratio, to the prior life experiences and values from the original Chinese immigrants who established Chinatowns in the late decades of the nineteenth century.⁶⁵ Unlike the first Chinese immigrants who viewed Canada as a temporary work place, they planned to make Canada their permanent home.⁶⁶ This contemporary community marks the beginning of the new, wealthy ethnic neighbourhoods or “ethnoburbs” in

⁶⁴ Thompson, Richard H. *Toronto’s Chinatown: the Changing Social Organization of an Ethnic Community*. New York: AMS Press, Inc. 1989: p. 89.

⁶⁵ The overwhelming majority (about 85%) of these new immigrants are either native to Hong Kong or resided there a good number of years prior to their emigration; “exposure to the cosmopolitan culture of Hong Kong and the experience of working in factories, department stores, and large offices have provided a basic sense of familiarity with the workings of a big city as well as preparation for assuming some role in an urban economy” (Nee and Nee, 1972, p. 255). As a result of this prior urban experience, 90% of Chinese immigrants to Canada live either in Toronto, Vancouver or Montreal. (Thompson, 1989, p. 20, 153)

⁶⁶ *Ibid.*, p. 159.

Scarborough, Markham and Richmond Hill, north of Toronto.⁶⁷ The shift to suburban settlements was significant and yielded a new type of ethnic "enclave." One need only travel through parts of Markham - near the intersection of Old Highway 7 and Highway 404 -to know that one is entering a "new" Chinatown. The "monster homes" found in these ethnic neighbourhoods, constructed with capital from Hong Kong by immigrants entering the country under the "investor class" category since the mid 1980s, are clear signals of a shift from previous housing forms. Office buildings, supermarkets, malls, banks, large financial and commercial institutions, and banquet halls with Chinese signs clearly indicate an ethnic commercial district. Another contributing factor is the phenomenon of large "Asian malls" such as Time Square in Richmond Hill or Pacific Mall in Markham, with their large chain stores, such as T&T Supermarkets, owned by Taiwanese, American and Canadian interests. These malls attest to the presence of a significant market of the Chinese diasporas in Canada; however, their success and continuous growth also speaks to the capacity of this "ethnic" phenomenon to reach out to a broader Canadian market.

With these "ethnoburbs" well established, new immigrants today generally bypass the inner city and move directly to the suburbs upon first arriving in the metropolitan Toronto region. Earlier immigrants and second or third generation Chinese who have lived in the inner city for decades, also frequently elect to move to these same suburban settlements.

To further elaborate on the formation of the "ethnoburbs", the phenomenon of large "Asian malls" in the suburban ethnic retail landscape is examined here. In the following section, Pacific Mall, a condominium Asian theme mall in Markham, serves as a case study. The self-proclaimed largest indoor Asian mall in North America has drawn

⁶⁷ What American geographer Wei Li has referred to as "ethnoburbs" are not secondary areas of settlement but enclaves populated by the recent wealthy migration of ethnic Chinese who wish to be in a predominately Chinese-speaking area with access to their own supermarkets, specialty stores, senior institutions and centres. (Li, 1998)

Figure 2.41 **Photos of Time Square**
Location: Richmond Hill, ON
(Taken by author)

Figure 2.42: **Photos of First Markham Place**
Location: Markham, ON
(Taken by author)

controversy over its built form, its condominium business ownership, and, most of all, its impact on both local and region-wide Chinese and non-Chinese communities. The section begins by introducing the history of the development site of the Mall. It then provides a business profile of the Mall, including its business composition, turnover, and changes in its ethnic composition. Major development issues, such as land uses, design, and ethnic expression are outlined, as well as social and cultural aspects of ethnic mall development in general.

2.4.1 The Case of Pacific Mall

A prime example of an ethnic centre designed and built for Chinese entrepreneurs and Chinese consumers in the Canadian suburb is Pacific Mall. Located on the south side of Markham adjacent to the municipal boundary of the City of Toronto, it is one of the most well known Chinese indoor shopping centers in suburban Toronto. Today, this mall, along with its surrounding community which reflects the large Asian, particularly Chinese Canadian, population found in the area, and is recognized as Canada's new form of Chinatown.

Pacific Mall is located at the major intersection of Steeles Avenue East and Kennedy Road bordering Markham and Scarborough; it is built on a large iron-shaped tract of land, with two other commercial properties, Market Village, to the east and Kennedy Corners to the west (Figure 2.4.1). During the past ten years, the three retail complexes have developed different specialty businesses: Pacific Mall features apparel and electronic products, especially for trend-setting youth; Market Village provides more restaurants and grocery stores for family-oriented activities; and Kennedy Corners focuses on banking and other services. In a way, the complexes complement each other, and the commercial triangle works as an integrated site. This intense development vividly illustrates the way in which a small rural community has coped with large-scale

Figure 2.4.1: Aerial Photo of Pacific Mall Site
(Source: City of Toronto archive)
Edited by Author

suburban sprawl; it demonstrates how an Asian-centred society has transformed the urban landscape.

In the 1950s, this area was covered by farm fields. Residential subdivisions later took shape in the western part of this commercial-zoned land, as well as further east along Steeles Avenue. The first retail complex on the site, Cullen Country Barns ("The Barns"),

opened in 1983. The Barns was a popular Markham tourist spot, featuring a country market theme of bygone times. This theme was maintained in the later retail developments: Market Village (1990) and Kenney Corners (1992); they both extensively use the same architectural language to achieve an old town atmosphere. At the same time, Asian themed businesses are featured inside the commercial complexes to meet the changing demographics of the surrounding areas. Due to business decline, Cullen Country Barns closed in 1994. In response to the growing Chinese population in the area and the booming Asian-oriented businesses, the Torgan Group, a long established Ontario-based developer, approached The Barns and proposed a retail replacement, later known as Pacific Mall. Designed by Peter Clewes of Wallman Clewes Bergman Architects, construction began in 1996 and Pacific Mall officially opened in 1997.

Store Size and Layout

Pacific Mall features 270,000 square feet of retail space and over 300 stores with innovative condominium ownership. It mainly targets the Chinese community who prefer to purchase or own properties for residential or business purposes. The presale of the condominium units drew investors residing both in Hong Kong and in Canada. The Mall was divided into 715 uniform units with an average size of 200 square feet, and allowed multiple unit purchases that “provide greater flexibility to re-configure stores in the future to respond to changing market conditions and retailing trends.”⁶⁸ Store sizes (in terms of usable area) ranged from 145 square feet to 1180 square feet. In 2004, the selling price ranged from CA\$59,800 to \$249,800. On average, retail space was sold at \$200 per square foot of the gross floor area, which includes a share of the public use space.⁶⁹ The developer retained ownership of about 7,500 square feet of the second floor; in 2000 the developer transformed this space into a “Heritage Town” and leased units to approximately 100 individual stores. The obvious assumption that can be made

⁶⁸ Town of Markham. "Report to Council: Proposed Commercial Plan of Condominium." 1995. Web. 12 Dec, 2011

⁶⁹ Data in this section was retrieved from the Centre for the Study of Commercial Activity (CSCA).

about the development is that the Chinese theme was used as a selling point to attract customers.

Figure 2.4.2: Floor Plans of Pacific Mall

The stores are arranged on a back-to-back grid system (Figure 2.4.2), reminiscent of the traditional characteristic of an array of markets filled with small shops and food stalls found in the Mong Kok shopping district of Hong Kong (Figure 2.4.6). The ground floor is used mostly for retail and services, and the compact cubicle units are divided by tall glass walls (nearly 10 feet in height) that maximize window displays of merchandise and exposure to window shopping. The larger units on the second floor are occupied, for the most part, by restaurants, food courts, and entertainment centres. Due to a generously fenestrated envelope – a very unusual feature for a shopping mall – the shopper can see out from the Wallman Clewes Bergman designed mall, to the surroundings.

Ethnic Expression

The architectural design of Pacific Mall features a large peaked roof and a glass, floor-to-ceiling main entranceway (Figure 2.4.3). As the mall stands in an ample parking space, the first impression it often makes is of an “airport hanger”. Its large outdoor signs in Chinese announce it as an Asian mall.⁷⁰ A journalist referred to the built form of Pacific Mall as the personification of the so-called “Hong Kong money”: “big,

⁷⁰ For Hong Kong immigrants, the Chinese translation of “Pacific Mall” is “Pacific Place”, the name of a famous commercial landmark in central Hong Kong. The name creates familiarity in their shopping experience.

clean, imposing, coldly functional, and coldly detached.”⁷¹ But this assessment is superficial and misunderstands the design’s radical gestures with regards to its surroundings. Unlike the nearby and very conventionally designed Market Village, Pacific

Mall does inscribe itself much more actively into its surroundings, with through-paths and visual transparency. Its architectural language – the honest shed form, with brick paneling and glass, is legible and direct, with no false pretensions of luxury.

Figure 2.4.4: Pacific Mall Interior

Figure 2.4.5: Heritage Town Entrance

Figure 2.4.6: Mong Kok, HK

Ethnic expression is more overt in the Mall interior (Figure 2.4.4), which attempts to create the atmosphere of a marketplace in Hong Kong (Figure 2.4.6).⁷² Under an industrial roof is the Heritage Town in the southern section of the second floor (Figure 2.4.5). Here people can find Chinese traditional artefacts and bright and

⁷¹ Gillmor, D. "Satellite City: We Have Seen the Future at the Pacific Mall: Placenta Tablets, Crocodile Bile and Gold Card-toting Teenagers". *Toronto Life*, 32(17), p. 146.

⁷² A large number of boutique stores are confined to small glass cubicles. Stores are divided by five shopping aisles with street signs, such as Queen’s Avenue, and Nathan Avenue, named after well-known shopping districts in Hong Kong (Figure 2.4.6), in an attempt to create a pseudo city, shopping environment. The intersecting aisles are numbered with lucky numbers, including eight, and irregularly from 18th to 288th street.

colourful decorations, mixed and matched, with different origins, styles, and regional characteristics. Pacific Mall does not shy away from overt symbols: The golden yellow glazed roof tiles which originally “were restricted only for the imperial court and for the few monasteries and temples appointed by the Emperor,” are largely used at the entrance but not in traditional proportions.⁷³ A ridge with two dragon heads on both ends resting at the top of the entrance is a replica of a decoration in the Forbidden City in Beijing. Two dragon walls with bas-reliefs made of glazed clay are constructed at both sides of the entrance, each representing the Northern and the Southern art styles in China. The roofs covering the walls are of an unusual curvy shape. A group of Chinese gardening elements from Southern China are set up unexpectedly under the imperial-palace-like entrance, which include a moon-shaped door, leading to the inside stores, connected by a small bridge with rose wood handrail panels; under the bridge is a golden fish pond designed with waterfall and stone landscaping assembled by a Japanese artist. While the developer’s use of numerous overtly Chinese references is suspect, the architectural project in itself, independently of the applied decorations, is radical and progressive from spatial and urban standpoints.

The developer of Pacific Mall, the Torgan Group, capitalized on Chinese themes as selling points to attract customers. Many seem to enjoy the mall’s open spaces and colourful displays, and the fact that the mall is very unlike typical malls and their generic stores and signage. Pacific Mall is so popular that it is the repeated subject on the online forum *Urban Toronto’s* website:⁷⁴

“Many westerner customers come to visit [the Heritage Town]. They feel very interested in everything” (Blog dated February 22, 2006).

⁷³ Cheng, Liyao. *Ancient Chinese Architecture Series: Imperial Gardens*. New York: Springer-Verlag Wien, 1998: p. 125.

⁷⁴ Urban Toronto <<http://urbantoronto.ca/forum/forum.php>> “Pacific Mall Expansion”, “Splendid China Mall”, “Star: Newcomes Transfer City”. Blogs dated 2006-2008. Web. Sep 2011. Note: Urban Toronto has developed into the most active and largest site devoted to development and construction in the GTA since 2001. Forum discussions include Toronto buildings, architecture, development, real-estate, transportation, politics, culture and photography.

"[I'm originally from the Caribbean]. I like the atmosphere and decorations here [in Heritage Town]. Its style, store layout, street names, all in all, create an Asian feel. That's why I come here" (Blog dated February 23, 2006).

"Mainstream malls are all the same. No big difference. Chinese malls can add the cultural elements to create their own characters" (Blog dated February 22, 2006).

"[It helps to] promote harmony, understand different cultures from each other, and reduce misunderstanding from each other" (Blog dated February 16, 2006).

However, there was an overall criticism, found on *Urban Toronto*, of the small-sized stores and the low-end business atmosphere in Heritage Town that does not conform to the cultural image it attempts to convey.⁷⁵ Merchants argue that the developer-landlord should have more control of tenant mix, and maintain the traditional cultural atmosphere of the area, instead of creating a "flea market" or "old Chinatown". Other *Urban Toronto* participants had reservations or resisted to the expression of Chinese identity altogether; they argued that the products and services merchants provide are more important than how the Mall was decorated:

I don't care about the cultural expression. People come to buy things they need in their daily life, rather than looking for cultural goods.... The Chinese business people like to concentrate together [to do business]...and the selling of condominium [units] attracted them, not because of the "Chinese theme" or the Heritage Town, which didn't even exist at the very beginning.... We don't need cultural characters; instead, we need to create an everyday life [environment], where people can buy Asian goods, especially specific products with Hong Kong style. (Blog dated February 16, 2006)

Pacific Mall, a work of architecture and urban planning that, on one hand, pushes suburban mall thinking forward, but, on the other, resorts to reductive cultural symbols

⁷⁵ Ibid.

and raises a number of delicate questions pertaining to cultural agency and the “selling of ethnicity.” From 1993 to 1996, the Torgan Group sold condominium units to business investors, primarily from Hong Kong, and used the Chinese cultural theme as a major attraction to draw tourists and customers.⁷⁶ It could be argued that in the case of Pacific Mall, the developers earned profits by selling a synthesized Chinese identity. Meanwhile, the majority of Chinese merchants provide products and services to both Chinese and non-Chinese customers. Unintentionally, they are maintaining a Chinese tradition of business operation. The static physical or architectural forms are the means for developers to materialize a commodified ethnicity. The everyday-life experience through the merchants’ interactions with their diverse customers is the conduit for business people to reinforce the dynamics of a fluid Chinese identity. Hence, the expression of Chinese ethnicity in Pacific Mall is multi-layered, and conveys authentic and genuine, yet fluid and synthesized meanings.

⁷⁶ Murray, Maureen. “Markham: Can Good Salesmanship Turn into Racism?” *The Toronto Star*, published 27 August 1995, F1 and F4

2.4.2 Social and Cultural Issues of an Asian Theme Structure in Markham

Since the 1990s, Markham experienced intense transformation, socially, culturally, and economically. The municipality, politicians and the community were not prepared to cope with these fast-paced changes. The influx of locally born changed not only the social composition but also the physical environment of the previously homogeneous neighbourhoods. On the one hand, the immigrants from Hong Kong, who were primarily affluent and well-educated professionals, had higher expectations and more resources to create a comfort zone for themselves, consistent with their Hong Kong lifestyle. This is reflected in the ethnic theme mall retail environments. However, people of the contemporary community also suffer from cultural dislocation. Asian residential districts are distant from important commercial and social landmarks related to Asian culture, and this is in sharp contrast to the relationship between the analogous sites in Hong Kong. Density is deeply entrenched in Hong Kong's history and cultural memory. The loss of this density is sometimes tied to the loss of cultural identity. While the interior configuration of Pacific Mall -- a large box housing small retail units to create a high level of density -- addresses this issue, the distance between the mall and any residential neighbourhood remains far and remote. There is an argument for developing Asian commercial centres that are more fully integrated into daily domestic life, where social rituals and shared cultural memories can flourish in a more relatable urban scale.

On the other hand, the noticeable rise in the numbers of affluent Chinese immigrants and the subsequent Chinese commercial activity in Markham has exceeded the comfort level of some of the long-time residents, and triggered their fear that a miniature Hong Kong is being built next door.⁷⁷ Furthermore, these locally born

⁷⁷ Since the late 1980s the neighbourhoods surrounding the site of Pacific Mall have experienced a gradual shift from a predominately White population to a predominately Chinese population -- Caucasians now make up less than 35 percent of the population. The demographic shift appears to have taken place in two stages. First, White residents moved out and immigrants from Hong Kong moved in; later, immigrants from mainland China moved to the neighbourhood and filled the spaces left by vacating Hong Kong immigrants.

offspring of the Hong Kong immigrants did not correspond to stereotypes of immigrants, who were expected to settle in less desirable neighbourhoods than established citizens, just as their predecessors had. With sufficient capital and strong market demand and supply, the Chinese community is the only ethnic group to capitalize on a series of large-scale retail developments such as Time Square in Richmond Hill, and First Markham Place (Figure 2.42) as well as Pacific Mall in Markham.⁷⁸ It is no surprise that the contemporary Chinese community drew attention to their different business culture as a result. Perhaps it is also a chance for the Chinese business community to understand Canadian social norms and learn how to integrate with the local community. After all, it takes time for both locally born and long-established residents to adjust to the new situation, and build harmonious relationships.

⁷⁸ Qadeer, Mohammad A., "Toronto's Residential Mosaic," (with Sandeep Kumar), *Ontario Planning Journal*, Vol.18 (5), Sept/Oct 2003: p. 7-9.

2.5 Conclusion

Immigrants are inevitably involved in the various aspects of Canadian urban life, especially in important urban centre such as Toronto, and their presence informs and transforms the built environment. Pacific Mall eloquently chronicles the complex relationship between general mercantile forces and culturally specific desires, tastes and sensibilities. This is a fascinating dialogue indeed, as the improved culturally-conscious, sustainable mall environment proposed at Pacific Mall holds the potential to create harmony between existing residents and newcomers. Lessons may be learned from the Chinatown approach, as well as that of Pacific Mall, on how to establish a community that can be sensitive to the ethnicity of nearby residents. The goal of this thesis is to design a community true to Markham's hybrid culture, and that responds to its original inhabitants, as well as to first and second generation immigrants concentrated in the area. The neighbourhood should facilitate newcomers to make easy adjustments to the Canadian social norms and community life. The design and configuration of the neighbourhood, if reflecting an Asian origin, should be derived from an authentic Asian architectural form or pattern, allowing for locally born Chinese and/or Canadians of different ethnic backgrounds to understand and connect with genuine Asian heritage. This thesis pursues an architectural project that will reflect the merging of two conditions, and that embraces and celebrates both cultures. The thesis project generated from Markham's cultural considerations will be able to serve as a planning model for other towns or cities in Canada with similar characteristics.

Chapter 3 Asian Patterns and Spatial Sensibilities

*"A settlement was not "the universe that man constructs for himself by imitating the paradigmatic creation of the gods, the cosmogony," for nothing is created in the world, and the world was not created either. Rather, the universal organism – uncreated but generated from Nature itself, whose every part, by a compulsion internal to itself and arising out of its own nature, spontaneously performed its functions in the cyclical recurrence of the whole – was mirrored in human society by a universal ideal of mutual good understanding."*⁷⁹

Joseph Needham, *Science and Civilization in China*

The opening quotation, in which Sinologist Joseph Needham critiques Mircea Eliade's interpretation of human constructions as emulations of the divine cosmos, underscores the important role played by Nature in the formation of traditional Chinese settlements. As outlined by Needham in his monumental work on Chinese science and civilization, the human environment is a "universal organism" generated by Nature, not a human construction. This is a powerful idea, and one that this thesis seeks to explore as a formative principle for a contemporary town plan.

By now, we understand that Markham, Ontario, in 2012 is no longer just another typical Canadian town in the suburbs. Through the three waves of immigration, several constant themes were identified. In fact, Asian cultural memory in Canada does possess a number of persistent and recurring themes, particularly, notions around time, the relationship of built form to site and boundary, as well as the generational connectivity in society. In order to reconsider Markham's town plan in a way that reflects the Asian

⁷⁹ Needham, Joseph. *Science and Civilization in China*, Vol 2. Cambridge: Cambridge University Press, 1956: p.290.

Joseph Needham (1900-1995) was a British scientist, historian and sinologist known for his scientific research and writing on the history of Chinese science.

cultural values and memory, it is imperative to examine these key themes derived from their traditional Asian built environment. This chapter will explore these persistent themes with a view to providing inspiration for a revised urban plan for Markham.

3.1 Chinese's Philosophy

The spatial patterns found in traditional Chinese built environments are derived from the most important Chinese cosmological ideal about the relationship between mankind and nature.⁸⁰ The universe is made up of natural forces determined by two opposing forces.⁸¹ The opposing forces, “yin” (the invisible) and “yang” (the visible element), do not conflict but presuppose and complement each other. Because for completeness, they are interdependent, they strive for unity. Thus, the plain and simple duality of matter and spirit, thought and feeling, humankind and nature, visible and invisible, organic and geometrical, good and evil, negative and positive – as cultivated in the West – is absent. These terms, in Chinese language and culture, are not absolute but, rather, relative.⁸² Following this Chinese doctrine, the definition of “Nature” is Heaven, Earth and Human in one.⁸³ In that line of thinking, there is no opposition between architecture and nature: landscape and architecture permeate each other.⁸⁴ In *West meets east: Mies van der Rohe*, Werner Blaser, an architect and author who worked with Mies and studied his work intensively, wrote of the Chinese inspiration in Mies's work in the following way:⁸⁵

“Architecture is not an ‘object’ in and adjacent to landscape, and certainly not ‘violence against nature’... Nature is the great space (the great void) where various types of demarcation and character of space are possible; the only contrast is between interior and exterior.”

⁸⁰ The most ancient Chinese philosophy which have been influenced and passed down by Confucius (551-479 BC) and Laozi (604BC) philosopher of ancient China who started Taoism.

⁸¹ Mote, F.W. *Intellectual Foundations of China*. New York: Alfred A. Knopf, 1971: p. 49: “Genuine Chinese Cosmology is that of organismic process, meaning that all of the parts of the entire cosmos belong to one organic whole and that they all intersect as participants in one spontaneously self-generating life process.”

⁸² Blaser, Werner. *West Meets East, Mies van der Rohe*. Basel; Boston: Birkhäuser, 1996: p. 17.

⁸³ In contrast with the Christian view recognises a spiritual relationship between god and Human; in dualistic thought, nature is matter, created by god for the use of Human.

⁸⁴ Blaser, Werner. *West Meets East, Mies van der Rohe*. Basel; Boston: Birkhäuser, 1996: p. 14.

⁸⁵ Ibid.

This architectural approach demands an open and flexible organisation of space, a desire for lightness, a negation of mass and reduction in solidity, a permeation of interior and exterior, as well as a victory over separation and restriction. These qualities reflecting this philosophy can be traced in the spatial pattern and formation of the traditional Chinese architecture, as found in the spatial organization of a traditional family household, the layout of a temple, or the plan of a traditional city. This thesis identifies the following key themes as inspiration for the town plan of Markham. The following are the key Asian themes explored in the next section of this chapter:

1. City as a cosmic center – spatial order in the macro- and micro- scale of the city grid.
2. The intergenerational household – family as a social structure.
3. Form and function in relation to the Chinese concept of time.
4. Connectivity and permeability of a city block, transitional space as the threshold.
This shall be explored as it is manifested in the layout of the *hutong*.
5. Density of the shophouse – locality of working and living in the same place.
6. Coexistence of human and nature in the Chinese garden.

3.2 City as a Cosmic Center: Spatial order in the macro- and micro-scale of the city grid

Orientation and symmetry are the guiding principles for the configuration of Chinese architecture. Under the influence of cosmology, orientation is the element that determines the energy flow of the building in relation to its site, and the notion of symmetry is used to achieve the sense of balance between the divine realm and the human world. Both the individual buildings and the planned Chinese cities conform to the fundamental orientation towards a cardinal direction, most often South. The practical reason being that China has southeasterly prevailing winds, and with the southern orientated configuration, inhabitants can take advantage of directional winds and sun exposure to create an ecologically sustainable environment.

The text *Kaogong Ji*, a Confucian-inspired text pertaining to the craft industries in ancient China, provides guidelines for the ideal layout of the ancient Chinese city.⁸⁶ *Kaogong Ji*, translated as *The Records of Examination of Craftsman*, was a collective work covering carpenters, metalworkers, leatherworkers, porcelain makers, as well as the manufacturing of vehicles, weapons and musical instruments, the building of houses, and many others. The text *Kaogong Ji* dates from 500 BC (Zhou Dynasty).⁸⁷ The text describes the major rules as follows: the perimeter length of the city was to be nine *li* (4.5km); the city should possess a strict south-north axiality, or central spine; nine major meridional and latitudinal arteries (each nine chariot tracks wide) were to subdivide the city into nine units with the palace at the center; and a continuous

⁸⁶ Xu, Yinong. *The Chinese City in Space and Time: the development of urban form in Suzhou*. Honolulu: University of Hawai'i Press, 2000: p. 34.

⁸⁷ *Kaogong ji* (考工记) or *The Records of Examination of Craftsman*, sometimes translated as *Book of Diverse Crafts*, is a classic work on science and technology in Ancient China, compiled towards the end of the *Spring and Autumn Period* - a period in Chinese history that is reckoned to have occurred from 771 until 476 BC.

enclosure was to surround the whole city.⁸⁸ The result generated was an orthogonal urban environment.

Figure 3.21 Canonical plan showing the general nine by nine city configuration.
(Source: Xu, 2000: p. 34)

Figure 3.22 Canonical plan of the royal Zhou capital in the *Kaogong ji tu* produced in the second half of the eighteenth century
(Source: Xu, 2000: p. 35)

Figure 3.23 Canonical plan of the royal Zhou capital in the *Yongle dadian*, produced in 1408
(Source: Xu, 2000: p. 35)

⁸⁸ Xu, Yinong. *The Chinese City in Space and Time: the development of urban form in Suzhou*. Honolulu: University of Hawai'i Press, 2000: p. 34.

In cosmological terms, two ancient Chinese ideas come to light in the ancient text. The first is *Tien-Yuan-Di-Fang*, which translates to “Heaven is circular and Earth is square.” The Earth and human world are formally represented by a square, whereas Heaven and the realm of the divine are represented by circles. The second idea, *Tien-Jen-Ho-I*, translates to “Heaven and humankind as one,” alludes to the Chinese philosophical idea of seeking the wholeness of the universe. The ruler of all-under-Heaven is to reside in a structure that is a symbol of the Earth located at the center of the city, the very heart of the Earth.⁸⁹ This is the cosmic focal point where forces of nature may be adapted to the interests of the whole realm, meaning that the nine by nine orthogonal layout not only configure the dynamics of a city as a microcosm, it also corresponds to something much bigger, the conceptual subdivision of the whole world.⁹⁰

⁸⁹ The direct translation of the name “China” (Chinese: 中国; pinyin: *Zhōngguó*) is “center” and “land”.

⁹⁰ According to the “Yu gong” section of the *Shang shu*, Yu, a legendary hero-emperor, divided the land of China into nine regions or provinces, *jiuzhou*, thought to hold a central place among the nine greater regions of the whole world.

3.3 The Intergenerational Household: Family as a social structure

Shiheyuan, the courtyard house, is the most widespread housing type in China. The spatial organization of the domestic setting can be seen as a scaled-down version of the city, for it follows the same dominant concentric system built around a sacred core. The basic composition comprised of covered interior spaces or halls, and open-roofed exterior spaces or courtyards surrounded by a retaining wall, which offers protection from harsh winter winds, preventing heat loss, as well as blocking the high sun rays in summer months.

In a typical north-south oriented courtyard house, the spacious main courtyard, *yuanzi*, is set up precisely at the center of the family complex, designed to let in the scarce northern China sunlight. The living quarters of the different family members are arranged at all four sides of the courtyard perimeter, facing in towards the courtyard, leaving the corners of the square plots empty. The location in which an individual resides depicts their hierarchical status within the family.

Figure 3.31-3.33 *Shiheyuan* typical layout
Perspective, plan and section
(Source: Inaji, 1998: p. 86)

Each hall is a single-story unit of three rooms – a central living room, *tang*, flanked on either side by private sleeping quarters, *woshi*.⁹¹ The size of the *woshi* within a hall is conformed to a standard dimension of three by five to three by six meters, regardless of social standing or wealth of the family, the size of the rooms remains the same.⁹² Additional units of *woshi* or *tang* may be added, but that is as far as the expansion of the residence goes. For this reason, much of the daily activities take place in the living room and courtyard, the bedrooms are strictly for sleeping, making the communal space very much a social hub.

The individual halls are separated, yet no building is independent; rather, each is interrelated with one another, reflecting the people's need to live as a close knit society. They are linked by the circulation path, which is the left-over space between the perimeter of the courtyard and the exterior wall of the buildings, often sheltered by the overhanging eaves from the roof structure. The threshold defining the inside and outside of the living quarters, therefore, is not merely a wall enclosure or a door, but the overlapping of a series of transitional spaces. The notion of the covered walkway is an important feature here as well as in the Chinese garden (which will be further elaborated in the later section). Not only is the covered walkway a social space for interaction, it also acts as the threshold that connects all public and private spaces; in addition, it functions as a framing device, borrowing views of the surrounding landscape, extending nature into the interior spaces.

The compound house is the spatial expression of the social and economic interdependencies found within a family unit. The extended family members usually function as the supportive economic unit where the elderly may, for example, look after the younger generation allowing the parents to engage in other more productive activities. As much as there are blurred social and economic relationships within and

⁹¹ The three-meter width is established to provide passage space of one meter around a bed two meters long.

⁹² Inaji, Toshiro. *The Garden as Architecture: Form and Spirit in the Gardens of Japan, China, and Korea*. Tokyo: Kodansha International, 1998: p. 93.

between these families and households, so too are there blurred boundaries between the public and private realms affecting the degree of privacy within the living spaces.

Figure 3.34 *Siheyuan* typical layout
Level of privacy
(Edited by author)

A high degree of adaptability was inherent in the structure, construction and spatial arrangement of Chinese buildings.⁹³ Places of worship or private dwellings alike were built in wood and roofed with tile. The most typical Chinese building was the rectangular hall on an elevated platform with wooden columns joined together in a complex trabeated system, and a non load-bearing weather enclosure.⁹⁴ These halls form the basic building blocks of the *siheyuans*, or, courtyard house compounds. Their regular columnar structures and modular planning made transformations to a family compound relatively simple. The timber frame and the screen walls not only provided large spans, compact supports, maximal unobstructed space, standardization of planning and construction, and flexibility of use, but made it possible to expand the

⁹³ Ibid., p. 170.

⁹⁴ Inaji, Toshiro. *The Garden as Architecture: Form and Spirit in the Gardens of Japan, China, and Korea*. Tokyo: Kodansha International, 1998: p. 91-98.

basic ground plan in all directions.⁹⁵ The modular quality also enables the provision of hierarchically appropriate accommodation for almost all social classes. This configuration emulates, at the building scale, the hierarchy, axuality, symmetry, enclosure and duality found in at the scale of the city.⁹⁶

Figure 3.35-3.36 *Siheyuan* typical layout
Plans showing duplicate pattern in expansion
(Source: Inaji, 1998: p. 92)

Figure 3.35-3.36 Birds eye view of the *Siheyuan* block
(Source: Firley, 2009: p. 16)

⁹⁵ Ibid.

⁹⁶ Firley, E. And Stahl, C. *The Urban Housing Handbook*. Italy: Printer Trento, 2009: p. 17.

3.4 Form and Function in Relation to the Chinese Concept of Time

Generally speaking, the form of a building rarely gives away the function of the space. According to Chinese cosmic beliefs, the divine and the people are viewed as one and the same and they are to be celebrated the same spatially, be it a residential unit and a temple.⁹⁷ Architecturally, in terms of design, materials, form and ornamentation, Chinese urban structures were indistinguishable from rural structures. Due to uniformity of building styles and layout, and use of ground space, the built fabric unfolded as a continuum from the city to suburbs to open countryside.⁹⁸

The same level of ambiguity could be said about Chinese architecture regards to the dimension of time. Chinese civilization did not lodge its history in the physical entity of buildings; rather, the real past of China is a past of mind.⁹⁹ The memory of specific associated persons and events were kept alive in the written word, therefore, the past reality of the city was psychologically present in the minds of its residents.¹⁰⁰ The Chinese city is also a literary construct.¹⁰¹ In *A Millennium of Chinese Urban History: Form, Time, and Space Concepts in Soochow*, the life-long sinologist Fredrick Mote stated that:

"The reality to the Chinese was not the stones forming its span so much as the imperishable associations with it; those eternal moments realized in words. The physical object is entirely secondary. Anyone planning to achieve immortality in the minds of his fellow men might well give a lower priority to building some great stone monument than to cultivating his human capacities so that he might express himself

⁹⁷ In *Science and Civilization in China* Vol.4 Part 3, 1971: p. 90, Needham stated that "The Chinese mood was essentially secular, loving life and Nature. Hence the gods had to conform, to sit and be worshipped in buildings identical with the halls of families and palaces, or not to be worshipped at all."

⁹⁸ Xu, Yinong. *The Chinese City in Space and Time: the development of urban form in Suzhou*. Honolulu: University of Hawai'i Press, 2000: p. 84, 167.

⁹⁹ Mote, F.W. "A Millennium of Chinese Urban History: Form, Time, and Space Concepts in Soochow." *Rice University Studies* 59, no.4, 1973: p. 35-65.

¹⁰⁰ Ibid., p. 51.

¹⁰¹ Ibid.

imperishably in words, or at least be alluded to in some enduring line by a poet or essayist of immortal achievement.”¹⁰²

Few Chinese cities were cities of stone, rather, they were built with relatively ephemeral materials, mostly timber. Unlike their European counterparts, they do not show the kind of architectural diversity generated by the succession of historical periods. Instead, Chinese cities were, as purely physical objects, characteristic of what Mote calls “a continuum in time.”¹⁰³ Mote emphasizes this point by referring to Lewis Mumford’s observations on the cities of Europe:

“The Chinese city did not possess visible ‘diversity of its time-structures.’ Time did not challenge time in the eyes of a wanderer in a city street in traditional China. In China there was no danger of the past not preserving itself; but neither did the architectural monuments remind one of the past, because architecturally the present was never strikingly new or different. No Chinese building was obviously datable in terms of period styles. No traditional Chinese city ever had a Romanesque or a Gothic past to be overlaid in a burst of classical renaissance, of a Victorian nightmare to be scorned in an age of aggressive functionalism. In that sense, the Chinese city did not escape ‘the tyranny of a single present,’ but neither did it consider ‘a future that consists in repeating only a single beat heard in the past’ to be monotonous.”¹⁰⁴

It is important to note that it would be wrong to regard Chinese architecture as invariable in time. “Continuity” indicates change rather than stagnation. Change came so gradually that visible diversity of time-structures could hardly be detected by the

¹⁰² Ibid. Fredrick Mote is an American Sinologist and a professor of History at Princeton University for nearly 50 years. In collaboration with Denis C. Twitchett and John K. Fairbank he helped create The Cambridge History of China, a monumental (though still incomplete) history of China.

¹⁰³ Mote F.W. “The Transformation of Nanking, 1350–1400.” In Skinner, G. William, Ed. *The City in Late Imperial China*. Stanford, CA: Stanford University Press, 1977: p. 101-153.

¹⁰⁴ Mumford, Lewis. *The City in History: Its Origins, Its Transformation, and Its Prospects*. San Diego: Harcourt, 1989: pp.98. “Through its durable buildings and institutional structures and even more durable symbolic form of literature and art, the city unites times past, times present and times to come.”

contemporary Chinese. However, through working manuals, mnemonic craft-rhymes and through apprenticeship, traditional forms and techniques of building were sustained, though undergoing gradual transformation, from one generation to the next.¹⁰⁵

In the traditional Chinese built environment, the most ephemeral building materials were used, and the similar techniques of construction were employed across a period of seven centuries. The vitality of the city, with all the ideas and memories associated with it, were kept alive in literature, which was the real vehicle for commemoration, whereas the physical structures could be rebuilt repeatedly without any danger of losing their historical value and meanings.

¹⁰⁵ Mote, F.W. "A Millennium of Chinese Urban History: Form, Time, and Space Concepts in Soochow." *Rice University Studies* 59, no.4, 1973: p. 39.

3.5 Density of the Shophouse: locality of working and living in the same place

Since the middle of the Tang dynasty (618-907), commercial activity grew, exerting a strong influence on the location and growth of cities. This period marked the end of the walled market quarters as the Chinese shophouse emerged. As the retaining walls enclosing the family compounds were gradually eliminated, the street plan became much freer, leading to the practical and conceptual change of public space. The breakup of the city blocks during this period led to the transformation of many narrow *hutong* passages, which connected the residential wards to major roads of the city, into busy streets flanked with shops and restaurants. The street-fronting buildings of the former courtyard houses were converted into shops. As the principal urban commercial facilities these were located wherever it was economically sensible in the city. The walled market quarters that once functioned as venues for commercial and social activities had been replaced by these shopping streets of localized business.

With the growing number of independent merchants and increasing wealth of the merchant classes, the urban expression of the shop began to appear in all sizes and styles, and some areas became defined as business districts. The business district was dominated by shophouses that were normally two-story buildings, with quarters that were cramped because of high land values. Later on, the new typology and its mixed commercial and residential use became an urban element in itself, and its application was no longer limited merely to the perimeter of the estates. Consequently, commercial and residential activities, and thus shops and houses, were no longer segregated from each other, but rather mingled in the web of city streets and alleys (see Figures 3.51-3.52).

Figure 3.51 Picture map of residential wards redrawn from a fragment of an engraved scale map of Tang Chang'an dating from A.D. 1080. (Source: Xu, 2000: p. 70)

Figure 3.52 Street plan of a section of the city of Suzhou adapted from a picture map engraved on stone in 1229 (Source: Xu, 2000: p. 71)

3.6 Connectivity and Permeability of a City Block, Transitional Space as the Threshold – manifested in the layout of the *hutong*

The southern orientation of the individual houses explains the east-west layout of the *hutongs*, a hierarchical street network of narrow lanes and small alleys, connecting the south-facing entrance of the *siheyuans* perpendicularly to the major north-south roads.¹⁰⁶ The term *hutong* refers to both the traditional laneways as well as the traditional city blocks. As mentioned in the previous section, during the period between the mid-Tang and Song, the gradual replacement of the enclosed marketplace and the walled-ward system by a much freer street plan which brought a true sense of “public space” into the city: urban space for daily activities in which all residents of and around the city could freely participate.

In *Rehabilitating the Old City of Beijing: a Project in the Ju’er Hutong Neighbourhood*, Professor Wu Liangyong from Tsinghua University in Beijing describes the three characteristics a typical *hutong* presents:

“The accessibility to both main streets and to individual dwellings; the mixed land use by ordinary houses as well as shops, temples, offices and mansions; and the integrated system of alleys and courtyard houses.”¹⁰⁷

With its high level of pedestrian permeability and its dense community texture, *hutong* denotes a traditional urban neighbourhood where public space often becomes an extension of private space, as when families pull their chairs out into the street to enjoy the relative coolness of the evening and greet neighbours, or when the merchants appropriate the sidewalk for displaying goods. Pedestrian activity dominates the small town streetscapes, making the streets lively places at certain times of day and night, and increasing the potential for social encounter.

¹⁰⁶ Firley, E. And Stahl, C. *The Urban Housing Handbook*. Italy: Printer Trento, 2009: p. 14.

¹⁰⁷ Wu, Liangyong. *Rehabilitating the Old City of Beijing: a Project in the Ju’er Hutong Neighbourhood*. Vancouver:UBC, 1999: p. 74.

Figure 3.61-2 Street views of the *hutongs*
(Source: Firley, 2009: p. 16-17)

Figure 3.63-4 Interior views of the communal
Courtyard in *Siheyuan*
(Source: Firley, 2009: p. 16-17)

3.7 Coexistence of Human and Nature in the Traditional Chinese Garden

In contrast to the courtyard found in *siheyuans*, *yuanzi*, which is regarded as a functional, outdoor living space in an urban setting, the contemplative landscape garden, *yuanlin*, is purely a pleasure garden intended exclusively for enjoyment.¹⁰⁸ Following Confucius' influence, the traditional Chinese believed that the notion of 'studying' improves man's virtue, particularly that of the noble arts: rites, music, writing, poetry, mathematics, chariot driving and archery.¹⁰⁹ As the Chinese people highly valued the nurturing of self development through literary and artistic activities, the landscape garden became the basis for educating the 'good man'. They fostered the traditional Chinese virtues of sensibility, self-control and harmony between man and the universe – which equipped a man to serve the government.

At first, the landscape garden was only found in the homes of the literati, warriors, and government officials, as the indicators of social position.¹¹⁰ The garden was associated with the residential complex but distinctly partitioned off from the hall/courtyard portion of the dwelling. It was perceived as an object for contemplation, set out to give tangible form to a vision of utopia similar to that of the circumstances and spirit portrayed in Chinese landscape painting.¹¹¹ The landscape gardens were an extension of the resident's personality and so were very much part of the scholar's psyche. It was important for the scholar's spiritual advancement that they should be surrounded by an environment appropriate to the Confucian, Taoist or Buddhist ways of thought.¹¹² It was during the period of Song dynasties (960-1279), "the golden age of the arts," that scholars and painters appeared in great numbers, leading to the

¹⁰⁸ Inaji, Toshiro. *The Garden as Architecture: Form and Spirit in the Gardens of Japan, China, and Korea*. Tokyo: Kodansha International, 1998: p. 102.

¹⁰⁹ Yao, Xinzhong. *An Introduction to Confucianism*. New York : Cambridge University Press, 2000: pp.23

¹¹⁰ Inaji, Toshiro. *The Garden as Architecture: Form and Spirit in the Gardens of Japan, China, and Korea*. Tokyo: Kodansha International, 1998: p. 103-104.

¹¹¹ Ibid.

¹¹² Keswick, Maggie. *The Chinese Garden: history, art and architecture*. Cambridge: Harvard University Press, 1986: p. 7.

emergence of free-form landscape-style gardens that were supported by literature and landscape painting.¹¹³ The garden-making theories and techniques were outlined comprehensively in *Yuan Ye*, “*The Craft of Gardens*,” written by Ji Cheng in the late Ming dynasty (1368–1644).¹¹⁴

One may find the most surprising aspect of *Yuan Ye* is that the primary emphasis in garden-making is on architectural features, with types and features of artificial mountains and paved paths playing a secondary role.¹¹⁵ The *Yuan ye* is a comprehensive garden-making guide consists of three volumes outlining topics from the theory of construction to structural and scenic features. In response to the thesis’ aim, the four relevant principles will be discussed here:¹¹⁶

3.7.1 Site

The garden is planned around exiting topography where the low-lying areas are dug even deeper, and high spots heightened further. This method ensures that even in a relatively flat urban *yuanlin* there will be variations in height. The original rocks, water, plants, which are grouped and condensed where they are too scattered, serve as the basic garden materials to remind the viewer of the beauty of that particular region. The basic approach is to utilize and enhance the intrinsic qualities, forms, and vegetation of the site.

3.7.2 Layout of Buildings

In the design of the Chinese *yuanlin*, priority is given to the positioning of buildings; the garden is then designed around the buildings. First the location of the

¹¹³ Ebrey, Patricia Buckley; Walthall, Anne; Palais, James B., *East Asia: A Cultural, Social, and Political History*, Boston: Houghton Mifflin, 2006: p. 81–83.

¹¹⁴ Cheng, Ji. *The Craft of Gardens (Yuan Ye)*. Translated by Alison Hardie. New Haven: Yale University Press, 1988

¹¹⁵ Inaji, Toshiro. *The Garden as Architecture: Form and Spirit in the Gardens of Japan, China, and Korea*. Tokyo: Kodansha International, 1998: p. 109.

¹¹⁶ Cheng, Ji. *The Craft of Gardens (Yuan Ye)*. Translated by Alison Hardie. New Haven: Yale University Press, 1988

main hall is decided, with the primary consideration given to the direction it faces, most often South. The positions of pavilions, terraces, and towers is then determined based on the interrelationship of their mutual views. Plants, mountain rocks, and water features are then added, and the various elements are linked by covered walkways.

Main Hall

The focal point of the *yuanlin* is the main hall, *huating*, which literally means “flower garden,” for gatherings and banquets. The *simianting* (“four-sided hall”) and the Mandarin Duck hall are the most common main hall styles. The *simianting* comprises an open interior space surrounded by a variety of latticework doors without any solid walls, with its open walkways all around; it creates an uninhibited space that offers a view on each of the four sides. The Mandarin Duck hall, on the other hand, is divided into two rooms, front and back, by a sheathed wall with latticework doors. The two rooms are based thematically on different seasons, the room facing South corresponds to winter and spring, and that facing North, to summer and autumn.

Opposing Buildings

A *duiting*, or opposing building, is always constructed as the focal point of each vista. *Duiting* may be halls, chambers, chapels, towers, pavilions; which are linked by covered walkways.

Covered Walkway

The meandering walkway functions not only as a connecting path between buildings, but guides the visitor through the main views of the garden and acts as a device for creating “segmented” scenes.

Figure 3.71

Covered Walkway
(Source: Inaji, 1998: p. 114)

Qualities of transparency and lightness are intrinsic to the forms of the mentioned architectural structures, they contribute towards the Chinese garden's pivotal feature that is composing "segmented" scenes. All the built structures have a reciprocal relationship, providing borrowed scenery for one another in a series of interdependent views that are both "mutual" and "intersecting". Each building, therefore, becomes an element in landscape composition for others (see Figure 3.72).

Figure 3.72

Schematic layout of buildings in a *yuanlin* to achieve mutual and intersecting views.
(Source: Inaji, 1998: p. 112)

3.7.3 Screens and Curves

The *yuanlin* is a stroll garden structured in such a way that as the visitor saunters from the central hall to the opposing buildings, the scenery flows by, with different scenes and views appearing and disappearing. "Screening" and "winding" techniques involving the use of buildings, wall surfaces, fences, caves, gates, and the covered walkways with unexpected twists and turns divide the garden into a number of distinct, scenic space cells (see Figure 3.3.2). No scene is completely independent of others; each is partitioned and linked by architectural features – primarily walkways and latticework windows. The layout of large and small areas is composed with rhythmical changes juxtaposing expansiveness and concentration.

3.7.4 Water

Another prominent feature of Chinese garden composition are the asymmetrical bodies of water. The thematic water elements can be human-made or

natural, and establish a contemplative and peaceful aura through their calmness and solitude. The organically shaped central lakes countering the orthogonal structure of the building layouts yet again reflect the Chinese philosophy on harmony between human and nature.

In contrast to the Renaissance and Baroque gardens where geometrical perfection is imposed on nature, Chinese gardens employ forms that appear to unfold according to the forces of nature.¹¹⁷ The Chinese *yuanlin* is composed of views designed to be appreciated from a seated position at chair height inside the buildings, as well as scenes designed to be viewed while walking. The essence of the *yuanlin* centers on interdependent mutual and intersecting views between buildings, so that each element of the garden's composition is multifaceted, multilayered, and kinetic.

¹¹⁷ Blaser, Werner. *West Meets East, Mies van der Rohe*. Basel; Boston: Birkhäuser, 1996: p. 15.

3.8 Conclusion

The formal arrangements presented above are responsible for ensuring a close-knit, trans-generational community, therefore, they will play an important role in the proposition for the revised town plan for Markham presented in Chapter 4. However, these traditional forms and arrangements cannot be simply applied to a site in suburban Toronto. Translation and analytical interpretation taking social and demographic contexts, as well as topography and physical contexts, will be necessary. The proposition presented at the end of this thesis explores new ways to update the traditional physical environment as well as to integrate the necessities of modern living within a landscape of cultural continuity. The result, if successful, will be a hybridized urban planning model that serves to strengthen the connection between the ethnic identity in a built environment and the sense of belonging to the broader culture in order to create, in Hayden's words, a "more inclusive cultural citizenship," that will positively encourage a greater participation in public life.

Chapter 4 Markham Town Centre Re-imagined According to Asian Ideas of Time and Space

This chapter will present, in detail, the current status of the Downtown Markham master plan development by the Remington Group. Following basic guiding principles set out by the Town of Markham, this thesis will proceed to test different urban planning models in search of a more appropriate configuration for the proposed, culturally-conscious housing development on the given site. As a preamble to the design of a new neighbourhood on the newly identified site along the ravine, the thesis examined other urban planning testing models to gain a better understanding of the project's yield requirements and possible forms, heights, and densities (see Appendix I). The process employed here is to see how well each planning model responds to the Town's parameters of economic, ecological and social sustainability, as well as to implement the key Asian spatial themes unveiled in the previous chapter. While it was known from the outset that some of these approaches would not arrive at a desirable outcome, the exercise was still worthwhile to help identify probable shortcomings and discover some unexpected positive results.

Figure 4.1

Downtown Markham master plan analysis:
Site and its periphery building typology

4.1 Revising the Downtown Markham Development Proposal

“The relationship between interior and exterior is attainable by opening up spaces to create the greatest possible dissolution of solidity and a type of skeleton construction. If in this way, the landscape becomes a part of living space, then the difference between natural and architectonic spaces will led solely in their scale and lack of a cover.”¹¹⁸

Werner Blaser

The official master plan of Markham by the Remington Group currently follows the logic of an enclave with a symmetrical urban park as focal point. The plan favours perimeter block developments with a central urban garden. Its urban blocks are defined by perimeter block “image buildings” which formally turn the neighbourhood blocks inward. And while the Remington Group’s massing does emphasize street edges, it also treats its blocks as self-sufficient systems lacking strong relationships with the adjacent landscape, especially at ground level: the Remington Group’s plan fails to establish a meaningful relationship with, the ravine, and in fact ignores the latter entirely (See Figure 4.11 & 4.12). Notably, the buildings on Simcoe Drive along the pedestrian corridor are treated in the exact same way as the buildings on West and East Valley Drive adjacent to the ravine edge. Because its urban forms are closed-ended and definitive, the Remington Group’s scheme leaves no room for gradual transformations nor for natural extensions over time. Neither does the plan allow for spatially significant relationships between one block and another, and between the built forms and the park and ravine system. The revised proposal here developed, recovers the idea of the *yuanlin* stroll garden as a main organizing idea, and will counter the Remington Group’s image-oriented proposition, and its fixed “picture” of what a neighbourhood should be.

¹¹⁸ Blaser, Werner. *West Meets East, Mies van der Rohe*. Basel; Boston: Birkhäuser, 1996.

Figure 4.11 Downtown Markham Town Plan designed by the Remington Group

(The Remington Group Press Release, dated May 23, 2007)

Figure 4.12 Downtown Markham Town Plan Analysis
(Sketch by author)

Figure 4.13 – 4.15 Downtown Markham Town Plan Renderings
Prepared by the Remington Group

4.2 Downtown Markham's Current Status

The various areas in the Downtown Markham master plan are at very different stages of development at the present time. Some of the proposed buildings are completed, some are under construction, and some are still pending approval by the Town. This thesis will focus on the area that has not yet been touched, working with the remaining numbers in the yield requirements established by the Town.

Figure 4.21 Downtown Markham Town Plan: Constructed Area (Edited by Author)

Figure 4.22 Site Photos of the current constructed buildings (Taken by Author)

The residential block on the west end has already been completed (Figure 4.21 & 4.22). The 22-acre built area, including a residential block of townhouses and six condominium structures, has been broken down as follows¹¹⁹:

BENCHMARK MANOR

Location: Northeast of quadrant of Enterprise Boulevard and Rouge Valley Drive.
Total Land Area: 6.18 hectares (15.27 acres)
Development: 175 townhome units including a local park 0.3 ha (0.74 acre) and relocating heritage home.
Yields: 11.5 Units per acre, and assuming 4 residents per dwelling, 45.8 Persons per acre

ROUGE BIJOU & BIJOU TERRACE - 1 & 2 UPPER DUKE CRESENT

Location: Northeast corner of Rouge Valley Drive and the Civic Mall.
Total Land Area: 0.51 hectares (1.24 acres)
Development: 188 apartments units within 10 and 7 storey building linked by a single storey lobby and oriented along the Civic Mall.
Yields: 151.6 UPA, and assuming 2 residents per dwelling, 303.2 PPA

BIJOU PROMENADE & ARBOUR - 39 & 57 UPPER DUKE CRESENT

Location: North side of the Civic Mall, east of Rouge Valley Drive.
Total Land Area: 0.68 hectares (1.68 acres)
Development: 244 apartments units within two buildings, 7 storeys each.
Yields: 145.2 UPA, assuming 2 residents per dwelling, 290.5 PPA

VERDALE PROJECT - 111,131, 151 UPPER DUKE CRESCENT

Location: West side of Verdale Crossing, south of rouge valley Drive
Total Land Area: 0.82 hectares (2 acres)
Development: 450 apartments units, within three buildings, 2 buildings @ 6 & 10 storeys and 1 building @ 6 & 14 storeys.
Yields: 225 UPA, assuming 2 residents per dwelling, 450 PPA

NEXUS - 8110, 8130 BIRCHMOUNT ROAD

Location: Northwest corner of the Civic Mall and Birchmount Road extension
Total Land Area: 0.75 hectares (1.8 acre)

¹¹⁹ Information gathered from the developer's website: The Remington Group. "Downtown Markham Project Description." 2011. Web. Sep 2011 <<http://www.remingtongroupinc.com/>>; "Downtown Markham: the Place to Be." *The Remington Group*. 2011. Web. Sep 2011 <<http://downtownmarkham.ca/>>; as well as individual condominium advertising websites and brochures. The calculation was done by author.

Development: 376 units within two buildings 6 & 10 storeys and 11 and 14 storeys mixed use buildings, including 3,274m² (35,242 square feet) of grade-related retail.
Yields: 208.9 UPA, assuming 2 residents per dwelling, 417.8 PPA

Assuming 2 residents per condo units and 4 residents per townhouse dwelling:

Total site area: 22 acre
Townhouses: $175 \times 4 = 700$
Condo units: $1,258 \times 2 = 2,516$
Total population: 3,216 residents
Total yield: $1,433 / 22 = 65.1 \text{ UPA}$
 $(700 + 2,516) / 22 = 146.2 \text{ PPA}$

Assuming 30% of the condo units are occupied by one resident (420 units):

Total population: 2,796 residents
Total yield: UPA remains the same.
 $[(838 \times 2 + 420) + 175 \times 4] / 22 = 127 \text{ PPA}$

Since this thesis and its architectural proposition seek to integrate daily domestic life with social ritual and the spaces of shared cultural memory, the revised master plan will focus on the 49 acres (see area in Figure 4.23 shown in pink) of un-built land just south of the Rouge Valley River, leaving the financial district untouched.¹²⁰ The goal of the initial proposal is to house a population of 10,000. As approximately 3,000 residents are accounted for in the already-constructed residential block, there remains a population of 7,000 to be accommodated. In the Business Park (see zones in Figure 4.23 shown in blue) and mixed-use development districts (see zones in Figure 4.23 shown in orange), five condominium buildings to house approximately 2,000 residents are planned. So as to satisfy the same yields, the counter-proposal to the Remington master plan must provide housing for a total of 5,000 residents on its 49 acre site.

¹²⁰ Calculation for the buildable area on site for Residential or Mixed-use development:
243acres (total Downtown Markham area) – 27.5acres (parks) – 33.2acres (unbuildable) – 100acres (business/commercial) – 11.6acres (school) – 22acres (constructed) = 48.7 acres

Figure 4.23 Buildable Site

4.3 *Yuanlin* Town: Living in the Garden

4.3.1 The Initial Approach

As a first study of alternate massing for the site, fragments of figure-ground plans of *hutong* and *siheyuan* are collaged together and inserted into the perimeters set out by the proposed town plan layout. The fragments were carefully selected from *hutong* and *siheyuan* plans from Beijing and Shanghai, as well as Kyoto and Tokyo, and juxtaposed to the Markham site according to equivalency of formal conditions.¹²¹ While the initial layout seemed to respond to the interconnectedness within a neighbourhood block, the Markham site's topography was not aptly taken into account by this process. This initial figure-ground study, while not successful in generating a new master plan, did point the way toward a new kind of massing, in which filtered and layered building placements, asymmetrical building and garden placements, and courtyard forms, all had operative roles. This first study phase did reveal the need to abandon the Remington Group's master plan boundaries altogether, and to start anew on a longitudinal, swath-like site, embracing the ravine.

As a preamble to the design of a new neighbourhood on the newly identified site along the ravine, the thesis examined other urban planning testing models to gain a better understanding of the project's yield requirements and possible forms, heights, and densities. These studies are presented in Appendix I of this thesis. Following this series of studies, the thesis embarked upon the design of *Yuanlin* Town, a master plan inspired by Asian concepts of time and space.

¹²¹ Firley, E. And Stahl, C. *The Urban Housing Handbook*. Italy: Printer Trento, 2009. Figure Ground plan of Beijing (p.19), Shanghai (p.139), Kyoto (p.59) and Tokyo (p.69).

Figure 4.31 Beijing

Figure 4.32 Shanghai

Figure 4.33 Kyoto

Figure 4.34 Tokyo

4.3.2 Filtering and Layering: Opening Street Edges

The project, “*Yuanlin Town: Living in the garden,*” develops the new master plan as an extension from the ravine southward, as a progression from the ravine to a stroll garden, and to the built fabric. The shift from the central garden scheme to an urban planning lay-out with much greater connectivity with the ravine constitutes a shift in vision and in values. *Yuanlin Town* reorients the official proposal from an inward, inter-boundary neighborhood – where the freeway, ravine, Warden Avenue and the GO Transit line had separated the district from its larger surroundings – to one that extends its boundaries in an integrated way. With the goal of opening up the street edges in the existing proposed town plan and to heighten interconnected flow through the site, the design principles for the counter-proposal can be broken down into five themes derived from Asian spatial qualities and ideas of space and time. Asymmetrical relationships between built form and garden replace symmetrical ones. The fluid connection to the ravine and a commitment to creating stroll through-passages between buildings, guides the new proposal. The five themes are as follow:

1. Dispersed Garden
2. Courtyard Houses and Inter-generationality
3. Network and Access
4. The Dispersed Market [Urban Sector]
5. Network of Public Amenities [Ravine Sector]

The new proposal includes a system of east-west layers that gradually grow and evolve from the ravine to the commercial and traffic artery. *Yuanlin Town’s* garden is a dispersed landscape, in which dwellers live. The project puts forth a new courtyard-house prototype that combines modern requirements with respect for the old fabric of *shiheyuan*, while simultaneously achieving a high density development.

Figure 4.35 Schematic sketch
 Depicting the area mediating between the
 natural edge and urban edge of the site.

Figure 4.36 Interconnected passages leading up to the
 ravine. Points of public entry through the in-
 between spaces of the peripheral buildings.

To contrast the formal and rigid form found in the Remington master plan, the architectural forms in *Yuanlin* Town explore the overlapping of thresholds and transitional spaces defined by texture and materials, in their interstitial zones. Textures and a variation of hard and soft surfaces, rather than walls or more obvious dividers such as fences, are used to create distinctions between spaces, zones, and degrees of publicity and privacy. The segregation of spaces by enclosure (walls) and changes in levels (steps up or down) employed in the official proposal are here modified. The environment is more sensual and participatory as a result, since the dweller's senses are constantly triggered, and since the language and urban relationships and divisions are more subtle than in the Remington Group's project. While the current town plan favours the facade of the perimeter block as a determining feature of the urban form, this counter-proposal explores architectural permeability, re-imagining the perimeter

block as a series of “filter buildings”. There are differentiated approaches in dealing with these “filter buildings” at the naturalistic ravine edge and the orthogonal urban edge (Figure 4.37). Both conditions are about entering or exiting the neighbourhood through a series of threshold of the buildings designated by public services.

Figure 4.37 Schematic Sketch depicting the differentiated approaches in dealing with the filter buildings at the ravine edge and the urban edge

Theme 1: Dispersed Garden

With the dispersed garden as a driving design metaphor, the whole site is treated as a garden in response to the topography of the site; rather than centering on a centralized figural garden “parachuted” on top of the site. The goal is to create stroll through-passages between buildings which will lead towards a more fluid connection to the ravine, reflecting the notion of cyclical time in Asian cultures. To contrast the Remington Group’s proposal, a series of dispersed centers and focal points are used instead of termination buildings and hierarchical planning and massing.

Figure 4.38 Modified modules multiplied leading up to ravine edge. Creating a series of interconnected passage ways, as well as dispersed gardens and market places.

Theme 2: Courtyard Houses and Inter-generationality

In the new proposal, courtyard houses (Figure 4.39) are favoured in the place of European influenced row houses. The official proposal employs linear town houses, and, in the commercial zones, megablock configurations for the mixed-use, condo/retail, and high-density residential blocks. This thesis makes adjustments to the courtyard typology to create a new “compound house” as the configuration of a “quadrant building block” (Figure 4.41) which will then be mirrored and multiplied to complete the urban planning layout of the site. The adjustments made to the courtyard typology pertain to the height of new buildings, the size of new courtyards, the number of inhabitants, and the provision of pavements and car access, and are conceived so as to increase spatial interconnectedness and intergenerational social connectivity in a manner that is relevant for the present. Considering these long established but vastly different genres of the compound house, it is instructive to identify the themes common to the derivatives of the traditional extended family models. These are:

- Shared infrastructure
- Servicing non-nuclei households
- Private, semi-private and communal spaces
- Functional need specific structure and management
- A degree of social and economic interaction between households (supportive interaction)

Cultural and lifestyle shifts affecting the demographic makeup of households include the following:

- Increase of empty-nesters (baby boomers)
- The need for home-based care for the aging population, death of partner
- Higher divorce rate (young, middle-age, elderly single-parent household)
- Choice in delaying marriage (younger people living at home longer)
- The increase of temporal or contract-employment is recognised as having very significant implications for the propensity for the young to save a down payment and become homeowners at the same relatively young age that their parents did

The compound house employed in this scheme responds to the social realities of Markham’s population. The compound houses include separate units within them,

which can be rented out, for income supplement or for extended family privacy needs. The compound house layout contributes to the social mixing of a neighbourhood by allowing persons with lower income access to the higher value areas. The basis of the affordability of the compound house comes from a variety of savings and efficiencies as there are no subdivision costs, and utilities costs and connection fees for basic amenities such as cable or internet are reduced. The compound house suggests supportive arrangements – from joint gardening efforts, to increased security, and even car sharing and babysitting.

The compound houses of *Yuanlin* Town reject the Remington plan's emphasis on the architectural facade. The latter would likely result in monotonous streets and a generic, perhaps even austere, environment. When street facades act as urban interfaces, as they do in the proposed scheme, opportunities to express the inner life of the block are increased. As you travel through the compound blocks, different views of the courtyards, residential units, and the ravine are accessed visually as well as physically depending on the need for level of security required. The idea is similar to that of the mutual and intersecting views activated by the covered walkways within the landscape garden.

The typology of the building defining the perimeter of the *Yuanlin* Town is shown below (Figure 4.39-4.41). Following the logic of the *siheyuan* spatial configuration, the frontal structure is now intensified, taking the form of a three-storey shophouse with commercial space on the ground floor and residential units above. The point of entry into the complex is a single-storey green-house structure framing the interior courtyards. A buffer zone is defined by the layering of different types of courtyards, filtering visitors and local residents through the transitional spaces, increasing the level of public-ness or privacy. The series of gardens immediately adjacent to the commercial space can be used as a back patio for a café or restaurant located in the retail unit in front or an outdoor gathering space between the locals and visitors. Layering of the covered walkways is also employed here, as well as the use of hard and soft texture to

define the inhabitants' perception of transition through the complex. The semi-public garden is shared by residents of the complex, leading into different housing units.

Figure 4.39 Typical *siheyuan* layout
In Plan and Section

Figure 4.40 Modification process of
the typical *siheyuan*

Figure 4.41 Modified module of the Yuanlin Town courtyard houses.

The proposed configuration of the courtyard house now forms a “quadrant building block” (Figure 4.42). A neighbourhood block is generated through the multiplication of these quadrant building blocks (Figure 4.45-4.48). This interactive urban process runs counter to the idea of completion through closure of finite blocks, as seen in new urbanism. The process of laying out the quadrant building blocks onto the existing site is in accordance with a series of *siheyuan*-inspired grids that are adjusted and shifted to the topography of the site (Figure 4.49). The aim here is to form an intimate relationship on both a micro- and macro- scale of the city grid, reflecting the Asian notion of “the city as a cosmic centre” as previously mentioned in Chapter 3.

Figure 4.42 Quadrant Building Block Plan
Depicting internal buildings within each block and unit occupancy

Yield Calculations within a Quadrant Building Block:

- 4 Large single-family households (4 – 6 persons per unit)
- 7 Smaller single-family households (2 – 4 persons per unit)
- 70 condo units (1 – 2 persons per unit)
 - 20 residential units above retail
 - 24 units above the 2 large family households
 - 26 units in 5-storey apartment buildings

- Yields 150 people per quadrant. Assuming 24 quadrants are laid out across the site, the residential block can accommodate 3600 residents in total.

Figure 4.43 Axonometric view of the Massing Model of a typical quadrant

Figure 4.44 Birdseye view of the a typical quadrant

The arrangement and size of building included in the counter-project is calculated so as to meet the proposed town plan population requirement of 10,000 inhabitants,. The residential block already constructed is set to house 3,000 people. In the business district in the initial town plan, there are five condominium buildings zoned to be built, housing approximately 2,000 people. The remaining number of residents required to be accommodated in the counter-proposal is 5,000. This figure implies the need for seven residential towers, up to ten storeys in height, to house a total of 1,400 people. The new proposition locates these residential towers, incorporating public amenities on the ground level, near the ravine edge. These will be further explained in the Ravine Sector section later on in this chapter.

Figure 4.45

Step 1 - mirroring quadrant 1 to form 2 quadrants.

Figure 4.45a

Axonometric View

Figure 4.46

Step 2 - mirroring quadrant 1 and 2 to form a block with four quadrants.

Figure 4.45 – 4.48: Completion through multiplication:
The quadrants are multiplied by the process of mirroring to create a quadrant building block. The quadrant block is then mirrored and multiplied in the similar process to define the urban planning layout across the site.

Figure 4.47

Step 3 - By mirroring the entire building block, they are multiplied to form a sector.

Figure 4.48

Communal gardens are formed between quadrants within quadrant building blocks further connecting the different quadrants within a building block.

Figure 4.49 Shifted *siheyuan* inspired-grids laid out on buildable site

Figure 4.50 Quadrant Building Blocks laid out on site according to the shifted grid
A new street, *Hutong Street*, is formed in this counter-proposal just on the North side of and parallel to Simcoe Promenade (as shown in yellow)

Theme 3: Network and Access

While in the current proposal, street entrances are aligned by streetscapes, this proposal favours interconnected entries. As Asian cultures cherish the relationship between generations, walk-ability should play a key role in their environments. A neighbourhood with great walk-ability not only offers a high level of practicality – it is good for the environment as it reduces vehicle dependencies, and it has time saving qualities -- for Asian communities, it is the catalyst that mediates the fluid relationship between generations. Walk-ability allows for elders to have access to different aspects of the city as well as the parks, all the places that younger people use. It is important to create an environment that fuels and gives back to the shared cultural memory of the people in the community. In this way, *Yuanlin* Town recovers many aspects of the traditional *hutong* form and social function.

The Covered walkway weaving through the site is a strategy to support pedestrian and intergenerational daily living rituals. It is a transitional device acting as the threshold between indoor and outdoor; it is also a strategy for connecting garden and built form. The new master plan includes a covered walkway which runs along on the west side of Birchmount Road and across the site between the proposed Hutong Street and the existing Simcoe Promenade, linking the residential quadrant blocks on the Northwest end of the site and the school zones at the East end of the site (As shown in red in Figure 4.51).

Figure 4.51 Path of the Covered Walkway is shown in red.

Figure 4.52 Qualities of the Covered Walkway

Theme 4: the dispersed market [Urban Sector]

Shops are distributed throughout the site, located in the street-fronts of the courtyard houses, forming perimeter edge buildings along the **Urban Sector** on the southern urban edge of site, along Simcoe Promenade. Aside from providing commercial spaces incorporated into domestic daily life, they are the anchor to the interweaving covered path.

Figure 4.53 Quadrants that make up the Urban Sector addressing the Urban Edge

Figure 4.54
Perspective view of the Urban Sector

Theme 5: Network of public amenities [Ravine Sector]

Shared public amenities dealing with health and family life, such as medical clinics, daycare, pharmacy, community outreach facilities, are also distributed throughout the site in the **Ravine Sector**. A distinct massing and formal language is used for the ravine edge buildings: they are free-standing linear buildings which must be perpendicular to the ravine; additionally, the geometry of the buildings is shaped by the topography of the site.

Figure 4.55 Schematic sketch depicting the quadrants that make up the Ravine Sector addressing the naturalistic Ravine Edge

Figure 4.56 Axonometric view of the Massing Model of a typical quadrant near the Ravine Edge

Figure 4.57 SECTION A-A: Sectional views through a typical quadrant

Figure 4.58 SECTION B-B: Sectional views through a typical quadrant

Figure 4.59 Birdseye view of Site Model

Figure 4.60

Eye-level renderings: depicting the relationship between internal buildings

Figure 4.61

Eye-level renderings: depicting the relationship between internal buildings

Figure 4.62

Views showing the filtered relationship between private dwellings and yards with shared gardens and public spaces.

Figure 4.63

Site Plans Comparison: between the Remington Group's proposed master plan and the counter-project

Conclusion

Cities, suburbs and societies are in a constant state of change. Beyond the critical question of environmental sustainability in urban planning, the undertaking of a 21st century multicultural Canadian suburban settlement form is an urgent one, requiring the participation of municipalities, government, planners, architects and developers. But such an undertaking is no easy task. While rethinking Markham's Town Center master plan according to planning traditions from Asian culture makes sense in many ways, the translation of traditional Asian spatial and planning ideals to a contemporary suburban context in the greater Toronto region is not simple. The question of cultural hybridity in architecture is complex. Immigrants to Canada from Hong Kong and China have not come directly from a *hutong* and *siheyuan* setting, but rather, from much more modern urban environments. How will these immigrants receive this proposal and its references to traditional Asian urban planning and architecture? Will they even recognize the references, and appreciate them? Or might these references be received as clichés, or as romantic visions imposed upon them by persons long disconnected from contemporary life in Hong Kong or China? Might some Asian Canadians, as was sometimes the case with Pacific Mall, see the "Chinese-ness" of the proposal in pejorative terms? Further explorations would be needed to fully address these questions.

Nonetheless, the *Yuanlin* Town counter-proposal does strive to integrate spaces and forms most apt to support relevant social rituals into daily domestic life. Aside from overt references to the *hutong* and *siheyuan*, the spatial shift toward filtered spaces -- with subtle gradations between private and public space and a network of covered walkways -- is the most important Asian architectural manifestation of *Yuanlin* Town: the revised master plan presented in this thesis aims to create strong spaces of shared cultural memory. The proposed buildings possess a high level of transparency and the ground plane is finer grained in comparison to new urbanistic town plan. The new proposal is admittedly an unrealizable speculation, unless extra steps are taken. In a further stage of development, the *Yuanlin* Town plan would be presented to the

community including Markham's population and potential buyers in order to receive their feedback, so that it could be modified and adjusted in correspondence to their desires. The new master plan and well-developed eye-level renderings of the proposal would also need to be presented to the town and its planning department. A project such as this one is a long-term process, but its outcome, a settlement form that supports new ways of living together, new forms of social and spatial belonging, and ideas of community that bridge the past and the present, is invaluable. Its realization relies on a high level of openness to change, working with direct input from the local communities, and on research into the cultural values of potential future settlers. Planners, urban designers, and architects will need new skills in cross-cultural communication. The project's realization would in effect be a starting point from which new perspectives can be gained as to how urban and suburban environments and built-forms can and should address cultural differences. While the intentions for the fulfilment of this proposal may in finality have a strongly economic basis, the benefits will extend into an increased consciousness of the importance of preservation of historic and cultural values.

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Appendix I

Having taken the site parameters into consideration, a number of development options were explored and assessed, with the goal of creating a more fluid connection between the landscape and its users, while meeting basic criteria set out by the Town of Markham.¹²² While it was known from the outset that some of these approaches would not arrive at a desirable outcome, it is still worthwhile to identify the probable shortcomings and perhaps to discover some unexpected positive results.

The Suburban Option

The 'Suburban Option' (SO) replicates some of the more recent residential developments at the south end of Markham, and is typical of much of what has occurred in the GTA region. The SO could be characterized as a car-oriented neighbourhood, comprised of single-family, detached housing on curvilinear streets and cul-de-sacs.

In this option, following the original master plan, the area adjacent to the ravine is left almost untouched. The site is redeveloped entirely as a series of walking and cycling paths around the perimeter, functioning as a simple open space. As the land would be retained exclusively for public use, there would be little chance of private ownership interests getting in the way. However, turning the entire area into paths neglects the integration of the natural landscape of the ravine into daily life of the local residents.

This option yields 224 small lots and 82 big lots, which is a total of 306 individual lots intended for detached residential development. With an overall buildable site area

¹²² Refers to Stefan Schulson's Thesis "re:Connecting the Edge : Remaking the Small Town Post-Industrial Waterfront on Vancouver Island" dated 2012, for suggesting the format of the site massing test, a thesis completed under the guidance of Benjamin Gianni.

of approximately 49 acres, this yields a residential density of 6.2 dwelling units per acre (UPA). Assuming an average of four residents per detached dwelling unit on site, a population density of 25 people per acre (PPA) is calculated.

Residents should be able to move in multiple ways throughout the neighbourhood. This is not only more convenient for pedestrians, but it increases opportunities for social transaction, which is likely to be a good thing for diverse neighbourhoods in the long-term. In this case, in keeping with the typical post-war neighbourhood development model found in Markham, there are numerous dead-ends and cul-de-sacs disrupting the street network, and the new pathways created to accommodate pedestrians and cyclists are rigid and limiting. There is little to encourage social activity or interaction within the suburban block. In the absence of other programmatic elements, the setting is unlikely to bring a significant number of new visitors to the town to bolster the tourist economy. The ravine will likely remain isolated behind a border of privately owned land which would be largely limited to use by the residents of the community, and remain underused for a large portion of the time. For the most part, it would remain, a 'border vacuum,' to borrow Jane Jacobs' term, a zone of single use with no connecting program at its borders to encourage interaction with the existing community. There are no 'seams' of activity – to use another Jacobs' term – connecting the ravine to the rest of the urban fabric. This is a missed opportunity as the ravine is an important site of attraction for leisure and sports activities.

As a strictly residential community, the SO does not diversify the town's existing economic base; there are no activities associated with the site to increase use by anyone from outside the neighbourhood; the ravine is again isolated behind the private lots of a band of residential development, giving the impression that it is a facility primarily for residents. This planning scheme also fails to address the housing needs of an aging population in that it is geared towards detached single-family housing, of which there is already an ample supply elsewhere in the town.

The Radial Option

The 'Radial Option' (RO) involves a concentric ring of residential development, centered around the proposed urban park, with radial streets roughly aligned with the town's view corridors. The sites around the neighbourhood centre are mixed-use buildings with commercial space at street level and residential units on the upper levels, similar to the constructed condominiums on site. The rest of the lots on the site are intended for single family, detached residences. The RO is a variation of the SO, and suffers from many of the same limitations.

In this option, there are eleven lots of mixed-use component at the neighbourhood centre adjacent to the urban park. The seven mixed-use buildings surrounding the park have three levels of residential units above a commercial base, and the four buildings immediately across from the already constructed condominiums are built at a height that mediates between the two (approximately seven storeys). This yields approximately 690 units. There are 380 individual lots intended for detached residential development as well, with an overall buildable site area of 49 acres, this yields a residential density of 21.8 UPA. Assuming an average of four residents per detached dwelling unit and two residents per mixed-use unit, a population density of 59.1 PPA is calculated. Compared to the SO, the residential density is significantly higher.

When considering the RO in terms of the parameters of sustainability (economic, ecological, social), the same issues are raised as the SO, with two main exceptions. From an economic perspective, this option contributes additional new commercial space to complement, rather than compete with, the town's proposed commercial hub. Since they are located at the centre of the neighbourhood, there is a captive market within walking distance to support them. Socially, this option partially addresses the changing demographics of Markham with the inclusion of higher density residences at the neighbourhood centre; however, they are concentrated in only one area. While this

development option would likely meet the town's twenty five year growth projections, it focuses too heavily on detached residences that are less appealing to retirees and empty-nesters.

By extending the axis directly to the ravine edge and creating residential blocks in similar patterns and sizes to those existing in the current townscape of Markham, the scheme ignores the site's topographical restraints. Extensive re-grading and excavation would need to be undertaken. This option does not do enough to diversify land use, nor does it represent a complete solution for the town's future needs. Therefore it too should also be considered a less than-optimal solution for the redevelopment of the site.

The Tower Option

In the High-Density Tower Option (HDTO) the built footprint is minimized in favour of tall, narrow residential towers sited to preserve view corridors and leave ample green space distributed throughout the site. This option incorporates twenty towers each sixteen storeys high¹²³, with approximately 140 residential units per tower for a total of 2800 units. On a buildable site area of 49 acres, this yields a residential density of 57.1 UPA; assuming two residents per unit, the population density for the site would be 114.3 PPA. The overall density of this option far exceeds that of the two previous options which from a sustainability perspective, this planning model comes closer to meeting several of the long-term objectives identified by the Town of Markham.

Economically, the significantly higher number of residential units created will yield more sales revenues at a lower per unit cost than houses on individual lots. The towers are set back from the connecting roadway to provide green space around the entire base. Unlike the condominiums development in the adjacent site, which includes a retail element at the base of the towers, the physical arrangement of these towers does not lend itself to that programmatic component. In the constructed condominiums, the towers are built right to the sidewalks with storefronts at the ground level, so there is a consistent urban streetscape for pedestrians, whereas the HDTO lacks that continuity.

Ecologically, minimizing the building footprints leaves a significant amount of green space on the site. Excavation and re-grading would be confined to the building sites; and it would be easier to accommodate the existing topography, although it still imposes buildings on the site rather than working with the natural landscape. Other

¹²³ The height of the towers was determined by comparing the proposed mid- and high-rise residential buildings in the Downtown Markham site, as well as the yield required for the number of units accommodating the amount of residents set out by the Town (175 town houses, 4000 condo units with a total of 10,000 residents).

ecological benefits would include: environmental remediation of the site; the retention of existing trees and foliage; ample open space for pedestrian and cycling paths throughout the site; and the retention of the view corridors from the existing town.

As a social condition, however, high-density towers pose some problems in this particular site. Firstly, there are very few existing buildings within the Town of Markham at this point higher than ten storeys; this might introduce a relatively foreign building typology to the town, end up being quite imposing on the periphery. Secondly, having the tallest buildings near the water's edge is frowned upon. Even in cities such as New York, the standard practice is to gradually increase in size the further back from the water that you get, not the reverse. Thirdly, this arrangement does not enhance the social interaction possibilities within the site because each building is set apart, connected by individual driveways, so that the primary means of travel throughout the site is the automobile. Finally, although there is a significant amount of open space on the site, there are no other programmatic components aside from the urban park to encourage use by the wider community. This option, much like the RO and SO is primarily a residential enclave that does little to encourage public access and social activities.

With regard to the town's development objectives, this option does succeed on a few points. It generates economic opportunities; it creates ample green space as a community amenity; the ravine is open and accessible; and the buildings should theoretically be constructed to green building standards (such as LEED®). As this option falls short of being a complete solution, however, it can be disregarded as a viable model for redevelopment.

Conclusion

The three options explored are fundamentally generic solutions requiring major adaptation in both form and diversity of program in order to work within the context of the site and to meet the Town of Markham's development objectives. That being said, there are elements of each that work within those constraints, and subsequently informed the final planning decisions.