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Submitted in partial fulfilment of the requirements for the degree of Master of Architecture at Dalhousie University, Halifax, Nova Scotia, July 2013

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ABSTRACT

This thesis proposes an architectural design for a public cultural centre for the diverse Chinese immigrant population in Calgary, Alberta, Canada. It addresses the history of Chinatown’s formation and how this ethnic community came to be, as well as analyzing how waves of Chinese immigrants contribute to the evolution of Calgary’s Chinatown. The reinterpretation of traditional Chinese architectural concepts and elements in ancient courtyard houses is essential to searching for identity. This reinterpretation studies the spatial organization and structural system, the generation of solids and voids, and the relationship between nature and the built form. This thesis explores a new design for Calgary’s Chinese Cultural Centre by combining traditional Chinese architectural concepts with successful existing and proposed programs to express culture and immigrant integration. It proposes functionality of different courtyards and includes cultural programs such as a performance theatre, heritage and cultural museum, Chinese school, restaurant, exhibition gallery, gymnasium, and a public library.
ACKNOWLEDGEMENTS

I would like to take this opportunity to say thank you.

Thank you mom and dad for your endless support and encourage. Without your care, I would not be who I am today.

Thank you Diogo Burnay for your supervision and insightful guidance along this incredible journey.

Thank you Steve Parcell for your enthusiastic encouragement.
CHAPTER 1: INTRODUCTION

Question

How can architecture strengthen cultural identity for Chinese immigrants within a western environment?

Context

Canada is a welcoming home for thousands of immigrants; a vast country with diverse cultures that contributes to a vibrant, multi-layered national identity. This diversity includes people from different religions, ethnicities, sexual orientations, and cultural origins. Canadian cities with diverse cultures and unique communities allow their citizens to live free of prejudice and discrimination and to access a variety of occupations, leisure activities, and living conditions. Policies such as the Multiculturalism Policy, the Human Rights Act, and Charter of Rights and Freedoms were enacted to celebrate and protect the differences among ethnic groups. However, immigrants still face many challenges in adapting to a new environment.

Ethnic enclaves have developed into an important means of survival for many immigrants. New immigrants typically choose their living accommodations based on familiarity. The enclaves provide immigrants kinship networking, cultural facilities, housing, and employment that contribute to their settlement and integration.¹

Over 60 percent of the national population growth resulted from immigration within the last decade.² The 2001 Cen-

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² Ibid., 8.
sus of Canada suggested that approximately 94 percent of immigrants who arrived during the 1990s resided in urban areas, with 73 percent living in large metropolitan areas such as Toronto, Vancouver, and Montreal.³ Calgary was ranked fourth nationally in attracting 3.9 percent, compared to the previous year of 3.6 percent.⁴ Calgary’s population has been increasing steadily over the last decade and will continue to increase. In 2010, it was estimated that the city’s population of 1,091,000 people included 304,000 immigrants (30 percent) and will continue to increase to almost half a million by 2020.⁵

As the city’s population became more ethnically diverse, the visibility of Chinese immigrants and Chinese-Canadians increased dramatically. The majority of immigrants living in Calgary came from the Asia-Pacific region as opposed to Europe.⁶ Immigrants from Europe declined from 40.1 percent to 18.2 percent between the years of 1982 and 2002, while Asian immigration increased from 7.7 percent to 25.4 percent.⁷ During these 20 years, 755,698 Chinese who entered Canada became Canadian landed immigrants. Over 20 percent entered in the 1980s, about 70 percent in the 1990s, and the rest in the new millennium.⁸

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⁷ Ibid.

of people came from the People’s Republic of China (49.7 percent), followed by Hong Kong (37.5 percent), and Taiwan (12.4 percent).9

Chinatowns are ethnic enclaves found throughout many Canadian cities and are becoming more significant than ever. These spatial environments are celebrated and protected cultural hubs that express the uniqueness of Canadian multicultural identity.10 Chinatowns in Western societies have become a popular subject to study in many disciplines. This has raised many important research questions in both sociology and anthropology. Popular research topics include cultural transfer overseas, the dynamic of social organization, and community development in new environments.11 According to Bunting and Filion, “new immigrants tend to favour locations with a history of previous immigration, supportive institutions, and employment and money-making opportunities.”12

As this trend in migration continues to grow, Chinatown(s) will need to find a method of fostering the rich cultural differences in Chinese groups, but also integrating them with the Canadian environment. A strategy must be developed to connect the Chinese immigrants with the rest of the city, allowing Calgarians to explore this new cultural environment and experience the richness of Chinese heritage. Just as ceremonies and festivals resonate cultural identity, architectural language has a responsibility to provide insight into an ethnic identity.

9 Ibid.
11 Ibid., 9.
12 Chahal, Planning for Ethnic Diversity in Calgary, 12.
Figure 1: Chinese residents by neighbourhood, 2006; data from Calgary Herald, Data Centre, Calgary’s Chinese Population, and from Statistics Canada, 2007.
Figure 2: Percentage of Chinese immigrants, 2006; data from City of Calgary, Community and Neighbourhood Services, and Social Policy & Planning (SPP) Division. Community Profiles. Calgary Community Social Statistic Profiles.
Chinese and Chinatown

These places of Chineseness and orientalism are complex urban phenomena shaped by immigration policies, radicalized discourses, commercial exchanges, missionary ambitions, labour exploitations, and cultural self-fashioning.

Immigrants have always been a vital part of Canada’s history and development. Canada’s historical Chinese population can be divided into two distinct groups. On one side are the pre-1923 pioneers and on the other side are the post-1947 immigrants and their descendants. The pre-1923 population came predominantly from the southern Chinese coastal provinces of Guangdong and Fujian, passing through the port cities of Hong Kong and Macau before arriving in North America. These migrants were typically male peasants, hired hands, pedlars, or tradespeople from rural towns with families who were desperate for better options with hopes of sending their income back to China. In the North American community, there was little interest in spending money on apartments or housing.

Today’s Chinese immigrant population is significantly different from their forefathers. Being visibly, linguistically, and culturally different from the dominant populace of Western society brought a range of disadvantages and discrimination which they had to endure. Nevertheless, the Chinese men were known for their hard working character, commitment, and bravery in the new frontier. The immigrants had always been attached to their homelands with memories of

their families, lifestyle, and civilization. Many of the Chinese immigrants wished to preserve their memory of China by physically projecting their familiarity through creating a built environment in Canada. The discrimination towards them prevented their chances of imposing an imported architectural style and concept onto the new environment. Only occasional signage with Chinese ideograms and decorative lanterns distinguished their buildings from local buildings. As the immigrant population grew, their neighbourhood became more visible. These Chinese expressions showed that the people did not want to sever connections with their homeland.

North American Chinatowns born in the nineteenth century and the twentieth century were manifestations of the early Chinese immigrants’ need to create a home away from home. Most Chinatowns began as a place of residency for young male labour migrants. This formation was a natural humanistic response for the basic necessities of food, shelter, and protection. The community became a means of survival for many immigrants. It provided them a place for congregation, kinship networking, cultural stability, housing, and employment opportunities. It also psychologically reduced culture shock. Ethnic enclaves provided new immigrants a place to settle where their culture was familiar and discrimination from the host society was avoided. In some cities, Chinatown has been viewed as either a ghettoized minority community or as an ethnic community.

16 Chahal, Planning for Ethnic Diversity in Calgary, 9.
17 Anderson, Vancouver’s Chinatown, 9.
Since 1885, immigration policies such as the Head Tax system were introduced by the Canadian government to control the flow of immigrants and the size of neighbourhoods. The initial $50 tax had risen to $500 by 1903. Unable to control the immigration from China, the government enacted the Chinese Immigration Act (Chinese Exclusion Act) in 1923. By the mid-1930s, Chinatowns began to be viewed as a valuable commodity to exploit. A more vibrant and touristic expression began to influence the community. A nickname was given to this “new” community, “Little China,” the concept of a country within a city. This idea was popularized initially by San Francisco and then adapted by other major cities such as Vancouver, Chicago, and New York, where the Chinese population was densest.

Little China began to be articulated in Vancouver’s society that fed on age-old fantasies about China’s ancient and venerated civilization … Europe’s once romantic conception of the east filtered back into the western consciousness.

After the 1906 earthquake destroyed San Francisco’s Chinatown, the largest Chinatown in North America, the community was rebuilt with explicit intentions by municipal authorities, landowners and Chinese merchants. New buildings in Chinatown were required to display exotic Chinese architectural and ornamentation to become the city’s

18 Ibid., 213.
21 Ibid., 140.
22 Ibid.
principal tourist location. San Francisco’s local landlords and Chinese merchants hired American architects to design the new “Chinatown.” Inspiration for their designs referred to published materials on monumental Chinese architecture, such as The Forbidden City. Unfortunately, it barely connected to the vernacular architecture of southern rural China and the pre-1923 Chinese immigrants. Facades were typically treated with roof overhangs, pagoda-like towers at corners, and tiled roofs, whereas the rest of the building was more conventional and local. This façade treatment was to give an eye-catching, oriental identity; however, this clumsy Chinese themed attempt at fashioning the community was criticized heavily and negatively reviewed by the architectural community, which included both Chinese architects and non-Chinese architects. They stated that it did not embody the essence of Chinese architecture, and that the Forbidden City was not the only precedent. Gradually, the stereotypical image was reproduced by Chinese merchants and the Chinese Benevolent Association in other Chinatowns to gain visibility and tourism.

This cultural enclave was more than a sanctuary for new immigrants. It was gradually accepted by the local people and became an exotic cultural attraction. After the Second World War, in 1947, Canada removed the 1923 Chinese Exclusion Act. The community began to grow again as Chinese residents with Canadian citizenship brought over their families.

24 Ibid.
25 Ibid., 165
26 Ibid.
This new freedom granted them the right to vote and many racial barriers were removed.\textsuperscript{27} While some families remained in Chinatown, some moved outwards into newer and non-Chinese districts. The new generation of Chinese-Canadian children grew up locally and were educated in a Canadian manner. They adapted to the Canadian environment and culture much easily than their parents and were less likely to stay within the boundaries of Chinatown. Even though they lived outside, they continually went back for nourishment and cultural festivals to reinforce their kinship and Chinese heritage.

**History of Calgary’s Chinatown**

After the completion of the Canadian Pacific Railway (CPR) in 1885, many unemployed Chinese railway workers moved east. The ones who settled on the prairies gathered in Edmonton, Calgary, and Lethbridge. Most found work on cattle ranches or became cooks or housekeepers. Some worked in the sugar factories and coal mines around Bankhead and Canmore. The fortunate ones operated cafés and laundromats near the CPR station in Calgary. Throughout the history of Calgary, three Chinatowns developed in three different locations.

Few traces remain of Calgary’s original Chinatown. The original buildings that housed the early immigrants are either gone or were demolished to make room for new buildings. While it is still possible to find stories of the area’s past in literature, the remaining artifacts and remnants are stored in Calgary’s Glenbow Museum and Chinese Cultural Museum.

\textsuperscript{27} Paul Yee, *Chinatown: An Illustrated History of the Chinese Communities of Victoria, Vancouver, Calgary, Winnipeg, Toronto, Ottawa, Montreal and Halifax* (Toronto: James Lorimer & Company Ltd., 2005), 17.
The Chinese community first established itself northeast of the railway station, around Stephan Avenue (Eighth Avenue SE), Atlantic Avenue (Ninth Avenue SE), and Hardisty Street (Third Street SE). With a population of less than 50 people, this small neighbourhood included a handful of businesses, including eight eateries, several laundromats, one grocer, and a rooming house.28 Behind one of the eateries was a community room to congregate and celebrate.29 After 1901, the neighbourhood was too small for the increasing number of immigrants and could not expand due to its location. Thus, a second Chinatown was established southwest of the original, on the other side of the railway station.

This second location was located around Pacific Avenue (Tenth Avenue SW), Smith Avenue (Eleventh Avenue SW), Scarth Street (First Street SW), and Hamilton Street (Second Street SW). By 1901, the Chinese population had grown to about 63 people and wanted to learn English at Knox Presbyterian Church.30 Within them was a desire to be more integrated with the rest of society. Dr. J.C. Herdman, minister of Knox Presbyterian Church, took this opportunity to do missionary work in the second Chinatown; however, the local people did not support the idea of introducing Christianity to the Chinese.31 Thomas Underwood, a Baptist, a builder, and later the Mayor of Calgary, had known the Chinese during the railway construction and supported Reverend Herdman by generously erecting a building for the Chinese Mission. This movement solidified the location of Calgary’s second Chinatown.

28 Ibid., 55.
30 Yee, Chinatown, 55.
31 Calgary Chinese Cultural Centre, “Our Chosen Land - The First Chinatown.”
Figure 3: Development and location of Chinatown from 1885 to 1980; data from Paul Yee, *Chinatown*, and Calgary Chinese Cultural Centre, “Our Chosen Land.”
By the early 1910s the demography of Calgary had changed drastically. The population had tripled to 44,000 and the Chinese population had increased to slightly over 500. The city’s economy exploded due to an increase in businesses, especially in the beef and agricultural industries. This economic boom presented the Canadian National Railway (CNR) an opportunity to purchase land for the construction of a new hotel-depot downtown, near the second Chinatown. The announcement of this fortunate news caused land prices to soar. Properties rented to the Chinese community became “cash-cows” that received little or no maintenance. Without hesitation, landlords evicted the Chinese from their homes and businesses.

The Chinese people felt resentful as their livelihoods and homes were taken away. At the price of $18,000, the community bought land in what is now the third and current Chinatown location. For another $22,000, the first Chinese-owned, two-storey, mixed-use brick building was built. This building, named the Canton Block, still stands today. The brick building was a statement by the community not to be forcefully relocated again. Surrounding inhabitants and journalists felt endangered by the Asian invasion, comparing their presence to a plague, suggesting that property values would diminish, and demanding that the city council relocate the Chinese. As a response, council took no action for segregation. The new location was also approved by medical health officers and Chief of Police Mackie, who

32 Yee, Chinatown, 56.
33 Calgary Chinese Cultural Centre, “Our Chosen Land - The First Chinatown.”
publicly stated that the Chinese are law abiding and not troublesome.  

1947 was a huge turning point in Chinese-Canadian history. The Parliament of Canada lifted the 1923 Chinese Immigration Act (Chinese Exclusion Act), ending the 24-year ban on immigration from China. This attitude of inhospitality to acceptance was a by-product of China’s alliance with the Allies during the Second World War. Still, there were restrictions to immigration. Only spouses (mainly wives) and minor, unmarried children of the Chinese-Canadians were allowed to immigrate. By 1951, the number of Orientals in Calgary rose to about 973, and to 2232 by 1961.

The events of the Second World War and the changes to immigration policies affected Canadian attitudes towards immigrants. Canada restructured its immigration policy with the Immigration Act of 1967, a system that functioned on merit-based points, allowing all immigrants to apply under a clear set of rules. With fewer restrictions and less discrimination, the population grew and welcomed a new wave of immigrants. This ethnic community became more visible again and reanimated Chinatown; however, the new wave did not feel the need to live in Chinatown. As a result, this raised public questions about whether Chinatown was still an important place. Many regarded Chinatown in a superficial way as an Oriental community with economic activities within an urban fabric.

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35 Yee, Chinatown, 56.
37 Ibid.
38 Yee, Chinatown, 60.
For the next 20 years, the declining Chinatown population led city planners to threaten its existence. In 1966, the city’s proposed Bow Trail Extension, a 12-lane east-west freeway through Chinatown, could have destroyed the entire area. In 1974 the construction of Harry Hays, a federal complex, forced 180 residences to relocate. In 1982, the rezoning of properties and land use to an unreasonably high density could have destroyed the integrity and character of this distinctive district. Throughout these multiple threats, Chinese-Canadian groups and associations have risen to protect the community from destruction by unthoughtful proposals. These organized protests allowed the thoughts and strength of the community to be felt by the whole city. Their opposition improved the municipal approach to community planning by including community leaders and the Chinese population as partners, for the betterment of the community. These movements convinced government officials to preserve Chinatown as a multicultural symbol of Canadian culture and a public landmark for cities across Canada.

40 Yee, Chinatown, 62.
41 Calgary Chinese Cultural Centre, “Evolution of Calgary’s Chinatown.”
42 Calgary Chinese Cultural Centre, “Our Chosen Land – Chinatown’s Survival and Expansion.”
43 Calgary Chinese Cultural Centre, “Evolution of Calgary’s Chinatown.”
The 1968 movement by Calgary’s Sien Lok Society was an excellent demonstration by the Chinese community in outlining the importance of Chinatowns to Canadian cities. The response to the 1966 Bow Trail Extension by this group was formed by Canadian-born Chinese professionals and entrepreneurs. Their determination to save the community led to a national conference called “Urban Renewal as it Affects Chinatown.” This conference was the first of its kind in North America and drew national attention through broadcasting and media. Ray Lee, the president of Sien Lok Society, said, “To the Chinese Canadians like myself who do not reside in the core, we look to Chinatown as a social-psychological well to which we can return to refresh ourselves.”

Hong Kong, as a port city and gateway to North America, has always been a supplier of immigrants. By the late 1980s, the number of immigrants from this region exploded. Hong Kong remains to this day a stunning Asian success story. Decades after Chairman Mao’s Cultural Revolution, the people of Hong Kong transformed this small harbour island into the world’s third largest financial and commercial metropolis, after New York and London. The migration of Chinese people was heavily influenced by political and economic factors. According to the 1984 Sino-British Agreement, once the rule of Hong Kong was returned to China, the colony would become a designated Special Administrative Region (SAR). In fear of what Hong Kong’s future might become after the handover in 1997, a large number of Chinese fled to Canada. There was certainly a difference be-

44 Ibid.
45 Yee, Chinatown, 62.
between the early Chinese community from Guangdong and Fujian and the new Hong Kong immigrants. People from Hong Kong were more western and highly educated; predominantly classified as middle class professionals, with a few elite members, due to Britain’s influence and colonization of the island from the First Opium War in 1839.\textsuperscript{47} They brought with them a substantial amount of capital, with which they invested in the Canadian economy.

Likewise, the Chinese immigrants from Taiwan were also influenced by political factors to migrate. The end of martial law in 1987 influenced a democratic government to form and seek independence from China. People from this region shared many similar characteristics with the group of Hong Kong immigrants except they spoke Mandarin instead of Cantonese.

The arrival of immigrants from Hong Kong and Taiwan brought a continuous group of entrepreneurs who were highly interested in developing Chinatown in Calgary. Their capacity and their abundant wealth increased land values and led to numerous developments. The visibility of this growth can be seen in the form of small retail stores and shopping centres from Chinatown to the Trans-Canada Highway (16th Avenue NE) along Centre Street N. Notable developments within Chinatown includes the Chinese Cultural Centre and the largest commercial shopping centre, Dragon City Mall. Other developments included residential apartments and small shopping plazas. Compared to the buildings by earlier Chinese immigrants, the style of these new buildings was rather modern, western, and generic, with eye-catching Oriental ornamentation.

\textsuperscript{47} Ibid.
The different waves of immigrants from various regions of China indicate a heterogeneous nature. The diverse characteristics of each wave affected the Canadian urban landscape differently. Between 1996 and 2001, approximately 8,250 fewer people arrived from Hong Kong than in previous years. Immigrants from Taiwan had risen slightly, but the most dramatic change was immigrants from mainland China. This trend outranked Hong Kong and Taiwan by more than double. Compared to the 11,000 landed immigrants from China in 1991 and 1995, there were 7,000 more between 1996 and 2001. This trend from China is increasing and current.

48 Ibid., 10.
Present Condition: The City and the Chinatown

A sign of the city’s changing acceptance of cultural diversity is its support for Mayor Naheed Kurban Nenshi. As Calgary’s current and 36th mayor, he is hailed as Canada’s first Muslim mayor. An interesting attribute of Nenshi, other than his religious background and ethnicity, is his challenge to the way Canadians build their cities. From one of his reports, “Building Up: Making Canada’s Cities Magnets for Talent and Engines of Development,” he argued, “People live where they work and play. Density is high. Public transit is a preferred choice. Young people can afford to live downtown. Classes and socio-economic backgrounds are mixed…”

Soon after assuming office, Nenshi’s council implemented many new revitalizing infrastructure projects to the downtown’s core. His administration completed the new C-train public transit line and other infrastructure projects initiated by the previous mayor, Dave Bronconnier. New redevelopments from his administration include East Village and the RiverWalk. East Village is a district east of Chinatown with a low-income neighbourhood and serious public safety issues. The goal for East Village is to become a high-density urban community, linked to cultural, recreational, retail, and commercial areas, that will house 10,000 new residents over the next 20 years.

One of the city’s current and ongoing ambitious civic design projects is the RiverWalk project. It is a key component in revitalizing the districts connected to the Bow and Elbow River.


50 Ibid.
waterfronts. From the very beginning, the project’s primary design objective was to create an opportunity for Calgarians to re-connect with the Bow River through public life, recreation, and urban spaces in the city’s core. A promenade and cycling pathway was established to link more than 700 kilometres of existing pathway systems together with a 4-kilometre extension from Calgary’s Centre Street Bridge east. The pathway connects neighbourhoods along the Bow River from Chinatown to Lindsay Park, including public facilities such as the Science Centre, Calgary Zoo, Fort Calgary and the Calgary Stampede Grounds.

This civic project holds great potential in bringing people from the RiverWalk into Chinatown. Unlike most Chinatowns, Calgary’s Chinatown has only two green spaces, located on either side of Riverfront Avenue SW between First Street SW and the Centre Street Bridge. The northern part of the park is located along the southern banks of the Bow River and connects the pathway passing through Eau Claire to East Village. The southern portion is much older and is bounded by a mixture of mid-rise residential and commercial buildings. Aside

from being a connector, the park space and landscaping is dedicated to the legacy and heritage of Calgary’s Chinese-Canadians.

As the city continues to strengthen and develop under the supervision of Mayor Nenshi and his council, so will Chinatown. The community is highly valued as an integral part of the city and a key component in mainstream urban development.52

Chinatown has shown significant signs of improvement in the last decade. 2010 marked a significant milestone for the community’s centenary. It provided a unique opportunity for the community to work together and share with Calgarians its century-long cultural history. Supported by the City of Calgary, the organized celebration brought more than 115 community groups together and delivered more than 60 exhilarating events.53 The Chinese community itself presented numerous celebratory events and 15 solid programs to engage with Calgary’s youth. The program was meant to motivate and promote youths to learn about their heritage. In addition to the celebration, October 13th is officially proclaimed as Calgary Chinatown Day.

The Chinatown Street Festival that began in the fall of 2000 has been a growing success for the community. Other festivals and ceremonies that are growing in popularity are the Chinese New Year Carnival and Mid-Autumn Festival. Each year, the Chinatown Street Festival attracts over 50,000 people from around Calgary to celebrate in the city’s cultural


53 Samantha Yang, Culture and Beyond: 20th Anniversary – 2012 (Calgary: Calgary Chinese Cultural Centre, 2012), 41.
diversity. Its growing success has become a platform to showcase Chinese culture while transforming the site into a massive public pedestrian celebration centre. The attraction gathers people of all ethnicities to experience multicultural diversity in the form of shopping, eating, and performing. Ethnic groups other than Chinese were highly encouraged to participate and showcase their culture.

In comparison to the Chinese population in other Canadian cities like Vancouver, Toronto, and Montreal, Calgary is a small place. In 2006, the city estimated that roughly 160,000 of its 1,000,000 people were Chinese. However, the Chinese community is fortunate enough to be experiencing a growth in population and urban development that has not abandoned Chinatown as its focal point. Miniature, suburban “Chinatown” communities have begun to form in Calgary’s northwest and northeast areas. Their architectural form does not represent the essence of Chinese culture and identity. The generic strip mall facades are treated with roof overhangs, tiled roofs, and entryways that appear similar to Japanese torii. This Chinese themed decoration represents the eye-catching ornamentation described by Anna-Marie Broudehoux. The area of these commercial developments in Calgary are relatively small and immature, compared to the large established developments spread throughout metro Toronto and metro Vancouver. Harvey Low’s research illustrated the concept of diaspora and its effects on Chinatown in a conference titled


56 Broudehoux, Learning from Chinatown, 165.
“Chinese-Canadians: A Changing Ethnic Community – Implications for Service Planning.” This study was produced by the City of Toronto's Social Development and Administration Division and was presented at the 8th National Metropolis Convention in Vancouver, 2006. Even though the research was focused on Toronto’s Chinese population, the largest in Canada, it was concluded that the architecture of these “Chinatowns” are simply compositions of strip malls and retail stores, seen regularly scattered in the American landscape. The research further illustrated that the new “Chinatowns” isolate activity indoors and are surrounded by tremendous residential growth in the form of subdivisions and condominiums.57

Cultural identity is a key component of Chinatown to represent Chinese immigrants. Essential to this thesis is the reinterpretation of key traditional Chinese architectural concepts and elements. Even in Beijing, the capital of the Chinese world, a century-old debate questions the modern expression of Chinese architectural identity in fear that it will alter the unique character.58 In the 1980s, one of China’s best-known followers of regional architecture was Wu Liangyong, professor at Tsinghua University. He assembled a popular series of housing prototypes influenced by traditional courtyard architecture of southern China.59 The combination of historical preservations and contemporary structures created an urban environment that Wu claims to “reconciliate the true nature of Chinese culture with the requirements of modern living.”60

58 Broudehoux, Learning from Chinatown, 156.
59 Ibid., 172.
60 Ibid., 173.
Figure 8: Calgary Harvest Hills northwest, a “miniature Chinatown.”

Figure 9: Calgary Pacific Place northeast, another “miniature Chinatown.”
CHAPTER 2: METHOD

Building Culturally

Traditional Chinese architecture goes back thousands of years. It embodied architectural concepts and elements that were adapted throughout China’s various regional and environmental conditions. The architectural language was unique and carried through in how cities and individual buildings were built. Most palaces and temples throughout China today are nationally preserved and are popular tourist destinations. Traditional houses are the last remaining architectural artifacts that still retain functionality in their original form. The architecture of ancient courtyard houses is as local and regional as the spoken vernacular language. Whether dwellings were set in a rural countryside or a populated urban centre, simple or grand, they shared concepts and elements that were interpreted as Chinese.

Jian

The most recognizable Chinese architectural element was the Jian. This concept was the fundamental building module used for spatial organization and structure, whether for a temple, palace, or dwelling. This structural and spatial module was used for different programmatic requirements. Jian defined the distance between two columns to form a bay. When builders placed 4 columns together and connected them with beams, it also created a volume and a floor area below, thus forming a room.

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63 Ibid., 30.
This basic building module was straightforward and was easily duplicated by builders to form either individual buildings or building groups by extending or contracting certain areas.\(^6^4\) When multiple *jian* modules came together, the central module became wider than the surrounding ones. Typically, the module would be extended to form a rectangular shape for a hall space along the longitudinal or horizontal axis. The primary axis then connected the halls together and formed building groups. Unless it was truly necessary to hide the structural columns in walls, it gave presence to the module in a naturally aesthetic way.

This architectural concept permitted a flexible arrangement of programs in the building. Whether the hall functioned as a living space, a sleeping quarter, or an ancestral worshipping hall, it maintained a similar form. Covered verandas or walkways would then connect the separate buildings. The module found in most houses was 3 metres by 3 metres. In most palaces and temples, the module was 6 metres by 6 metres, or 9 metres by 9 metres.\(^6^5\) These dimensions varied from public to private buildings, depending on their function and anticipated gatherings. This arrangement was different from Western concepts, which tended to unite all functions under one roof.\(^6^6\)

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\(^{64}\) Ibid.

\(^{65}\) Ibid.

\(^{66}\) Ibid., 27.
Figure 14: Exploded axonometric drawing showing the *jian* concept throughout the courtyard. Details on the right show the material assembly from the ground to roof. Floor plan base drawing from Werner Blaser, *Courtyard Houses in China*, 1995. Detail base drawing from Laurence G. Liu, *Chinese Architecture*. 
Axial Planning: Generating Solids and Voids

Axial planning was another characteristic of traditional Chinese architecture. It contrasted Western axial planning, which placed the building at the end of an axis of movement.\(^{67}\) Halls and courtyards were located along the longitudinal axis in Chinese axial planning. This formation created different courtyards and building groups that ranged from public to private activities at the point of entry. The longitudinal axis was considered the major axis in most building types and the transverse axis was the minor. It was planned in this manner because the longitudinal axis functioned as the main path of movement because entry was customary from the south.\(^{68}\)

Chinese axial planning had three distinguishable methods of arrangements. The most common arrangement was locating the main hall at the centre. Then a minor hall was located south of it and enclosed by walls. This assembly still allowed the formation of a courtyard space.\(^{69}\) The second arrangement method was known as the central-building layout, by placing the main hall at the intersection of the longitudinal and transverse axes. It would then be surrounded by minor halls and connected by verandas and other built spaces.\(^{70}\) The third arrangement extended halls and building groups along the primary axis. This longitudinal extension was used when there was insufficient space to extend addition buildings near the main hall.\(^{71}\) Parallel extension required the smaller building groups to establish a minor

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67 Ibid., 29.
68 Ibid., 28.
69 Ibid.
70 Ibid.
71 Ibid.

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Figure 15: From top to bottom. Central planning: Temple of Heaven, Round Mound. Parallel axis: Taiyuan, Shanxi, Congshan Si (based on a Ming Dynasty temple plan). Central axis: Ronghe, Shanxi, Houtu Ceremonial Hall (based on a Jing tablet); from Laurence G. Liu, *Chinese Architecture*. 
longitudinal axis parallel to the primary axis. Finally, cross extension was used in large building assemblies to extend both the transverse and longitudinal axes.

These principles in arranging courtyards, minor halls, and main halls on the axis generated a contrast between the natural spaces and built spaces. Both the exterior space and interior space are integral components that depend on one another in the concept of solid and void. This principle relates to Taoist philosophy of yin and yang, the balance of light and dark. The house, enclosed by walls and buildings, separated its private activities from the public street activities. Within this complex building group, buildings would face inwards to communal areas rather than outwards to the street. The open space was the focal point of activities for the family, and in Taoism represented the centre of the universe.\(^{72}\) Courtyard spaces symbolized the void and embodied the yang principle of light, sky, and heavenly goodness.\(^{73}\) The existence of different courtyards permitted different activities to take place, in the outer courtyard, main courtyard, private courtyard, and back courtyard. The outer courtyard is a transitional space from the main gate to the rest of the house. A wall and a secondary entrance or a screen separated the two areas by removing visibility. The outer courtyard was a space for servant activities and a waiting area for non-family members. The main courtyard was a lively area for family members to gather in outdoor recreation and social activities. Private courtyards provided a more quiet and solitary space for the head of the house. Back courtyards were also servant spaces and connected

\(^{72}\) Ibid., 29.

\(^{73}\) Werner Blaser, *Courtyard Houses In China* (Berlin: Birkauser, 1995), 12.
Figure 16: Plan of courtyard house showing how natural light and shadow represent the solid and void concept. Base drawing for floor plan from Werner Blaser, *Courtyard Houses In China*. 
Figure 17: Section of the courtyard house depicting the concept and pathway of interchanging solids and voids. Base drawing for section from Werner Blaser, Courtyard Houses In China.
to the street by a rear exit used mainly by servants. Halls and rooms symbolized the solid and related to the *yin* principle of shadow and ground. The private area provided a retreat for the individual from family activities that took place in courtyards.\textsuperscript{74}

As one enters the main gate and steps into the courtyard, a transitional space, one can see that the entire building complex is composed of alternating solid and void. In passing from a hall to a courtyard, and then from a courtyard to a hall, one experiences a series of spatial sequences.\textsuperscript{75}

### Natural and Built Spaces

Chinese gardens embody concepts and principles that are different from those of buildings. Landscape design intentionally removes the restraints of buildings by simulating the natural landscape. Its poetic, picturesque quality closely resembles scenic watercolour paintings to set the wanderer free from urban reality.\textsuperscript{76} This environment is meant for relaxation freed from authority, since its intention is to create interaction with nature.

These garden sanctuaries are enclosed by building structures: pavilions, minor and major halls, and verandas alongside temples and palaces, and within houses. The buildings separated the garden and the wanderer from the busy streets to allow the garden landscape to feel more natural. In the Western approach to gardening, the greenery surrounds the building and extends outwards along the primary axis as an expression of authority when approaching the building.\textsuperscript{77} The difference between Western and Eastern

\textsuperscript{74} Ibid.  
\textsuperscript{75} Liu, *Chinese Architecture*, 29.  
\textsuperscript{76} Ibid., 35.  
\textsuperscript{77} Ibid.
gardens lies in the use of buildings. The building and other built structures did not act as the primary focus in the garden; instead they enclosed the garden and their appearance functioned as a mountainous background for the greenery by creating depth and colour contrast. The experience of the garden was enhanced by a body of water. The reflection of the garden in the water magnifies the actual size of the space. Symmetry of the landscape in an upside-down manner presents the wanderer a dream-like worldly condition. In most Chinese gardens, a pond would either be left as a whole or divided into two separate ponds by a pathway or a bridge. The edges would then be curved to simulate nature and allow the wanderer to follow its curvature to experience the movement of the landscape. Mounted rocks, tree foliage, and scented flowers recreated the natural environment by physically engaging with the person. Pathways were paved with pebble stones to generate the roughness of actual dirt roads but kept orderly and clean in the fashion of geometrical tiles. The gardens’ winding routes were deliberately arranged to change the view of the traveller and to connect the built forms and the garden together. By doing this, the garden’s pathway would flow into the enclosed building space, and vice-versa: the pathway of the building would continue into the natural environment. This created an unbroken relationship between the natural and the built form.

78 Ibid.
79 Ibid.
80 Blaser, Courtyard Houses In China, 106.
81 Liu, Chinese Architecture, 35.
Figure 18: Master-of-nets garden in Suzhou, China. Built in the 12th century and restored in 1770. Plan and section base drawings from Werner Blaser, Courtyard Houses in China. Pictures from Asian Historical Architecture, Master-of-Nets Garden.
Figure 19: Garden of Harmony in Suzhou, China. Plan and section base drawings from Werner Blaser, *Courtyard Houses In China*. Pictures from Asian Historical Architecture, *Garden of Harmony*. 
CHAPTER 3: DESIGN

Site Analysis: Chinatown Calgary

In Calgary’s Chinatown, the most prominent and iconic public building is the Chinese Cultural Centre. The idea of transforming the community into a pedestrian oriented area and with a public cultural focus was conceived in the early 1980s. In response to a reclassification proposal from land developers to change land usage and density, concerned Calgarians and Chinese-Canadians challenged this proposal.82 After two years of negotiation between land developers, city council, and the Chinese community, the result was a defined handbook of guidelines and regulations for the betterment of the community. The Chinatown Area Redevelopment Plan (ARP) was published in 1986 and included environmental studies and a proposed location for a cultural building.83 The desire at the time was to project future growth towards mainstream society through revitalization efforts in becoming more public to the rest of Calgary.

The present state of Chinatown’s urban condition is an issue that needs clarification for the project to continue. Skyscrapers taller than 80 meters on the south side and high density residential growth in both Eau Claire (west) and East Village (east) surrounds the site. Chinatown comprises more than seven city blocks south of the Bow River, with buildings of different heights. There are two main roadways that people use every day to enter Chinatown and Calgary’s downtown.

83 City of Calgary, Planning and Building Department, Chinatown Area Redevelopment Plan (Calgary: The City of Calgary, 2009), 24.
Figure 20: Site analysis of Chinatown and surrounding urban context. Map base drawing from City of Calgary, Infrastructure & Information Services. Digital Aerial Survey Maps of Downtown Calgary, 2012.
core. Centre Street, with its bridge, connects the area north of the Bow River to the south; however, it divides Chinatown in half. The second is Fourth Avenue, which connects to Edmonton Trail and Memorial Drive (other main roadways). As mentioned before, the RiverWalk is also a major pedestrian connector. Both roads and their pedestrian walkways become heavily filled with workers during rush hour. These conditions are opportunities for the community to create interaction and cultural exchanges.

Site materiality, activities, and Chinese themed architecture are key indicators that distinguish the community from its surrounding neighbours. The daily commercial, residential and institutional activities contribute to the environment’s vibrancy. In most cases, commercial activity takes the form of eateries and retail. Residential apartments are divided into two categories: senior housing and regular housing. Institutional activity includes community centres, religious spaces, and government agencies. These daily activities and site characteristics help create a comprehensible area of Chinatown through experience. Even though the border extends from Second Street SW to Second Street SE, the actual comprehensible Chinatown experience can only be felt from First Street SW to First Street SE. This compression is the result created by the east elevation of the Cultural Centre and the west elevation of Harry Hays. Their opaque facades isolate visibility into the western and eastern horizons and separate Chinatown from Eau Claire and East Village.
Figure 21: Site analysis and strategy diagram.
Figure 22: Site viewed from the northwest looking at surrounding context and how the proposed building is situated.

Figure 23: Site viewed from the southwest looking at the border of Chinatown and Eau Claire.
Figure 24: Site viewed from the top of Centre Street bridge.

Figure 25: View from Crescent Heights looking at Downtown, China-town, and RiverWalk to compare the building height difference.
Site Selection

The design strategy begins by eliminating the negative experiential compression from Chinatown by moving the existing cultural centre from its current location. The intention is to enlarge the experiential area of Chinatown to the edge of its western border and take over the unused land behind the building. The design for the new cultural centre is located on the same block as the old building but not on the eastern edge. This site's location is at the western edge of the community, which extends from Second Street SW to First Street SW and from River Front Avenue SW to Third Avenue SW. Other existing features of the block include an apartment complex on the northeast, two 80-meter tall office towers on the southwest, and a surface parking lot on the southeast. To the north is Eau Claire’s Farmers Market, a mixed-use residential-commercial complex, and the historical Sien Lok Park.

The design for the block begins with a site materiality investigation. This study reveals how surface material can define the community’s space and how to strengthen pedestrian experience. Currently, concrete pavement is the most common sidewalk material, as with most other city blocks. The brick paving, however, suggests a characteristic that is pedestrian oriented and community expressive, but its misuse and inconsistency as a block perimeter framing is confusing. The block design proposes that the ratio of brick to concrete as a sidewalk surface material to be larger and more apparent to heighten the sense of the public domain.

The design of the garden area is an important component that contributes to making the outdoor space a public celebration and gathering environment. The placement of the
Figure 26: Analysis of site materiality to unite the block design and garden landscaping with Chinatown.
new Chinese Cultural Centre at the northern edge enables the garden space to take form to the south. In an attempt to remain true and traditional, buildings that enclose this green space become the mountainous backdrop for the natural element. The water element does not exist in this design because it is not sustainable during Calgary's cold winter season. Instead, the open areas function as celebration and festival courtyards for large public gatherings and events such as the New Year's Celebration and Mid-Autumn Festival. Upon entering the garden from the east and west, the visitor will notice a pair of lion statues guarding the entry. The surface material changes to long, light coloured stone slabs to lead the person from the sidewalk into the garden. When inside, the paving changes to a pebble stone texture. Approaching from Chinatown, the first open area is a public square for causal gatherings. The second area is a small courtyard space for the overflow of sport activities from the gymnasium and small-scale functions. The design intention of the third area is to provide a large public gathering and celebration area that will lead the public to the main entrance and into the festival hall. The position of the main entrance is also a traditional concept of Chinese architecture.
Figure 27: Block design strategy and landscaping concept. The reinterpreted design for a Chinese garden.
Figure 28: Light study of how daylight and shadows cast by nearby skyscrapers will affect the block design in June.
Program Development

The program development for this new cultural centre derived firstly from the existing cultural centre. Newer programs recognized what was missing in expressing Chinese culture and immigrant integration. A number of programs were chosen based on their ability to foster and promote cultural exchanges while also attending to community and immigrants’ services. The activities from these programs also need to express a communal, educational, recreational, and cultural sense. Programs that were relocated from the existing cultural centre include the heritage and cultural museum, Chinese school program, public library, and gymnasium facility. The newer programs include a performance theatre, exhibition gallery, and restaurant. In total, the new building includes seven core programs.

The heritage and cultural museum houses a diverse collection of artifacts that reflects the history and culture of China. The rich and decorative collection on display offers the public an educational experience interesting enough to promote further understanding. The heritage museum provides visitors a detailed exhibition of Chinese-Canadian history for the thousands of Calgarians and Chinese immigrants who are unaware of its beginnings. This is a program dedicated to preserving and promoting Chinese history. Its placement across from Sien Lok Park and its transparent façade produces a visible connection to the historical elements. This transparency also grants pedestrians information about future exhibitions and events.

The Chinese school program is an important component for social integration. On the weekends, it offers children and adults an opportunity to master verbal, reading, listen-
Figure 29: Photomontage of existing cultural centre’s east elevation and surrounding context.
Figure 30: Programmatic analysis of Calgary’s existing Chinese Cultural Centre.
ing, and writing skills in Mandarin. The evening classes provide a chance for immigrants and non-English-speaking people a place to learn English and Canadian culture. The void space to which the classrooms of this area are linked forms a cheerful leisure courtyard for children and different ethnicities to interact.

Reading is one of the many activities in the public library. This is an invaluable program for the community in providing a huge selection of media, literature, electronic resources, and technology. The Chinese library is recognized as one of the largest in North America. Since 2006, the State Council Overseas Chinese Affair Culture and Education Division of the People’s Republic of China and Huaxing Video and Book Library have donated books and videos on a regular basis. Aside from the need to create quietness, its location on the second floor above the student lounge signifies its importance, like a main hall on the longitudinal axis.

The design intention of the gymnasium space is to reflect the wood construction of a major hall in Chinese architecture, from its use of timber as flooring material to columns, walls, and gable roof structure. Timber serves a dual purpose in representing Chinese and Canadian wood construction culture and in symbolizing the integration of those cultures. In this traditional looking volume Asian sports such as Kung Fu, Karate, Tai Kwan Do, Kendo, and Ping Pong would be showcased. The organization of these events will require participation from practices around Calgary. Of course, those are not the only sports people who are allowed to practice in the gymnasium. They simply represent a culturally rooted sport that the public can experience. Glazing on
the south allows daylight to fill the sports hall and emphasize the warmth of wood. It also provides a portal for the lively physical activities to be seen by the outside world.

The auditorium is a major program in the cultural centre’s design. From the public events in the celebration courtyard to the festival hall, the auditorium is at the end of the progression, where cultural performances take place. Just like traditional architecture, there is a sequence of spaces before reaching the most private area. The seating capacity of 400 people provides the community a medium-scale auditorium to host its Chinese theatre and musical performances. In addition, performers from overseas are given a proper facility to perform within the district, keeping the public activity on-site and benefiting the local communities. When the cultural centre offers its facilities to be used by other groups and ethnicities, it brings in attention and creates an opportunity for the visitor to interact with other Chinese programs. Likewise, the exhibition gallery embodies a similar design and programmatic intention.

How a people cook and how a people eats is one of the most powerful ways they have to express, and preserve, their cultural identity.84

Chinese food is very popular in Calgary and especially in Chinatown because its variety in cooking style and taste is attractive. Food is not only eaten for its nutritional value, but is an expression of pleasure, community, family, spirituality and identity. The culinary world of this culture represents more than one region of China. Instead it can be categorized as northern cuisine (Beijing and Shandong region), eastern cuisine (Shanghai and Yangzi region), western cuisine (Si-

chuan region), and southern cuisine (Canton region). The function of the program is more than a social nourishment location for Orientals. It instantly allows cultural exchange to occur with the non-Chinese population by showcasing the making of Chinese food from its open kitchen concept, as the diner can see into the noodle, dim sum, and main cooking kitchen space. The placement of this program at the corner of River Front Avenue and Second Street SW is to address the farmer’s market and create a vibrant street corner through food. Its dual entry from the corner and from inside the cultural centre is to prevent programmatic segregation from the building or street. Sliding doors on the north façade and courtyard façade open the restaurant to summer patio areas for diners to eat outside.

Figure 31: Programmatic layout.

Figure 32: Use of solid and void concept in proposed design.
Figure 33: Main floor plan.
Figure 34: Enlarged main floor plan.
Figure 35: Second floor plan.
Figure 36: Enlarged second floor plan.
Figure 37: Section A-A looking north.

Figure 38: Section C-C looking west.
Figure 39: Enlarged section A-A.
Figure 40: Enlarged section C-C.
Figure 41: Pedestrian circulation diagram of proposed cultural centre’s public entrances.
Figure 42: Proposed cultural centre’s service entrances.
Figure 43: Circulation diagram of morning user groups and active programs.
Figure 44: Circulation diagram of afternoon user groups and active programs.
Figure 45: Circulation diagram of evening user groups and active programs
Figure 46: Circulation diagram of emergency exit strategy.
Figure 47: Interior rendering looking at the courtyard space between the museum and gymnasium.
Figure 48: Interior rendering from the second floor of the Chinese school overlooking the courtyard space below.
Figure 49: Interior rendering from the mezzanine level of the library, overlooking group work space and the outdoor dining courtyard of the restaurant.
Figure 50: Exterior rendering looking at the entrance of the building from the celebration courtyard.
Figure 51: Exploded axonometric drawing showing detail drawing locations.
Figure 52: 1:20 of detail drawing 01 and 03 showing key materials and ground to roof connections.
Figure 53: 1:25 detail drawing 02 showing key materials and ground to roof connections.
CHAPTER 4: CONCLUSION

The growing urban and social conditions of Calgary's Chinatown and immigrant population need to be dealt with at different scales. This complex situation regarding identity also requires several methods and strategies. Although this thesis focuses on the interpretation and translation of an architectural typology for a contemporary public centre, it was equally important to produce an urban strategy to strengthen its weakened urban environment. Architectural spaces for cultural arts enable dispersed people, places, and neighbourhoods to be reconnected and new ones to be formed.

Reflecting upon the thesis question (page 1), it is noticeable that the design's combination of cultural programs and architectural reinterpretations is one way to strengthen cultural identity and future developments in Chinatown. It is interesting to think about what other methods the thesis could have used to respond to this question and what other results would appear. Another exciting consideration is whether future proposals would build upon this project or contribute to it. Perhaps the architectural approach used in this project could be adapted to other cultures and urban situations.
BIBLIOGRAPHY


