

REINTERPRETING CHINESE CULTURAL IMPERATIVES WITHIN THE CONTEMPORARY URBAN CONTEXT
THROUGH THE INTEGRATION OF NATURAL ELEMENTS

Reinterpreting Chinese cultural imperatives within the contemporary urban context through the integration of natural elements

Ву

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ABSTRACT

As Chinese contemporary architecture is entering into a new era along with rapid economic development, this is an opportunity for young Chinese designers to start to translate their own Chinese cultural perspectives into contemporary architecture. This thesis uses an iconic Chinese architectural symbol, the 'Chinese Garden', as a vehicle to explore this opportunity to re-interpret the traditional Chinese garden in relation to contemporary Chinese urban culture. The challenge is to investigate how a contemporary garden could be inspired by the philosophy and principles of traditional Chinese gardens within a contemporary Western contextual environment. This thesis explores four major Chinese garden types and their architectural characteristics, how their imperative cultural reflections of Confucianism, Taoism, Buddhism, Fengshui Principles, Chinese landscape Painting and legend of 'Round Heaven and Square Earth' influence the traditional Chinese garden making. This thesis analyzes the qualities of the existing site, Frank Kitts Park, and it discusses the important 'positives' and potential 'negatives' that exists on the site. This design thesis will take the 'negatives' and translate them into positives through Chinese garden making theories and philosophies. While the Dunedin Chinese garden decided to hide the western urban context with a surrounding wall, this design thesis seeks to embrace the surrounding western urban context and incorporate it into the garden as a means of demonstrating how traditional gardens can flourish within contemporary times. This thesis challenges how a contemporary and western context can be incorporated with the principles of a traditional Chinese garden and how existing urban elements can be interpreted as landscape elements by translating traditionally soft plant elements into architectural elements. Just as solid walls are used to enclose the perimeter of traditional style gardens (both imperial gardens and private gardens), the contemporary garden should also consider the appl

Thesis Format:

This section is the introduction to my research including written thesis, site assessment and design thesis. It generalizes and outlines the focus and argument of my thesis. The objective of the research is to re-interpret traditional Chinese cultural imperatives in a contemporary Western urban context and incorporate it with natural elements. The structure of the thesis is comprised of three components. Part 'A' as a discourse investigates traditional Chinese cultural imperatives so that they may be similarly retained, translated, and celebrated in contemporary Chinese interior architectural design by drawing upon Tadao Ando's methods of cultural translation and consideration. Part 'B' is a site analysis introducing important positive local conditions and potential urban conditions. Part 'C' is a design intervention that demonstrates a translation from traditional Chinese cultural imperatives to a contemporary garden design.

Part A:

This chapter is the theoretical argument comprising five major components: Design research, design analysis, design experiment, design solution and conclusion. The first section is mainly research resources of Chinese gardens and relevant Chinese cultural imperatives as well as how they could be translated into my own contemporary garden intervention. The section then analyzes local site conditions and the urban environment, and takes their important 'positives', utilizing potential 'negatives' into my own contemporary garden design methods based. Consequently, this chapter is a design experiment investigating Japanese cultural imperatives, and how Tadao Ando translated Japanese traditions into contemporary architectural design by his own methods. Finally this chapter summarizes essential architectural elements in this innovative contemporary Chinese garden: Gate/pathway/lotus seat, exterior/interior, and lights/shadows. They become key garden elements emphasizing what a contemporary Chinese garden should focus on.

Part B:

This chapter is the introduction to and analysis of the chosen site of Frank Kitts Park for this contemporary garden design intervention. This chapter is divided into three sections. The first section is an analysis of urban contexts: Wellington central city. The second section is narrowing down to the site (Frank Kitts Park) analysis, and the final to the existing car parking building, Wilson car parking building. This chapter investigates and concludes the advantages and disadvantages of the site referring to the design experiment.

Part C:

This chapter shows a design process of this contemporary garden design from design matrices, concept design, developed design to a final design intervention. Design matrices show a translation from Chinese cultural imperatives and existing site conditions to a new conceptual design intervention. Conceptual design explains different Chinese cultural meanings of each individual architectural form, and how they could be translated from Chinese theories and philosophies into contemporary architectural language. The developed design shows combinatorial architectural forms represented by Chinese cultural imperatives and a further development of relations to the existing site and urban environment. Finally, the rendered images of this contemporary garden design intervention demonstrates a translation from Chinese cultural imperatives into a contemporary garden design inspired from Tadao Ando's architectural languages and methods.

PART A: THEORETICAL ARGUMENT

Introduction

Chinese culture in its broadest sense has strongly influenced ancient Chinese architecture and has created one of its most significant architectural symbols, the Chinese Garden. This thesis employs the Chinese Garden as a vehicle to explore the opportunity, reinterpreting Chinese cultural imperatives within the contemporary urban context through the integration of natural elements. This thesis investigates the symbols, theories and philosophies of traditional Chinese Gardens, and how the method of Chinese garden-making has influenced and been restricted by Chinese cultural perspectives, as well as how it varies culturally from place to place in China. It is essential to understand what qualifies a Chinese garden as traditional before designing one's own contemporary garden, which is to be informed by Chinese cultural perspectives. As an example, this thesis establishes what essential garden elements create traditional Chinese gardens and how they can act as design vehicles, leading to a correct method of design approach and direction.

This thesis challenges how a unique contemporary garden could be inspired by the philosophies and principles of traditional Chinese gardens within a Western contextual environment. The Dunedin garden is an important example of recent attempts to create a traditional Chinese garden within a Western context. In this case it was decided that it was only possible to have a Chinese garden by building a wall around the garden to hide all western elements entirely. While the Dunedin Chinese garden decided to hide the western urban context with a surrounding wall, this design thesis seeks to embrace the surrounding western urban context and incorporate its elements into the garden as a means of demonstrating a way for traditional gardens to flourish within contemporary times.

This thesis discusses what existing qualities of the site shall enable Frank Kitts Park to be used to explore a traditional Chinese garden. This thesis analyzes the obvious positives and potential negatives of the existing site, and proposes to take the 'negatives' and translate them into positives in order to incorporate the urban context to be part of the contemporary garden elements. This thesis is also challenging how a contemporary and western context can be assimilated with the principles of a Chinese garden. This shall be illustrated through the act of 'accepting' existing urban elements and interpreting them as landscape elements, as well as by translating traditionally soft plant elements into architectural elements. This thesis argues that by applying "interior architecture" principles through the translation of landscape principles, how the field of interior architecture can be used to translate the traditional garden into a more readily inhabitable space. For example, hillsides as architectural steps and corridors, soft garden elements as habitable space defining architectural elements. This thesis also investigates Japanese gardens and Japanese cultural perspectives; specifically how Japanese traditions are translated by contemporary Japanese architect Tadao Ando and deciphering how his contemporary architectural languages are interpreted through his own cultural perspective. This thesis investigates Tadao Ando's contemporary architecture and how he adapted his methods to represent his own architectural languages of modernism, minimalism and functionalism. This contemporary garden design concludes some contemporary architectural elements of Gate/Path/Lotus Seat, Exterior/Interior and Light/Shadow, are essential for this unique contemporary Chinese garden, it is not just a translated contemporary garden, and it is a 'spiritual microcosm'.

II Design Research

This chapter introduces the definition of a 'real' traditional Chinese garden as well as its major characteristics, symbolism, grounding theories and philosophies. Dunedin Chinese garden is an important example to discover what a traditional Chinese garden should be when it was located within the Western urban context. The Dunedin Chinese garden epitomizes the typical Chinese private garden style; enclosed by surrounding walls in a traditional method. The Chinese garden proposed within this thesis shall utilize a more contemporary means of engaging and embracing its surrounding Western urban context. This chapter shall also explore the existing conditions of the Frank Kitts Park and its suitability for a Chinese garden within Wellington.

Many people outside of China are confused as to what a real traditional Chinese garden is; this chapter introduces the four major traditional Chinese gardens types, and how each of their characteristics and imperatives can be translated into this contemporary garden intervention. This chapter also introduces the six most important Chinese cultural imperatives and how they have been influenced in traditional Chinese gardens.

1: Traditional Chinese gardens

A traditional Chinese garden is a place for solitary or social contemplation of nature. The interior of Chinese gardens reflects symbolism of peace and tranquility. It represents a harmony of contrasts between dark and light, hard and soft, solid and empty, straight and undulating, yin and yang. 'The Chinese garden was the product of Confucianism, Taoism and Buddhism.' The emergence of Chinese gardens not only symbolizes crystallization of human wisdom, but also is a significant symbol that reflects the material and spiritual life of different Chinese people as well as their respective cultures.

Characteristics of Chinese Gardens

Chinese traditional gardens not only have a long history with significant achievements, but they also represent a unique style influenced by Chinese culture. Traditional Chinese gardens have their own unique garden architectural characteristics. The fundamental principle is that; 'this is nature and must compliment nature, in order to make a perfect combination of artificial beauty and natural beauty'¹. The traditional Chinese garden expresses a scene full of poetic and artistic conceptions.

There are three major characteristics of traditional Chinese gardens.

The first characteristic is to express a sentiment that is different. Traditional Chinese gardens not only pursue visual conceptions including architectural forms, materials or colours, but also imply an inherent poetic imagery. The holistic garden site seems a maze leading visitors to experience a spiritual path from a secular entry threshold to a sacred place, from an open space to an enclosed space, from exteriors to interiors. Traditional Chinese gardens were inspired from Chinese poems and paintings and represent a product created by poets and artists, which express the highest state of the art. The poetic imagery of Chinese gardens portrays feelings and scenery, blended with perception and scenery, which strikes a chord in one's heart and elicits ones emotions and feelings. This intensifies the impact of the art.

¹ Chinese Garden Design Philosophy. www.gardenvisit.com

The second characteristic is the Composition principle. Most traditional Chinese gardens have unifying and symmetrical layouts. The layout of traditional Chinese gardens relies on the key principle of garden making with adventurous forms such as upturned tiled roof and curved bridge. The technical use of the zigzag pattern; variety of scales, high-low and long-short; they enhance the architectural layout of traditional Chinese gardens.

The third characteristic of traditional Chinese gardens is to take different attitudes when treating the natural environment. A traditional Chinese garden is not an independent ordinary architecture being enclosed by anything; it has to be integrated with natural elements and installed as a whole component. To select the right environment it is important to pursue natural beauty. The use of rocks, ponds and vegetation are more important than architecture itself for garden making purposes. A perfect combination is the blend of architectural beauty and natural beauty, as well as merging natural elements such as rocks, water and vegetation into the architectural form, as well as creating a landscape, that will achieve beautiful poetic imagery.

Traditional Chinese gardens pursue a very high artistic conception because of influence by Chinese paintings and poems, which pursue myths and charm. Chinese landscape paintings show scenes of austere mountainside dwellings, with a few hermits shown living in harmony with nature, far removed from society. 'Garden making' may not only consider the natural look, but also inject garden maker's subjective feelings into it. Each area of a traditional Chinese garden is created by themes representing different stories depending on the environment. Buddhists believe humans have five sense organs. These are the eye, ear, nose, tongue and body, in order that humans may realize colour, sound, scent, taste and touch. Humans can only reach the highest state of Buddhism when they are aware of these senses. In traditional Chinese gardens, the beauty of artistic conception is not only being conveyed by vision, but it is also conveyed by hearing, taste and imagination in order to deliver through these senses and emotions enough information about the design.



The Symbolism, theories and philosophies of Chinese Gardens

The Chinese garden intends to reflect the theory of 'heaven and the earth'. It is a symbol of Paradise where all life was protected and sheltered, and it also is a place representing naturalness and simplicity; it is a heaven for the sage, scholar and nature lover. The traditional Chinese garden had been given over to the grandiose, the artificial, extravagant and luxurious to the people who are living in ancient China, and nowadays it has become a heritage of Chinese traditional architecture.

In traditional Chinese gardens, all the forms of art represent the observable expression of 'Chi', the cosmic breath or energy, whether it is painting, poetry, music or the creation of a garden, all creation must be in accord. The traditional Chinese garden has become a place for painters, poets or musicians to get inspirations from. In a well-designed traditional Chinese garden it should be difficult to distinguish the differences between the work of 'Man' and 'Nature'. The 'work by man' represents 'borrowed scenery from nature', and the 'work by nature' represents 'among trees in the mountains'. No matter whether the traditional Chinese garden is located in wild scenery beside a waterfall, or a trickling stream, or in a bamboo grove, or the courtyard of a city dwelling, it still should be a place of meditation and communion with nature. Traditional Chinese gardens are the natural home of man. Architecture and gardens, according to Fengshui (wind and water) principles, influence harmonies of the environment with the currents of Chi, and will hold the balance in both architecture and garden as in nature by the Yin-Yang forces. The lunar power represents the Yin valleys and waters, and the solar power represents the Yang mountains and sky, with all their endless yang and yin qualities such as sunshine and shadow, height and depth, warm and cold.



Figure 2: Western Lake (Resort Scenic Garden), Hangzhou, China

The scenery of a traditional Chinese garden is changeable during the four seasons, its moods and colours or flowers and trees; therefore, pavilions are essential for enjoyment in summer or winter and became an integral part of the scenery. One can sit in a pavilion to admire the beauties of the white snowy landscape and to watch the budding of the plum blossom in winter time. The traditional Chinese garden is especially evocative by moonlight during the evening, where it becomes a spiritual place to appreciate the full moon in the Mid-autumn Festival. Pavilions and galleries have to blend with natural surroundings. Ji Cheng said: "Buildings should be placed so as to harmonize with the natural formation of the ground."2 Pavilions connect to galleries and follow the terraces of the land or winding of the water crossed by bridges, "bringing in all the symbolism of the crossing of the waters, of transition, of communication between one realm or plane and another as well as of man as mediator, occupying the central position between the great powers. Added beauty and symbolism was introduced in the 'moon bridge', a lovely half-circle which when reflected in the clear water below formed the perfect circle of the full moon."3 Pavilions are placed in traditional Chinese gardens and they are constructed by the shape of hemisphere, the vaulted ceiling painted to represent the nocturnal sky with numerous small windows of coloured glass describing the moon and stars. The total effect is the subdued light in the summer night which brings imaginary conceptions in the garden: when the moon has reflected on the water surface, the moon washes its soul in the clear water; traditional Chinese garden become a spiritual place where heaven and the earth meet.







Figure 3-5: The Lion Forest Garden (Private Garden), Suzhou, China

² Ji Cheng, <u>Yuan ye</u> Preface

³ J.C Cooper, *The symbolism of the Taoist Garden* P3

The symbolism of water in the traditional Chinese garden is not only due to Ying-Yang principles but also to the wide significance of water itself, next to the Dragon. In Taoist symbolism: "Water is strength in weakness, fluidity, adaptability, coolness of judgment, gentle persuasion and passionless." Mountains and rocks seem as the bones of the body, the earth is flesh, rivers and streams are the arteries and blood. When rocks are placed into the water, it represents the interaction of softness and hardness. The Chinese garden design is about how to hold the balance and harmony, and the water is the 'Yin' to the rocks 'Yang'. The balance of the traditional Chinese garden would be lost without the water to soften the harshness of the rock. These rocks are carefully selected for their colours, texture, grain and shape; some are upright and towering, some like animals and others are larger at the top than at the base etc. "Sometimes the rocks formed grottoes, but whatever the shape they always appeared as natural to the setting and were as near to the form of wild mountain crags as possible, giving the impression of Nature, untamed and capricious." The mountains in traditional Chinese gardens represent the Yang power in nature with the water as the Yin, symbolically. When the 'mountains' are placed in the core of a lake or a pond, rocks are stable and eternal, the opposite of the water which is fluid and temporal.

J.C Cooper, The symbolism of the Taoist Garden P4

⁵ Ibid

2: Recent history of the Chinese garden in New Zealand

Dunedin Chinese Garden

The Dunedin Chinese Garden (Lan Yuan – The Garden of Enlightenment) is New Zealand's only aesthetic Chinese private garden and was built in September 2008. It was designed by Associate Professor Cao Yongkang of Shanghai Jiao Tong University, and architecture specialist Professor Tan Yufeng of Shanghai Museum. As Cao explained, the particular design was influenced by the desire "to present Dunedin's people and New Zealand with the authentic flavor of a Chinese garden"⁶.

As Cao Yongkang acknowledges, "a totally Chinese environment in the vicinity and given that Dunedin's environment is totally Westernized . . . to make the whole garden look authentic and to retain its original flavor, we actually will have built a very high wall encircling the garden. Moreover, tall trees behind the wall should hide Western views and Western architecture" This is a typical example of the traditional Chinese private Garden style, from the late Ming and earlier Qing dynasties. It covers 2500 square meters, and it is surrounded by a four - meter perimeter wall in order to block the outer western world and enclose the entire Chinese garden inside of walls. The pavilion was placed centrally on a large lake, and it connects with the rest of the garden via a zigzag bridge. This 'invisible design' created a peaceful enclosed sheltered space; used for either a recreation or as an attractive scenic spot for public enjoyment.

Figure 8: Dunedin Chinese Garden (Elevation), Dunedin, New Zealand

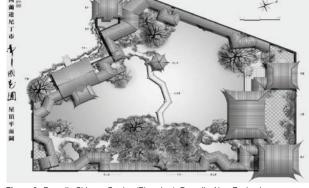


Figure 6: Dunedin Chinese Garden (Plan view), Dunedin, New Zealand



Figure 7: Dunedin Chinese Garden (3D Perspective view), Dunedin, New Zealand

James Beattie, 'Growing Chinese Influences in New Zealand: Chinese Gardens, Identity and Meaning'. James's 'interview' with Cao Yongkang, ShangHai

⁷ lb

The most important feature of this Dunedin Chinese garden is its integration of elements, including blocked up layout, traditional pavilion, water, rocks, walls, corridors and plants into its site. The Dunedin Chinese garden challenged diffused views within the garden boundary. Each view in the garden showed a wholly traditional Chinese garden perspective without western contexts. The inside of the Dunedin Chinese garden represents the pure atmosphere of traditional Chinese gardens, not Western architecture. This design thesis for the contemporary Chinese garden will challenge views on axis and incorporates western contextual mountain-scapes and city-scapes into the site in contemporary time. It will borrow scenery from the outer world and incorporate contexts to be part of contemporary garden elements.

Blocking out elements of the surrounding urban environment is one way of enabling visitors to experience the Dunedin Chinese Garden as a holistic landscape and a microcosm. While the Dunedin Chinese garden hides the western urban context for traditional Chinese garden-making purposes, this design thesis will embrace the surrounding western urban context, and incorporates it into a contemporary garden. The buildings of the city become the 'mountain'; the roads of the city become extensions of the garden paths. The harbour and lagoon become the shui (water) element in the garden, and city-scape and mountain-scape become shan (mountain) elements in the garden. This design thesis proposes an evolution of the traditional garden into one which defines contemporary new Chinese architecture in the 21st century.







Figure 9-11: Dunedin Chinese Garden, Dunedin, New Zealand



Figure 12: Dunedin Chinese Garden, Dunedin, New Zealand

Wellington Chinese Garden

In order to symbolize the close relationship of Wellington with its sister cities of Beijing and Xiamen, the Wellington Chinese Community represented by WCGS (Wellington Chinese Garden Society) decided to give Wellington a Chinese garden to celebrate Chinese culture and Chinese experiences in New Zealand.

It has been some 10 years since a group of enthusiastic people from the Chinese community approached the Wellington City Council with a proposal for the Community to establish a Chinese Garden in Wellington with the City Council's help in finding a suitable site. The Chairman of WCGS, Kenneth Chan⁸, explained that "from the historical note, the earlier float of an idea of establishing a Chinese garden in the Botanic Garden was not well received and did not proceed." In January 2006, a site in Waitangi Park on the waterfront was considered. However, WCGS was concerned that having a Chinese Garden site next to a proposed three level multi-functional building might block the light and shade of the Chinese garden, which would affect the Fengshui principles. The original design proposal for Waitangi Park was to merge the Chinese Garden into a multi-functional building and establish it as an ordinary garden to decorate Waitangi Park. This was a western misunderstanding of what a real Chinese Garden is in Western eyes. It is not just a garden surrounded by a variety of vegetation; it must be fully integrated on an open site. Another issue Ken Chan mentioned was that part of the proposed Waterfront redevelopment was to provide increased car parking for the public needs, meaning there would not be enough space for achieving that if the Chinese Garden was to be installed on Waitangi Park.

8

Kenneth SK Chan, (MNZM, JP), Founding Chair of Wellington Chinese Garden Society Inc. President of Seyip Association of NZ Inc. 'Interview'. 6th April 2010.

⁹ Kenneth SK Chan, *Interview* 6th April 2010

Frank Kitts Park Waitangi Park



Figure 13: Wellington City Map, Wellington Central City

After considering alternative locations across the waterfront, WWL (Wellington Waterfront Limited) and WCGS have agreed that Frank Kitts Park presents an attractive possibility. In collaboration with Ken Chan it was decided that "the basis of the design will embrace traditional Chinese garden concepts and will be integral to the whole design of the redevelopment of Frank Kitts Park. The garden will be an iconic landscape that will be immediately identifiable as a Chinese garden, incorporating and interpreting the key elements and principles of traditional Chinese garden design in a fresh and imaginative way."¹⁰ Ken Chan also acknowledged, "The Chinese garden at Frank Kitts Park will be a unique contemporary Chinese garden that will symbolize the history of the Chinese people in Wellington, the Chinese migrant experience and the contribution of the Chinese community in the enrichment of cultural experience and the fabric of the city. It will on completion be gifted to the City for the enjoyment of the people of Wellington and their visitors. The Chinese garden will be robust and enduring."¹¹ This design intervention will be a unique contemporary Chinese garden inspired by traditional Chinese garden concepts and Chinese cultural perspectives. These values shall be reinterpreted and installed as a holistic intervention upon the existing site of Frank Kitts Park. This design not only incorporates soft plants such as grass and trees in a contemporary way, but shall also embrace the surrounding context (city, mountains, the sea, roads etc). This allows visitors to see the urban landscape within the context of the garden.

This thesis engages both program and site as a unique interior architectural design project, installed on the open site, surrounded by nature, and embraced by natural light and shadow. The entire garden design is also considered in association with and translated in relationship to principles of nature (mountain, water, plants and Chi). The basic elements are the same for the Chinese landscape painting, mountain and water, which might include imposing scenery or simply a pond and rocks. Mountains, rocks and water are all traditional symbols of Chinese culture. This contemporary Chinese garden design will be a reflection in microcosm. The enjoyment of life should come from a view regarding the universe as a garden, so that all beings live according to their nature which in turn brings happiness.

¹⁰ Kenneth SK Chan, *Interview* 6th April 2010

¹¹ Ibic



Figure 14: Wellington City Map, Frank Kitts Park

3: Four types of Chinese gardens

Chinese gardens were originally established near the end of the Shang (BCE 1700-1027) dynasty and the beginning of the Zhou (1045 BC to 256 BC) dynasty. Chinese gardens are represented by four types of gardens which are: Imperial Garden; Private Garden; Monastery Garden and Scenic Resort Garden. These four types of Chinese gardens have different definitions, functions, symbolizations, purposes, scales and locations. It is important to explore their distinction and similarities as well as their inherent implications, how they reflect Chinese cultural perspectives.

Matrices: Four types of Chinese gardens

	Imperial Garden	Private Garden	Monastic Garden	Scenic Resort Garden
Picture				
Location	North of China	South of China	North, South, West and East of China	South of China
Site	Within cities Locate on a flat site	Back of the residential courtyard	Within cities or in suburbs On the mountains	Within cities or in suburbs. Nearby mountains and lake
Scale	Large scale	Small scale	Medium scale	Large scale
Style	Royal, grandiose and magnificent	Elegant and tasteful	Solemn and sacred	Relaxed and natural
Arrangement	Symmetrical and balanced	Asymmetrical	Symmetrical and balanced	Asymmetrical
Layout	Imperial Garden The Forbidden City	Private Garden The Suzhou Garden	Monastery Garden The Shaolin temple	Scenic Resort Garden The Scenic West Lake
Occupy (Ancient time)	Ancient emperor, empress, imperial concubines and imperial children	Bureaucrats, Landlord, rich merchants and the scholarly-gentry	Eupatridae, Sangha, Abbot and Monk	Tourists
Occupy (Modern time)	Tourists	Tourists	Eupatridae, Sangha, Abbot ,Monk, Pilgrim and Tourists	Tourists
Elements	Pavilion, bridge, ritual pathway, plants and water	Pavilion, pathway, corridor, rocks, plants and water	Pavilion, staircase, mountain and plants	Tower, bridge, mountains, water and plants
Garden making philosophy	The guideline for the design of an imperial garden gives expression to feudal autocracy and reflects the idea that the Son of Heaven is the richest man under heaven.	Private gardens display a delicate balance between the forces of nature and man's creation. The main principal of these gardens is to recreate nature in deep observation and understanding of the nature.	Monastic Garden is a sacred place of the 'god; it represents the Tao philosophy of 'Heaven on the Earth' and the Buddha philosophy of 'Islands of the fairies'.	Scenic Resort Gardens reflect a natural landscape. They take advantage of the lay-out of existing and nearby mountains and water.

A: Imperial Garden

An ancient Chinese emperor Qin Shi Huang (259 BC – 210 BC) was the founder of the Chinese Imperial Garden, and he possessed powers and status, as well as controlling human resources, material resources and financial capabilities for all of China. Therefore, the Chinese Imperial Garden is a product which was based on national economies, technology and art, rising to the highest level during Shang dynasty. Imperial Gardens are on a vast scale, fully-formed layout, completely functional, fully equipped and extravagant. The imposing manner and scale of Imperial Gardens symbolize a powerful country. The guideline for the design of an imperial garden gives expression to feudal autocracy and reflects the idea that the Son of Heaven is the richest man under heaven. The layout of Imperial Gardens is divided by symmetrical lines in order to keep a balanced system between left and right. The symmetrical layout embodies the powerful royal authorities and a solemn atmosphere, symbolizing the paramount status of the emperor. Most Chinese Imperial Gardens are located in the north of China, and are thus susceptible to the harsh northern climate in so far as architectural tradition, coloration and the planting of vegetation are concerned. Typical Imperial Gardens are found at The Forbidden City and The Summer Palace in Beijing.

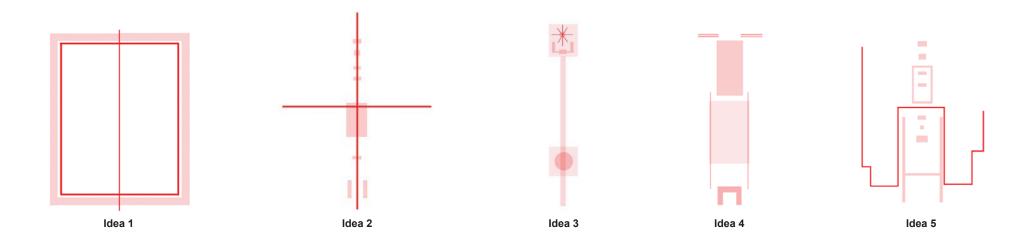




Figure 15: The Forbidden City, Beijing, China

B: Private Garden

Chinese Private Gardens are private properties owned by bureaucrats, landlords, rich merchants, and the scholarly-gentry. Private gardens are generally of small scale compared with Imperial gardens, but look elegant and tasteful, as well as performing multiple functions such as a lodge, social gatherings, study, theatrical performance, and sightseeing. Private Gardens are created mainly by water, and merged with 'mountains', rocks, plants and architecture. They all try to re-create an environment close to nature in an area with limited space. In Chinese Private Gardens, 'mountains' are artificial and they were most frequently represented by rocks. Different shapes of rocks compose groups of 'mountains', some rocks formed grottoes and some formed wild mountain crags, in order to give a capricious impression of nature in the garden.

Imitating nature is a fastidious way for private garden-making within the small scaled garden. The beauty of natural landscape is condensed and reproduced in the form of artificial mountains and tree groves in a garden that could be visited and watched, and in which harmony is achieved between man and nature.



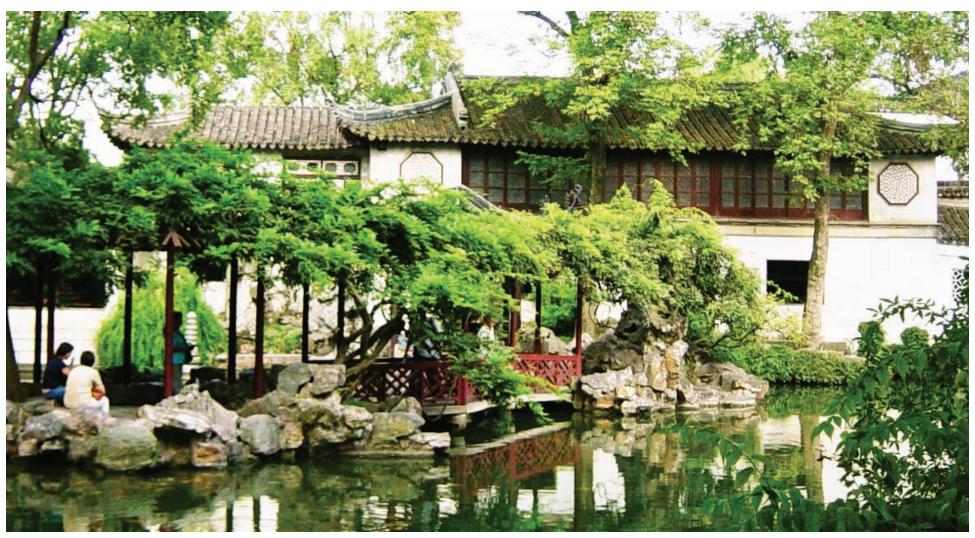


Figure 16: Humble Administrator's Garden, Suzhou, China

C: Monastic Garden

Monastic Gardens are not 'gardens' per se, but more like a temple, yet still containing garden properties. Buddhism and Tao believed that the Monastic Garden is a sacred place of the 'god'; it represents the Tao philosophy of 'Heaven on the Earth' and the Buddha philosophy of 'Islands of the fairies'. Monastic Gardens are not just a place for researching Buddhism; they are also places for Eupatridae and Sangha to communicate and interact. Since Buddhism was introduced into China, there has been a focus on development, secularization and lifestyle. For example, in 'Yungang Grottoes' which was excavated during the Northern Wei period (A.D 386 – 533) Buddhist portraits of beautiful women have been discovered. There has been some accessorial architecture features merged into Monastic Gardens gradually, which include 'The Free Life Pond' and 'Lotus pond', in order to enhance the purpose of tourism and aesthetic enjoyment rather than just be available for Eupatridae or Sangha.

Monastic Gardens are most typically built on mountains, yet some are located in cities. The 'garden languages' of Monastic Gardens are similar to Private Gardens, but as a sacred place, they still signify different characters, which are the syntheses of temples, religious scenes, artificial mountains and water, as well as natural landscape. Monastic gardens are a public tourism place for pilgrims and tourists to use, no matter whether you are female or male, poor or the rich, noblesse or pauper, this is a sacred place without social hierarchy. The layout of Monastic Gardens is mainly created by architecture and outbuildings. Plants are located in the middle of a palace hall or on either side, in order to stand out, as primary or secondary features as well as for symmetrical arrangement.

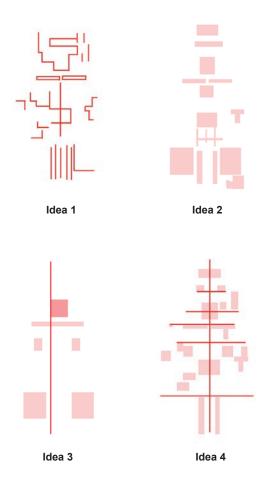




Figure 17: The Monastic Garden within Zhouzhuang, Suzhou, China

D: Scenic Resort Garden

Scenic Resort Gardens reflect a natural landscape. They take advantage of the lay-out of existing and nearby natural mountains and water to match the surrounding environment and to construct garden architecture, in order to develop a public Scenic Resort Garden, artificially, for visitors to experience. There are two types of Scenic Resort Garden: one is located in suburbs, and is typically of large scale with enriched contents; the other is located within cities, and the thematic contents tend toward towers, pavilions, bridges and water. Certain elements found in Scenic Resort Gardens, such as their topographical features, natural water sources and plentiful vegetations, results in Scenic Resort Gardens having high cultural value. This design thesis considers the use of Western urban high-rise buildings as urban translations of mountains while integrating adjacent landscape elements such as the lagoon and sea.

The zigzag bridge is a key element of the Scenic Resort Garden, which divides an entire lake into separate parts, thus it breaks the feelings of monotony while creating active water surfaces. The most common type of bridge used in Scenic Resort Gardens is called the 'Bridge of Nine Turnings' (Jiu Qu Qiao). 'Nine' is symbolically sacred in imperial Chinese culture. In ancient Chinese it means: 'Imperial Throne' and 'In the End', as well as being a lucky and valued number. The inflection (size and length) of bridges depends on the water environment one-fold, two-folds or three-folds to a maximum of nine-folds. The shape of the bridge is able to break the monotonic feeling of long and straight architectural form. The bridge provides an opportunity for visitors to approach an architectural pavilion flanked by scenic views by connecting with the water.

Scenic Resort Gardens do not have a specific geographic scope or boundary; they are framed by natural mountains and water and then developed into a garden layout. They are multi-functional public touristic places, embracing the multiplicity and inclusiveness of large scaled natural landscape.



Idea 1



Idea 2



Idea 3



Figure 18: Western Lake (Scenic Resort Garden), Hangzhou, China

This section investigated how a contemporary garden design intervention might engender qualities of these four types of Chinese traditional gardens for different purposes. Their different characteristics address different contemporary imperatives. Some of the four garden types are bound (such as the Imperial Garden and Private Garden) and others are not bound (such as the Scenic Resort garden). Some garden types are large scale and some are small scale. This design intervention is dealing with the nature of the boundary edge of the urban condition, and it also challenged a 'complex' of these four types of traditional Chinese gardens.

4: Chinese gardens as a reflection of culture

There are a few main cultural and spiritual influences in traditional Chinese garden design; they include the most important Chinese cultural perspectives: Confucianism, Taoism, Buddhism, Fengshui, the culture of Chinese landscape paintings and the ancient Chinese philosophy of 'Round Heaven and Square Earth'. This section investigates the definition of each of these Chinese cultural perspectives, and their ideology, philosophy, principles and how they have each influenced Chinese gardens.

Matrices: Chinese cultural imperatives

Chinese Garden Philosophy	Confucianism	Taoism	Buddhism	Fengshui Principles	Chinese Landscape Painting	Round Heaven and Square Earth
Established time	551B.C	450 CE	500 BCE	1368A.D	770B.C	unknown (legend)
Symbols	6 0			Francis Land. The control of the co		
Principles	Confucianism em- bodies Loyalty, Filial Piety, Chastity, Righ- teousness, Benevo- lence, Rite, Wisdom, and Trust.	Taoist theology elaborates various themes such as naturalness, vitality, peace, 'nonaction', emptiness, detachment, flexibility, receptiveness, the relativism of human ways of life.	Buddhism embodies 'The Noble Eight- fold Path', 'The Four Frames of Refer- ence', 'The Four Right Exertions', 'The Four Bases of Power' and 'The Five Faculties and Strength'.	In Fengshui principles, the consideration of orientation, aesthetics, relationships and symbolism become the art and science for determining proper sites.	Chinese landscape painting contains a romantic mysticism in its imagery. 'Shan' (Mountain) and 'Shui' (Water) are two essential Chinese words to describe Chinese landscape painting.	A circle is represented by 'Heaven' and a square is represented by the 'Earth', when 'heaven' and 'earth' are placed together, it represents the 'fu- sion of heaven and humans'.
Influences in Chinese Gardens	Confucianism emphasizes bilateral symmetry, enclosure, and hierarchy and horizontality.	Taoism emphasizes the need for human beings to live in har- mony with Nature.	Buddhism emphasizes the reflection of the power of Buddha, and it is a mirror of natural beauty.	Fengshui is used to create a comfortable environment which promotes harmony between humans and nature.	The Chinese garden is a logical extension of Chinese landscape paintings re-created as a microcosm of nature for people's own homes.	When heaven and earth meet, a circle covers up a square, or a circle adjacent to a square.

A: Confucianism

Confucianism is a system of thought involved in practical life. Confucianism is one of the pillars of Chinese culture, which has had a profound influence in Chinese architecture. Confucianism embodies Loyalty, Filial Piety, Chastity, Righteousness, Benevolence, Rite, Wisdom, and Trust. These principles have shaped the lives and culture of the Chinese, and influenced four important features in Chinese architecture: bilateral symmetry, enclosure, and hierarchy and horizontality emphasis. These Confucian features predominantly influenced the symmetrical layout and arrangement in Imperial Gardens; it emphasizes the solemn and magnificent garden atmosphere. Chinese architecture has created a rigid 'ranking system' from early on, in relation to the established social order. For example, in terms of the scale of architecture and its decoration, there were strict regulations to reflect a ranking system.

B: Taoism

The principle of Taoist theology elaborates various themes such as "naturalness, vitality, peace, 'non-action', emptiness, detachment, flexibility, receptiveness, spontaneity, the relativism of human ways of life, ways of speaking and guiding behavior."¹³ Taoism as a religious belief system is concerned with emotion and the pursuit of immortality. Taoist legends had a substantial influence on Chinese garden design. Since Taoism was founded around the 5th century the classical Chinese Gardens became popular at the same time. The development of Chinese Gardens was linked with the Taoist concept of people in society returning to nature. Some particular private gardens artistically use flow and composition to recreate the beauty of nature. They are designed to use limited space, creating a series of distinct but organically connected environments.

Tao is the first-cause of the universe and also is a force that flows through all life. It refers to a power that envelops, surrounds and flows through all things, living and non-living. The Tao controls natural processes and nourishes balance in the Universe. It embodies the harmony of opposites. Garden design in China has been to a large extent, influenced by the Taoist principles of duality, as well as wanting to be alone, of humbleness, and the eradication of desire. Taoism also worships nature. It holds that supernatural beings do exist. That is why Chinese garden is a place for solitary or social contemplation of nature; it is a shelter to provide a spiritual utopia for one to connect with nature.

^{12 &#}x27;Ranking system' was a civil service nomination system during the Three Kingdoms and the Southern and Northern Dynasties in China.

¹³ Taoism: http://en.wikipedia.org/wiki/Taoism

C: Buddhism

Buddhism was introduced to China from India in the Han Dynasty (206 B.C – 220 A.D). It was adopted by the Han Emperor Ming Di and transformed through contact with Chinese civilization. Buddhism is regarded as a localized religion in China. It holds that insight, experience, or meditation, rather than logical analysis is the appropriate and effective way to understand the world. Human beings and the universe should co-exist in union.

The inner feeling, insight, and meditation have become important in artistic undertakings since Buddhism became a prominent religion in the Tang Dynasty (618-907). It started to influence Garden design. According to the Chan Sect, everything in the world can reflect the power of Buddha. Therefore, no matter what size a garden is, it is a mirror of natural beauty. Unlike its counterparts for the royal family, private gardens full of Buddhist features tend to be smaller in size and scale.

The development of Imperial Gardens evidently shows that cultural philosophies have played an essential part in garden design. Not confining itself to visual satisfaction through inviting shapes or colors, Chinese gardens tend to convey the meaning of life and the idea that human beings should co-exist with, rather than conquer, nature.

D: Fengshui Principles

Fengshui means wind and water. "Fengshui is the ancient Chinese art of placement, of balancing and enhancing the environment." Fengshui is used to create a comfortable environment which promotes harmony between humans and nature. This design thesis challenges all things in nature that are related to each other in Chinese gardens. In Fengshui principles, the consideration of orientation, aesthetics, relationships and symbolism become the art and science for determining proper sites. Yin Yang is another important Fengshui theory relating to balance through opposites, "Yin is dark while Yang is light; Yin is passive while Yang is active. Yin is void while Yang is solid." Chinese gardens contain both regular and irregular elements. Irregular rocks, plants and ponds represent Yin, while regular buildings and pavilions in the garden represent Yang. The layout of Chinese gardens establishes a balanced composition of enclosed and open spaces. Open spaces such as courtyards are 'voids' which represent Yin, and enclosed spaces are 'solids' by contrast which represent Yang.

¹⁴ Jimmy Yuen, *Interrelationship of Fengshui and Green Architecture* P3

¹⁵ Lee Chin-Chong, Feng shui: It's context and influence in Chinese Architecture P8

E: Chinese Landscape Painting

Chinese landscape painting has influenced traditional Chinese gardens strongly. This design thesis is dealing with how a contemporary garden creates three dimensional (3D) Chinese landscapes utilizing the Chinese garden-making principles of 'Borrowed Scenery' and 'Framed Scenery'. Chinese landscape painting contains a romantic mysticism in its imagery. 'Shan' (Mountain) and 'Shui' (Water) are two essential Chinese words to describe Chinese landscape painting, and that is why these two elements are essential for Chinese garden-making. Chinese landscape painting represents balance of the Yin yang principle of duality.

In Chinese mythology, "The Mountains form the connection between heaven (yin) and earth (yang) and a place where the Chinese immortals would inhabit." The Chinese garden is a logical extension of Chinese landscape paintings re-created as a microcosm of nature for people's own homes. When people walk through the garden rockeries, the garden opens to each person's imagination as to what people feel. Ideally, the feeling conveyed is that they should feel that they are a part of a living landscape and that as they meander through the paths, they feel as though they have been shrunk to a tiny size wandering through rockeries which have now become mountains.

Leisurely walking through a Chinese garden should give people the impression of being part of a three dimensional Chinese garden landscape painting. Similar to Chinese landscape paintings, Chinese gardens do not seek to recreate the whole cosmic landscape but rather provide a small vignette of nature in one's own backyard. Chinese gardens owe their immortality to painting the design and construction as well as to the famous painters, poets and calligraphers who wrote about and drew them. Some famous poets wrote poems about mountains and waters which often inspired paintings in their honour, adding more romantic mysticism about gardens.



Figure 19: Chinese Landscape Painting

¹⁶ Malcolm Wong, <u>A Synopsis of the Culture of Chinese Gardens</u> P4

F: 'Round Heaven and Square Earth'

The ancient Chinese viewed the world as one entity before its creation, which was known as Taiji. The Taiji in turn gave birth to dual (two) entities known as Yin and Yang, thus creating the heaven and earth (as two entities). The ancient Chinese regarded all the stars/constellation/sky and the infinite universe as the 'heaven', while the land/farms that are surviving as the 'earth'. The Sun/Moon and all the heavenly objects were constantly moving, circling through various cycles in infinite movement, just like a circle that has no ending. Thus, the heaven was represented as a 'rounded' circle. For the earth, it was normally static and was considered to be stable, just like a square, and this was represented by a 'square'.

A circle is represented by 'Heaven' and a square is represented by the 'Earth', when 'heaven' and 'earth' are placed together, the Chinese cultural perspective of 'Round Heaven and Square Earth' represents the 'fusion of heaven and humans'. This contemporary garden design Intervention will be mainly formed by a circle and a square, and they are adjacent to each other in a contemporary way. This is a product of 'fusion of heaven and humans', it emphasizes the harmonious relationship between the humans and nature.

Given that traditional Chinese gardens are influenced by the six major Chinese cultural perspectives, this design will utilize these same Chinese cultural elements to develop the Chinese garden to another level; through a translation from traditional imperatives to contemporary imperatives. This design intervention will create an innovative contemporary Chinese garden to be disengaged from traditional Chinese garden concepts (such as lay-out of their architectural plan, forms and materials) completely but allowing it to still reflect connotative Chinese philosophies in a contemporary way.



Figure 20: Ancient Chinese legend of 'The Round Heaven and Square Earth."



Figure 21: Chinese traditional architecture: Tulou. Fujian, China.

It represents Chinese philosophy of 'The Round' Heaven and Square Earth.'

III Design Analysis

This chapter analyzes local conditions of Frank Kitts Park. It investigates the various advantages and disadvantages of the existing site, and what important positives should be used and what potential negatives can be developed. This analysis deduces what suitable urban conditions can be used or incorporated into the new contemporary garden design. This innovative garden design is a composite garden design consisting of four types of traditional Chinese Gardens (refer to the previous research of four types of traditional Chinese gardens). This chapter also discusses what major traditional garden imperatives can be translated into this contemporary garden in a decidedly contemporary way.

5: Analysis of local conditions

The site of Frank Kitts Park is composed of a Right-angled trapezoid shape, and is located on a flat piece of land central within the Wellington Waterfront, which is near the sea (East) and close to a lagoon (South). A bridge connecting to the site and South Waterfront, allows visitors to pass through the park from the contextual environment along the sea edge. The natural resources of the site provide advantages and disadvantages for the design of a contemporary Chinese garden: Advantages include key Chinese garden elements of mountain, water, Chi, bridge, plants and light. Disadvantages are: location within the noisy city and several commercial buildings surrounding the west side. An existing single floor car parking building is merged under the Frank Kitts Park. It creates a slope that links the flat part on the northern side (facing the City) to the higher part on the southern side (facing the lagoon). There is an opportunity to create pavilions at a higher level in order to capture the best views of both sides.

"The suitability of positioning is the essence in gardening" which explained the "meaning that every feature of the garden, whether plant, rock, bridge, tree or building, had a single uniquely suitable position in the garden. A building in a garden might be sited well in accord with local conditions, but if equal attention has not been paid to the importance of the treatment of details such as a door, a window or a banister, the building loses an element of its harmony with the surrounding scenes." The word 'Suitability' is defined within the context of 'skillfully appropriate', which represents a garden path, the sitting of trees, and the piling up of mountains and rocks. In this garden design intervention, 'Suitability' is not only in terms of dimensional shapes, positions and directions in space, but also in

¹⁷ Chen Lifang and Yu Sianglin, *The Garden Art of China* P34

¹⁸ Ibid

conditions of local conditions including seasonal qualities of sky, weather, plants and requirements of site. This design intervention will take the surrounding urban context as suitable conditions and incorporate them into the site to provide seasonal views for the garden scenery. Using the existing car parking building as the higher terrace to integrate a traditional pavilion above, and located within the centre of the car parking building. A square shaped roof will be applied to the pavilion to pursue "a magnificent and glorious view" and good fortune and avoiding disasters for Wellington city.

This design intervention should 'take advantage' of surroundings in every facet and aspect of the locale, including nearby fields or remote peaks in order to enrich the scenes in the garden, whether they are close at hand, far-off, or in movement. This design intervention is challenging to bring psychological 'walls' – city-scapes and incorporating them into the garden site as well as becoming its own 'surrounded walls', some physical solid walls are still essential for 'borrowed scenery' and 'framed scenery' purposes in the garden, but they will only be applied somewhere. This design intervention will take advantages of borrowing mountain scenery and the sea scenery into the garden site to create a three-dimensional Chinese landscape painting with some physical walls.



Figure 22: Wellington City Map, Wellington Central City

6: Analysis of contemporary garden making methods

This contemporary design intervention is a composite design of the four major traditional Chinese garden types. It assimilates the most symbolic characteristics from each type of garden and incorporates them into the new contemporary garden design. The traditional imperial garden has a vast scale and fully formed layout; it is mainly arranged symmetrically through magnificent pavilions and hierarchical pathways. This contemporary garden design challenges to use of symmetrical lay-out to create a central pathway dividing the entire garden into a left and right hemispheres. It also creates two horizontal architectural forms, a circle and a square, which shall be located adjacent to each other and linked by the central pathway. When a hierarchical stairway is applied in this design, is to reflect a solemn atmosphere and to represent the ancient social hierarchy from the traditional Imperial garden method. It also leads visitors to the garden's highest point to enjoy the best views of the urban cityscapes from each side.

Traditional private gardens are a small scaled garden type and are again generally enclosed by surrounding walls. They are arranged irregularly through pavilions, trees, water, rocks and bridges, etc. This is a way to create an inner microcosm and embrace nature. This contemporary design intervention shall incorporate this method of an irregular arrangement for other elements such as plants, pond, bridge and stairways etc, to offset the symmetrical architectural arrangement seen elsewhere. The entire contemporary garden is integrated by soft plants, grass and bamboo. Grasses inhabit the entire garden floor and are interspersed by bamboo set against with architectural forms. This arrangement demonstrates a contemporary poetic way of embracing nature, engaging nature, and pursuing nature. When soft plants are set against hard architectural forms, it creates a Yinyang force and a balance of harmonies.

Traditional monastic gardens are sacred gardens located on a mountain site or within a city. They are not only a public place for people to visit and worship but also a place of 'Gods'. When monastic gardens are located on a mountain, most have a hierarchical stairway connects the monastic garden from the ground level. This stairway does not represent a social hierarchy like in an imperial garden but it is more like a ritual stairway, or a 'path' that leads visitors to heaven. This design intervention is located within a city, although it is not located on a high level. There is an opportunity to take the existing car parking building as a high level to create a pavilion above. A hierarchical ritual route shall connect this high point from the ground level thus representing the form of the monastic garden.

Scenic resort gardens take advantage of the layout of existing and nearby natural mountains and water to match the surrounding environment and to construct garden architecture. Scenic resort gardens are vast in scale and not bound by the boundary edge. They are mainly created by the nearby lake or river, plants, bridges and pavilions. This contemporary garden design shall resemble most closely, of the four garden types, a traditional scenic resort garden. The existing site of Frank Kitts Park itself is bound by the physical site edge, but this contemporary garden is not bound by a physical boundary. When mountain-scapes and cityscapes are to be incorporated into the garden and become part of these garden elements, the inner city as a whole becomes a garden site. This contemporary garden is near the sea on west side, and close to a lagoon on its south side. Water as an essential garden element brings good Chi to the site. With a long pathway located on the shore side, clam atmosphere for visitors to enjoy is created.

IV Design Experiment

Tadao Ando has managed to translate Japan's cultural philosophies and imperatives into a contemporary architectural language that is not derived from mere

copying of Western style. He is a creator who has sought the key to adapting contemporary architecture, not only in Japan, but also throughout the world. China

has not yet succeeded in achieving this result for its own contemporary architecture. China still has a long way to go before reaching a level comparable to Japan.

Chinese imperatives could be similarly retained, translated, and celebrated in contemporary Chinese interior architectural design by drawing upon Ando's meth-

ods of cultural translation and consideration.

This chapter investigates Ando's secular architecture and sacred architecture, and thus concludes what his traditional principles have been as well as how they

have each been embraced and translated. The objective of this chapter also is to explore further how Ando was inspired by his own cultural perspectives and

how he transformed these cultural elements into his contemporary architecture. This chapter considers how Ando has adopted his methods to represent his own

architectural languages of modernism, minimalist and functionalism.

The ultimate objective of this parallel analysis is to further understand differences between the cultural evolution of Chinese gardens and Japanese gardens and

how Japanese architects have responded to this design challenge while China has not. Ando's works are investigated to analyze his design-based cultural impera-

tives, and how they are similar to those in Chinese culture.

Matrices: Tadao Ando's Translation

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Japanese philosophy	Diagram	Feature 1	Feature 2	Feature 3	Contemporary elements	Ando's translation	Ando's contemporary architecture
Zen Buddhism "Zen believes that it ultimately carries no existential meaning for emancipating a human being from his or her predicaments, for it maintains that discriminatory knowledge of any kind is delusory/illusory in nature."		Zen's Nothing "Zen condenses "no-thought and no-image" into a singular word "no" in keeping with its proclivity to favor the simple, as this contraction allows Zen to expand the scope and the meaning of "no-thought and no-image." ²	Emptiness Emptiness is not literally a lack of content or passivity. It is 'being', and it is 'becoming'. It is knowledge and innocence.	'Nothing' is 'Everything' In architecture this means that perfect poverty is attained when perfect emptiness attains perfect fullness. Or, to put is another way: when 'nothing' becomes 'everything.	Form / Wall Materiality Tactility Emptiness	Ando uses his own methods to reduce architecture, reducing it to the simplest of terms. He uses a simple geometry of cubes and cylinders, bare concrete walls, solids and voids, light and darkness in order to confront visitors with emptiness, with the Godhead.	
Taoism "The Tao, which means the way, road, or path, but can also mean the principle, method, or doctrine, was a sort of harmony or orderliness in the universe - a sort of will of heaven itself over any divine will other than the universe itself."		The Way "The Tao, or, the Way, emphasizes a correlation between humans and the natural order of things."4	A Way to the Universe "What is this path, and how do we find it? The path begins with an under- standing of the origin of the universe."5	Nature "Nature is complete without us, this verse tells us. We must recognize this fact and begin to participate with nature as a partner in the universal scheme."	Light / Spirit Natural light Spiritual light Movement Light and darkness	Ando's lights are not just ecumenical natural lights, they are symbolizing the spirit. At the intersection of light and silence we become aware of 'nothingness' a void at the heart of things.	
Taoism Taoism is profound in its naturalism. Nature is something that should not be exploited and abused, it should be befriended not conquered.		Universe Tao is the first-cause of the universe. It is a force that flows through all life. It refers to a power that envelops, surrounds and flows through all things, living and non-living.	Yin Yang The yin-yang doctrine is based on the concept that there are continuous transformations within the Tao, the principle that embraces nature.	Natural Elements The principles of yang are light, heat, heaven, male, sun, etc. The principles of the yin are darkness, cool, earth, female, moon, etc.	Nature Yin and Yang Hard and soft Reciprocal interaction	Ando's architecture pursues a 'reciprocal interaction' between buildings and landscape. Emanating from the ambiguous treatment of figure and ground. Exteriors become interiors, and interiors become exteriors, always with the ambiguous wall plane mediating between two.	
Zen philosophy In Zen and Zen art, being; is considered to be the self-unfolding of the unformed 'Nothing' or 'God'.	0	Start with Zero True emptiness is the state of zero. This is expressed by the equation zero equals infinity, and vice-versa.	Zero Time and Zero Space "Zen contends that 'here and now' is enfolded in both zero time and zero space. This means that one time contains all times and one part contains the whole, as in the case of a holographic dry plate in which a part contains the whole." ⁷	An integrate Time and Space "Zen makes another equally important contention through this abstention, namely that time and space are lived as integrated space-time in the interfusion of a concrete temporalization and spatialization."8	Circle Infinity, perfection and endless Space and time Connection	In Zen philosophy, the circle represents infinity. Ando's full circle, his curves including one-fourth or one-sixth of a circle, are a symbol of infinity. Therefore, how one connects the rest of the circle to make one's own universe is up to the individual. Ando attempted to achieve the possibility of that completion in the mind of the viewer.	
Taoism The Tao is a principle that embraces nature, a force which flows through everything in the universe. Taoism encourages working with natural forces.		Infinity "Tao is the root of all things, but all things are not Tao. To be Tao is to be unlimited, undefined or unformed."	Nature "This attainment of harmony with the Tao is also seen as living in accord with nature."10	Water "Like emptiness, water goes by largely unnoticed, but without it life would not exist. Just as life would not exist without the Tao. Just as we cannot see the emptiness, we cannot see the Tao (or God)."	Water Emptiness Soft Natural	In Ando's architecture, water is the element to create light surfaces, to reflect light and to show depth. Through the way light is received by the water and by the soft cement, infinite conditions of light and dark are created.	
Shinto 'Way of the God' It is a philosophical path established a connection between present day Japan and its ancient past.		Gate (torii) "The torii is a gate which marks the entrance to a sacred area, usually but not nexessarily a shrine." 12	Pathway (sandō) "Its point of origin is usually straddled in the first case by a Shinto torii, in the second by a Buddhist sammon, gates which mark the beginning of the shrine's or temple territory." "3	Fountain (temizuya) "Before entering the shrine, visitors are supposed to wash their hands and mouths at a fountain built to the purpose called temizuya or chōzuya." 14	Pathway Spiritual	Ando's pathway is not just a physical pathway; it is a spiritual threshold and a universal passageway, which connects to the heaven. Ando created his spiritual space connects to the human 'mind' and 'body'.	

7: Japanese gardens and reflected cultural imperatives

"Japanese gardens were developed under the influences of the distinctive and stylized Chinese gardens." Japanese gardens have an ancient history influenced by Shinto, Buddhist and Taoist philosophies. These philosophies and ideologies combined to create a powerfully spiritual place, always containing the essential elements of rocks, sand, gravel, walls, fences, paths, ponds, waterfalls, trees and bridges. "Shinto is the pre-Buddhist religion of Japan. The name derives from shin, meaning gods or spirits, and Tao, which as in Taoism, means 'way' or 'path'. Shinto is translated as 'the Way of the Gods' or 'the Way of the Spirit'." Objects in nature such as the sun, moon and gods, who live in forests, rocks, rivers and mountains, were worshipped by Shinto in Japanese gardens. A Japanese garden is a place of worship and a god's home, it also is a sacred space surfaced with gravel, and was created in Japan well before the arrival of Buddhism.

There are two major styles of Japanese garden. They are; Tsukiyama gardens (wet) and Karesansui gardens (dry). Tsukiyama gardens normally feature an artificial hill and are combined with stones, a pond, a stream and a range of plants and trees. In Tsukiyama gardens, stones represent mountains and a pond represents the ocean. Karesansui gardens are typically associated with Zen Buddhism, and are often located as the front or rear gardens at the residences of Zen abbots. The main elements of Karesansui gardens are rocks and sand, with the sea symbolized not by water, but by sand raked in patterns suggesting rippling water. To clarify the relationship between graveling and planting, it is useful to make a distinction between 'sacred' and 'secular', terms which form two ends of a continuum. "At the sacred end are compounds dedicated to spiritual entities and activities, including individuals with 'divine' origins, such as emperor."²¹ These compounds are severe graveled areas in the ancient Japanese tradition, and they are always adjacent to or surrounding sacred buildings, such as shrines and temples. "At the secular end of the continuum are spaces dedicated to entertainment and aesthetic enjoyment, such as gardens constructed for mansions and villas."²² In general, these types of gardens are larger, merged with a pond and planted with trees, shrubs and flowers, as well as with a variety of rocks, lanterns and pavilions. "In the middle of the continuum are gardens that combine aesthetic pleasure with a feeling of philosophical or religious profundity."²³ Katsura Rikyu

¹⁹ Japanese Garden, <u>http://en.wikipedia.org/wiki/Japanese_garden</u>

²⁰ Tom Turner, *Asian Gardens, History, Beliefs and Design* P238

²¹ David and Michiko Young, *The Art of the Japanese Garden* P14

²² Ibid

²³ Ibid

(Katsura Imperial Villa) in Kyoto represents the high point of garden and palace architecture in Japan. The palace formerly belonged to the Princes of the Hachijō-no-miya family, and it is one of most important large-scale cultural treasures in Japan. A little more towards the Zen meditation garden, Ryoanji (The Temple of the Peaceful Dragon) in Kyoto is composed entirely of white gravel and rocks. Towards the secular end is Saihoji Temple garden in Kyoto. It is a Rinzai Zen Buddhist temple, which is famous for its lush green mosses and stately trees. The gardens in the middle of the continuum are Japans finest.

Japanese gardens are mostly influenced by Shinto, Buddhist and Taoist philosophies. These philosophies have combined to create an intensely spiritual place for Japan. Taoism advocates nature and it holds that supernatural beings do exist, a traditional Japanese garden is a microcosm of the macrocosm, a small complete expression of the vastness of nature. Buddhist worships the inner feeling, insight, and meditation, so it believes that everything in the world can reflect the power of Buddha. Therefore, no matter what size a Japanese garden is, it is a mirror of natural beauty. When Japanese gardens are influenced by Buddhism and Taoism, they are then depicting 'nature' and pursuing 'nature'.



Figure 23: Japanese Tsukiyama gardens (Wet), Japan



Figure 24: Japanese Karesansui gardens (dry), Japan

8: Tadao Ando and Japanese cultural imperatives

"I believe that architecture belongs not to civilization but to culture. Architecture comes into existence only against a background of history, tradition, climate and other natural factors." ²⁴

- Tadao Ando

In some of Tadao Ando's architectural works such as the building of 'Oyamazaki Museum' and 'Water Temple', were characteristically inspired from Zen philosophy. Oyamazaki Museum is a new addition next to the existing Western Tudor-style villa. It is contemporary architecture consisting of a horizontal rectangular volume that contains circulation leading from the existing villa, a smaller vertically oriented rectangular volume which contains an elevator and a cylindrical volume containing an exhibition gallery. The vocabulary of architectural forms Ando has used is very basic: the square, the rectangle, and a circle. The cylindered form became a major space of this project, forming the end destination of the whole journey. The essence of Zen philosophy is a circle and it represents infinity. Ando's full circle, his curves including one-fourth or one-sixth of a circle, are a symbol of infinity. Therefore, how one connects the rest of the circle to make one's own universe is up to the individual. Ando attempted to achieve the possibility of that completion in the mind of the viewer. The architecture Ando is trying to achieve is not just form, not just light, not just the sound, not just the material, but the ideal incorporation of everything.

Figure 25: Tadao Ando. Oyamazaki Museum, Kyoto, Japan

²⁴ Ando's Vision towards the Crisis of Modernism: http://www.archsociety.com/e107_plugins/content/content.php?content.23

Karesansui gardens are Japanese dry gardens which are typically associated with Zen Buddhism. As mentioned, previously, the main elements of Karesansui are rocks and sand, with the sea symbolized not by water, but by sand raked in patterns that suggesting rippling water. Ryoanji is the most famous and celebrated Zen garden in Japan. It was simply composed of stone and sand, serving as a subtle yet effective example of the dry garden type. The simple interpretation of the stone arrangement is that the sand floor symbolizes sea waves, and the rocks symbolize islands. When Ando merged Zen sand into his contemporary concrete building and placed them on the top of the roof, it created another comprehensive architectural language of man-made and 'Nature', which provided an environment in which one can experience the universe both physically and spiritually. This concrete container becomes a piece of art for visitors to enjoy when they sit in the café area which is located in the second floor of the existing Asahi Beer Oyamazaki Villa Museum. When sand instead of water is placed on the roof and interacts with natural plants, it creates a contrast of man-made (concrete) and nature (plants); when green trees touch sand, the shadows seems are more stable and solid.

Engawa is "a floor extension at one side of a Japanese-style house, usually facing a yard or garden and serves as passageway and sitting space." The engawa is a part of Ryoanji, which is not only a passageway that brings together the inside and the outside, but also is a connection of garden and shrine room. Inside the shrine room, it is dark and compressed; outside, the garden, the ambiguous scale suggest a limitless vista. It is psychological as much as physical. This is the traditional Japanese way to orient a path to the outside and is open to the nature. In Ando's pathway, by using glass as the surrounded walls, physically there is a barrier, a protection from outside, but visually there is no boundary between the outside and inside. This clear glass container is surrounded by natural plants and looking inside from the pathway; it creates 'borrowed scenery' which offers visitors a spiritual piece of poetic 3 dimensional 'landscape painting'. Visitors are able to experience a spiritual transition from a secular space to a sacred space. Ando fully understood the depth Japanese culture and with Zen philosophy has transformed Japanese cultural imperatives into his modern architecture successfully. This achievement has become an essential process which influenced the evolution of Japanese contemporary architecture, as well as demonstrating that rich cultural perspectives could change the development of architecture, from traditional architecture to contemporary architecture.

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Engawa: http://dictionary.reference.com/browse/engawa



Figure 26: Tadao Ando, Asahi Beer Oyamazaki Villa Museum Of Art Kyoto, Japan



Figure 27: Ryoanji Temple (Zen/dry Garden), Kyoto, Japan



Figure 28: Engawa,Ryoanji Temple Kyoto, Japan



Figure 29: Tadao Ando, Asahi Beer Oyamazaki Villa Museum Of Art, Kyoto, Japan

9: Tadao Ando - Secular and sacred architecture

This section explores Tadao Ando's own contemporary architectural methods and what essential elements he applied into his contemporary architecture. His most contemporary architecture represents his understanding of materiality: walls, light and natural elements, as well as how he was influenced by Japanese garden philosophies of Shinto, Buddhism, Taoism and Zen. This section will be a case study to investigate successful means by which traditional Eastern cultural imperatives can be translated into contemporary architecture.

Tadao Ando is an 'architect of light', 'a master of space', and 'a builder for humanity'. Tadao Ando is a self – taught architect, who did not receive any formal architectural education, but trained himself with books, traveling and self-investigation. He then integrated 'the spirit of modern architecture' and 'the spirit of traditional Japanese architecture' to create his own contemporary architecture. Referring to Ando's personal investigations and Zen philosophies, he pursues 'timeless' architecture and expresses the dual nature of existence.

"Tadao Ando, at his most sincere, expresses only the devastation which marks the greatest moments in Japanese art, says how remote and inaccessible tradition is and demonstrates how pointless it is to think that simply to live in a beautiful house could in any way bring peace to the world. Ando's architecture, if it renews anything, has the great merit of once again laying bare for us the deepest disturbances of the Japanese soul: the idea that existence is a hopeless struggle that has to be suffered to the extreme and unthinkable limit."²⁶

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The first impression of Ando's architecture is materiality. "His powerful concrete walls set a limit. Beyond this point there is no passage but that which is opened by his will."²⁷ The second impression of his work is tactility. "Hard walls seem soft to the touch. They exclude then enclose, admitting light, wind, and the passing visitors, who leaves behind the disorder of everyday existence to be sheltered in a realm of stillness."²⁸ The third impression of Ando's work is its emptiness. In his architecture, "perfect poverty is attained when perfect emptiness attains perfect fullness."²⁹ His architecture is created by light and space. His works also represent the principle of 'reciprocal interaction' between buildings and landscape, interiors and exteriors, artificial and nature. His architecture introduces us to the spiritual dimension; to the 'Godhead'.

The core of Ando's architecture is created by walls and can be described as 'architecture of a wall'. The function of walls is not just for supporting roofs or other structures. "In Ando's architecture, walls assert themselves by themselves." Ando's walls seem to screen light or create a representation of light. Therefore, his walls have become significant. It is difficult to explain, for they have neither a material existence nor a spatial one. The leading feature of Ando's interior space is created by cold and solid concrete walls, which highlight their 'profound emptiness'. "The spaces have an unmistakable quality of poverty and stillness which is another way of describing tranquility." 31

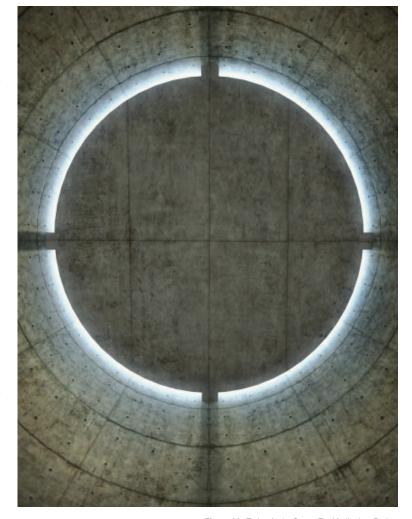


Figure 30: Tadao Ando. Space For Meditation, Paris

²⁷ Philip Jodidio, <u>ANDO: Complete Workds</u> P1

²⁸ Ibid

²⁹ Philip Drew, *Church on the Water / Church of the Light: Tadao Ando* P35

³⁰ Francesco Dal Co, <u>Tadao Ando : complete works</u> P8

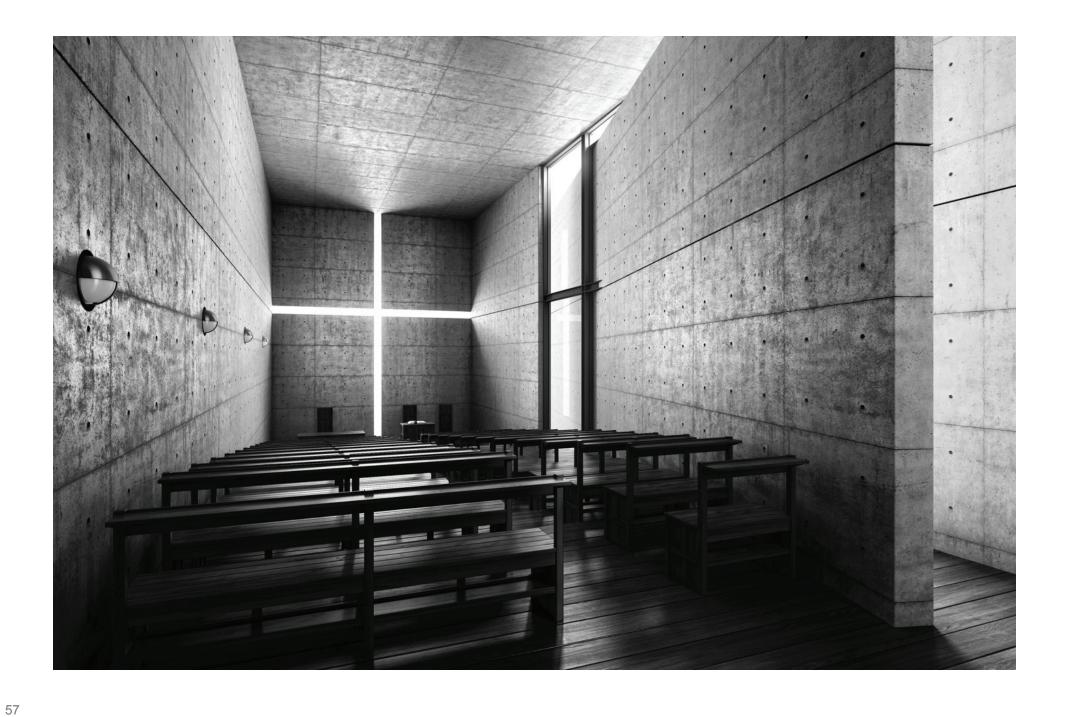
³¹ Philip Drew, Church on the Water / Church of the Light: Tadao Ando P40

Japanese gardens are mainly influenced by Japanese culture of Shinto, Zen Buddhism and Taoism. Ando's contemporary architecture is a reflection of Japanese garden design. Ando's works have been strongly influenced by Zen philosophy. In Zen and Zen art, "being; is considered to be the self-unfolding of the unformed 'Nothing' or 'God'. In particular, the function of the beautiful is to spark an epiphany of the absolute and formless void which is God. True emptiness is the state of zero. This is expressed by the equation zero equals infinity, and vice-versa. Accordingly, emptiness is not literally a lack of content or passivity. It is 'being', and it is 'becoming'. It is knowledge and innocence. In architecture this means that perfect poverty is attained when perfect emptiness attains perfect fullness. Or, to put is another way: when 'nothing' becomes 'everything." Zen philosophy as a piece of logic which is contradictory, and we only can understand the real underlying values when we ourselves experience the richness of emptiness directly in his interior spaces. Ando uses his own methods to reduce architecture, reducing it to the simplest of terms. He uses a simple geometry of cubes and cylinders, bare concrete walls, solids and voids, light and darkness in order to confront visitors with emptiness, with the Godhead. This method demonstrates the true essence of his sacred buildings such as the 'Church of light. Using light as a special medium in his architecture, Ando defines and clarifies of the Zen principle of 'emptiness'.

Some of Ando's sacred buildings such as the 'Church of Light' embody his personal understanding of light and darkness. Light is an important controlling factor in all his work. Light and darkness have a relationship between one another; therefore we cannot separate any of them. Light cannot be seen without the existence of darkness and vice versa. In the 'Church of light', the cruciform cut in the concrete wall is the pivot point of the interior space. This shows natural light during the different periods. Light is invited to participate across the surface of the concrete, constantly revealing its smooth and cold surface as it gradually moves. The interiority of the architecture changes continuously during the course of the day. The interior environment is affected and controlled by the movement of the sun. During the day, whether it is sunny or cloudy outside, the interior of the chapel still remains in darkness because of the enclosed solid concrete walls. The only visible natural light can see are come from these hollow gaps which exist between the ceilings and walls



Figure 31: The Symbol of Japanese Zen



and of course from the cruciform itself. The sacred ambiance is enclosed and controlled by these natural lights from outside. They are not just ecumenical natural lights, they are symbolizing the spirit. Just as Tadao Ando re-interpreted his own understanding of light through the act of 'cutting walls'; this design intervention will challenge a re-interpretation of natural sunlight in a spiritual interior space by 'cutting gaps' within the ceiling. Sunlight is a yang force, when it penetrates into the yin interior space; it brings yang warmness and infinite energies to the space, as well as creating a balance of cold and warm, soft and hard, light and dark.

Figure 32: Tadao Ando. Church of Light, Osaka, Japan

In the 'Water Temple', water is another essential element Ando applied for his projects. The water is serene and lotuses are real as they reflect the sky. A large circle pond is divided symmetrically by a spiritual footpath, which connects to the 'heaven' and the 'earth'. When visitors pass though this key threshold and walk down from the staircase path, visitors are separated from the profane world. It is a spiritual way to close to a scared temple provides a place where gods are worshiped and ritual enacted. The Tao is a principle that embraces nature, a force which flows through everything in the universe. Taoism encourages working with natural forces. Water is an essential natural element of Japanese gardens; it also is a part of Tao. When Ando applied water into his contemporary architecture, it demonstrated his translation from traditional Japanese cultural parallels to a contemporary architectural language.

A curved solid concrete wall blocked the 'Chaos' from one side in the 'Water Temple'. The visitor must walk round this curve wall in order to reach the entrance of the temple. A small footpath leads the visitor to an imposing concrete wall with only one opening. The entrance to the temple is below the level of pond, and the path way obliges visitors to going down from the ground level. This temple is nonetheless imbued with a sense of modernity and of ecumenical spirituality. Ando's design has an important aspect shows his wish to break with the massive roof designs that have traditionally symbolize the power of the temple.

The spaces in Tadao Ando's architecture are naked; they look like abstract spaces trimmed of all humanity and function. Ando attempts to achieve spatial prototypes rather than spatial abstractions in his works. His spaces represent emotional expression of various people rather than intellectual operation. Ando created an in-depth dialogue between user and the architecture; his spaces transcend theory and appeal to the deepest spiritual levels. Ando applied simple geometries such as circle, square, triangle and rectangular shape in his contemporary design interventions. These symbolic forms he applied in his contemporary architecture are the psychological power of abstract shapes represents human emotions. The circle represents infinity, perfection and the endless; the square represents solidity, honesty, shelter and safety; and the triangle represents the sacred trinity. For example, the circle water pond in 'Water Temple' represents infinity in Japanese Zen philosophy and it become a sacred place where connects to the heaven and earth, a pathway in the centre of the circle become a gateway to the human spirit and leads visitors to approach a sacred temple from chaos.

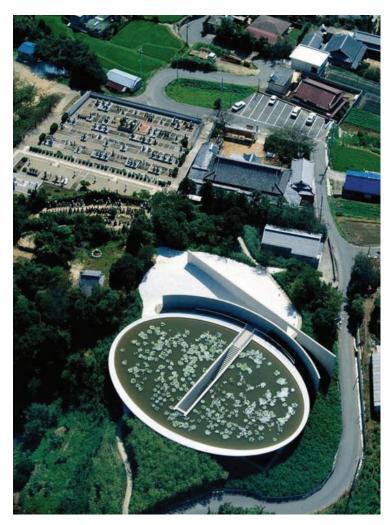


Figure 33: Tadao Ando. The Water Temple, Hompuki, Japan

These design experiments demonstrated how Tadao Ando has translated Japanese traditions into his contemporary architecture successfully; his contemporary architectural interventions represent a strong connotation towards Japanese Shinto, Zen and Buddhist philosophies and it is wholly disengaged from traditional Japanese architectural design style. Ando's interpretation has defined his own understanding of Japanese traditions, as well as created his own translated methods. This design intervention follows Tadao Ando's methods to re-interpret a new Chinese contemporary garden to be disengaged completely from Chinese traditional design, as well as to be constructed within a Western urban context. This design thesis also challenges a re-interpretation of translating the Chinese traditional principles into contemporary architecture throughout Ando's methods and philosophies by using the meaningful forms of circles and squares for this contemporary Chinese garden design intervention. Two major architectural forms, a circle and a square, will be integrated as an adjacent arrangement within the site. The circle reflects the Chinese philosophy of 'Round Heaven' and a square represents the 'Square Earth'. Ancient Chinese people believed that the heaven is comprised of a round shape and the earth is a square, and that the round heaven covers up the square Earth. This design intervention challenges a contemporary arrangement of 'a circle adjacent to a square' instead of 'a round form covering a square volume', while the arrangement also demonstrates one of the Chinese garden methods by contrasting Yin against Yang, hard against soft, rough against smooth and high against low.

V Design Solution

This chapter refers to the previous analysis of Tadao Ando's works and how he adapted his methods to represent his own architectural languages of modernism, minimalism and functionalism. When he achieved a dramatic transition from Japanese traditionalism to Japanese modernism, some elements become essential architectural icons to be considered in this contemporary garden design intervention: Gate/Paths/Lotus seat, Space/Exterior/interior and Lights/Shadows/Forms. These characteristics are vital features to create a special contemporary Chinese garden, a 'spiritual microcosm' for visitors. This chapter will take these vital characteristics into this contemporary garden design intervention, to engage with western urban contexts (mountain, city, sea, lagoon, streets, and existing car parking building).

The design intervention also challenges the contemporary garden as a unique interior enclosure as created by physical architectural geometry, natural elements (water, plants and trees), western urban contexts and natural sunlight. While the entire garden is fully installed on the Frank Kitts Park and surrounded by the Wellington urban contexts, lagoon, the sea, mountain-scape and cityscape, the garden itself is sheltered by the 'urban walls'. While visitors walk the pathway of the garden, they are enclosed by more ephemeral walls: nature and sky during the journey.

Matrices: Translated contemporary garden elements

Name	Picture	In Traditional Chinese Gardens	In Contemporary Chinese Garden design	Symbolism
Gate		Commemorative arch	The gate is a starting point of spiritual journey in Chinese gardens, it is the beginning of a journey, and it also is a departure from one configuration of objects and circumstances to another.	Gate is a transition from external world to the internal world. It is a symbol of death and resurrection.
Gate		Hierarchical system	The pathway represents the beginning of a journey and time of transformation in Chinese gardens.	Different path configurations symbolize different psychological circumstances. They are the ways to gain knowledge and awaken consciousness.
Lotus seat		A place to communicate with Heaven	The Lotus seat is a final destination of the journey, and it points the way to the goal.	The centre of the lotus seat is the core of the garden world which symbolizes the infinite source of energies.
Wall		Dividing space Block up entire site	Walls have the power to divide spaces, reform places and create new domains.	Space is not created by architecture, but it is reveled by it. An entire garden space shall be defined in both exteriority and interiority.
Exterior		Contextual landscape	Walls are able to cut through the amorphous and immaterial elements of sunlight, sky, wind, air and landscape, which create a close relationship between the internal world and external field.	Walls are naked and cold, and at times the wall is like a sharp weapon menacing us. They become mirrors reflecting landscape and sunlight during daytime.
Interior		Interaction between interior spaces and plants	When' walls' cut into these natural elements of sky, sunlight, wind and landscape, interior architecture and exterior architecture can reflect a demonstration of power.	Interior enclosure is a 'reciprocal interaction' between buildings and landscape, emanating from the ambiguous treatment of figure and ground. Exteriors become interiors, interiors become exteriors.
Light		Center feature objects	Light connects spaces and forms as well as gives objects existence.	Light is a significant symbol and natural light brings to the earth inexhaustible energy to the contemporary garden intervention. Light is creating, transforming and colouring the environment.
Shadows		Create reflection Create patterns through windows and doors	Light and shadow like a twin, cannot exist separately. The shadow of the moon, the shadow of flowers and the shadow of water were the tools to read light in a Chinese garden. They produced a profound spiritual imagery.	The appearance of shadows is changeable within architectural space when light varies in intensity with the shifting of time and changes of seasons. It creates an interaction of light and dark is based on personal spatial experiences, whether interior or exterior.

10: Essential architectural elements in the 'Spiritual Microcosm'

Through an investigation of Tadao Ando as a great example of capturing traditional cultural imperatives in his contemporary architecture, he has achieved the task of this 'transformation' successfully. Ando's methodology, theories, philosophies and design interventions emphasize some essential architectural elements such as forms, materials, lights, shadows and nature which evokes a further definition of what a future interior architecture should be, and how the 'Spiritual Microcosm' is identified.

A: Gate, Path, and Lotus seat

The "gate, path, and lotus seat as well as steeples and sanctuary are holistic organizing principles in architecture. They mold a building into patterns that integrate mind and surroundings. Just as overall architectural form has direct connections to the workings of consciousness, the individual parts -- such as walls and roofs – also serve as links between spirit and matter. Each piece of a building has a corresponding form of thought and feeling."³³

Consciousness shapes architectural form through an elemental pattern of human thinking which include desire as well as search and discovery and each thought, is a step in the mind's journey through this pattern. People might wish to absorb more knowledge on religion, health, happiness, calmness or peace; each desire encourages people to search the thing they want until they find it in the end when they experience this contemporary Chinese garden. The architectural forms of gate, path and pavilion externalize this journey of consciousness in the design intervention. Every structure applies this triad as an organizing design principle. This configuration reflects the source, journey, and goal of human spirit's adventure, this fundamental pattern exposes whenever people give architectural form to inner thought and feeling. A future contemporary Chinese garden will become a place of spiritual microcosm for people to pause for thought, and it will form an eternal impression in people's heart when they contemplate in this unique re-interpreted contemporary Chinese garden.

³³ Barrie, Thomas. Spiritual Path, Sacred Place: Myth. Ritual, and Meaning in Architecture P79

The gate is a starting point of spiritual threshold in the contemporary Chinese garden, it is the beginning of a journey, and it also is a departure from one configuration of objects and circumstances to another. The gate offers a promise, a lure, and it instills curiousness for people to stride over and begin a sacred passageway. There is a main gate, created by a part of the curved wall which is located at the beginning of the central route in the contemporary garden design intervention. It represents the commemorative arch that was so much a feature of the public architecture of traditional Chinese urban spaces, erected as monuments to mark the life of outstanding local figures. A gate is located in a skewed cross link. This gate is intended to represent the idea of friendship between all peoples, those of New Zealand and China in particular. Gate is a transition from external to the internal, it brings people into a calm environment from the chaos, it is a symbol of death and resurrection, and it opens through the infinite energies of the cosmos, entering into human life. "There are essentially



Figure 34: Entrance, The Temple of Heaven, Beijing, China

three ways of approaching a gate: the direct frontal assault of a straightaway path, the oblique sidestep that delays the approach and reveals new perspectives of experience; or the curving spiral that meanders about before entering."³⁴ The gate creates meaning of polarity which embodies life and death, beauty and ugliness, good and evil, hope and fear, which blind us to a limited being. You might want to pass, but you might want to stay; you are curious, but you are afraid; you love her, but you hate her, to be or not to be. It creates a mysterious boundary between inner and outer worlds. When a large stone, as a piece of art, is placed inside a gate in the contemporary Chinese garden, it is called a guest stone. A threshold stone indicates the boundary between the chaos of the outer world and the harmony of the garden within. The stone makes a deferential gesture of welcome. In the 'spiritual microcosm', the gate not only visually leads people to focus on a direction of the three dimensional natural landscape, but also leads people to experience the mysterious circumstance both physically and psychologically.

The pathway represents the beginning of a journey and time of transformation in this contemporary garden design intervention. Different path configurations symbolize different psychological circumstances. They are the ways to gain knowledge and awaken consciousness. "Architecture can embody this formula by serving as a link between mind, body, and the natural environment. Architecture can shape the route to transformation out of the tangible stuff of our everyday lives." External and internal paths create five elements that mold the experiences of the journey: configuration, stepping-stones, bridges, stairs and layers of unfolding. They are assistants that support the traveler's progress and guide their ways by offering traces to future development. Each of these elements creates spiritual paths in this contemporary garden and leads people to experience the transformation from unknown to known, from physical to spiritual. The path creates a human transition from depression to happy, from desperation to hope, and from ignorance to knowledge.

There are three types of path created during a journey: linear, radial and spiral. There is a linear pathway located in the centre of the entire garden. A linear path is a straightforward direction leading people step by step to the resolution of a conflict. It is a reflection of a corridor in a building or a footpath in a garden. This design intervention as a contemporary garden is created by two main architectural forms: a circle and a square. In traditional Chinese philosophy the earth is represented by a square, and heaven by a circle. When a circle and a square are adjacent to each other as well as are linked by a central pathway, this linear passageway symbolizes the connection of heaven and earth. "Spiral paths map a stream of consciousness that expands to new dimensions while referring to the source of its existence." At any point on the spiral arrangements the history of past actions leads to that spot and specify the direction of future growth. The path creates a network configuration; it also provides a communication opportunity when people reach a vital point.

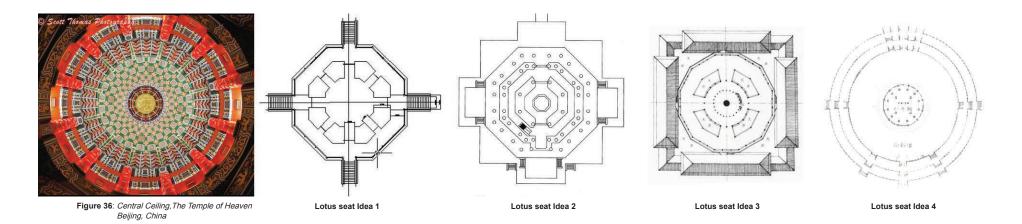
Lawlor, Anthony. *The temple in the house: finding the sacred in everyday architecture* P32





Figure 35: Pathway, The Water Temple, Hompuki, Japan

The Lotus seat is a final destination of the journey, and it points the way to the goal. "Techniques for transforming mind and body, as well as intellectual knowledge, are merely vehicles for ferrying us to the luminous shore of truth, consciousness, and bliss."³⁷ The lotus seat typically is created by enclosed architectural forms including circle, square, rectangle, hexagon, or octagon, it indicates four directions, north, south, east and west. In the design intervention, a 'lotus seat' is a sacred place reflecting the inner harmony of balance and symmetry; it also offers a microcosm of time and space. The centre of the lotus seat is the core of the garden world which symbolizes the infinite source of energies. When people pass through pathways and arrive at the lotus seat, this is where the end point creates a peaceful fulfillment for washing the soul. It is a rebirth and the recovery of self. Enter a spiritual microcosm and the circumstance recreates the universal pattern of returning to the source and reconnecting with the springs of eternal life. It is a scared journey that reminds us that life can pass through the gates of duality, travel the path of knowledge, and come to the lotus seat of fulfillment.



37

Lawlor, Anthony. The temple in the house: finding the sacred in everyday architecture P44

B: Space / Exterior / Interior

"Floors, walls, pillars, and roofs join forces to shape habitable space, the elusive archetype that offers up the ultimate mystery: 'from the nothing the beginning, from the nothing the increase, from the nothing the abundance.' Declare the Upanishads."38

Space is not created by architecture, but it is revealed by it. An entire contemporary garden space shall be defined in both exteriority and interiority. This design thesis is challenging a garden space, which is not only enclosed by limits of geometrical forms such as floors, walls, pillars and roofs, but also it might be created by the natural environment and also is sheltered by invisible elements such as air and sounds. The five senses of sight, smell, hearing, feeling and taste are essential human perceptions to assist people to understand how the natural garden space creates a unique interior enclosure. Chinese gateways create gates to the human soul. A perspective view from the gate orienting our attention to the open passageway reveals a space shaped as a visual art which might be formed by walls, roofs, columns and merged with nature. This unique interior enclosure seems a passageway, or a space, that brings together the inside and the outside world. It is psychological as much as physical. "Of all architectural elements, most directly display the qualities of consciousness, like pure awareness, it has no tangible attributes, but takes on the characteristics of the center of all physical pursuits." It is nonphysical, but it is the core of physical pursuits.

This contemporary Chinese garden is surrounded by psychological walls of mountain-scapes and cityscapes mostly but it integrates with some solid walls somewhere inside of the garden to divide spaces (exterior space and interior space) thus reforming places and create new domains. In this garden design intervention, the walls as a metaphor express the consciousness of separation and enclosure. This fundamental element differentiates the internal world from the external world and separates floors from roofs to create habitable spaces. Walls are shaped as a secure place for people not only in a physical way, but also in a psychological aspect. When this contemporary garden is simultaneously embraced by mountain 'walls' and city 'walls', it is challenging to use concrete walls to create an urban interior enclosure. When two walls cut through the ground, the grass becomes the floor, enclosed blue sky becomes the ceiling. This is another evolution of definition of an interior space; it is an urban interior enclosure that represents 'reciprocal interaction' between physical architectural form and landscape. Exteriors become interiors, and interior become exteriors.

³⁸ Lawlor, Anthony. The temple in the house: finding the sacred in everyday architecture P87

³⁹ Ibid P88

Tadao Ando mentioned, "In my building, walls play a dual role, serving both reject and affirm. By positioning a number of walls at certain intervals, I create openings. Walls are freed from the simple role of closure and are given a new objective. They are calculated to accept even as they reject." ⁴⁰ Physical walls in this contemporary garden are different from the solid walls in traditional Chinese gardens. Physical walls enclosed the entire garden and created a boundary between an inner world and outer world in some traditional Chinese gardens in a traditional way. But this design intervention challenges some physical walls as they are able to cut through the ground just as amorphous and immaterial elements such as sunlight, sky, wind, air and landscape, which creates a close relationship between the internal world and external field, the boundary of underground level, internal world is located below the ground and external world is above. How tense the relationship is, depends on the 'cutting method' of deep, shallow, straight or oblique, and different ways of creating different interior and exterior spaces. Somehow, this is not a cruel or destructive way, but it is a new method to create a sacred microcosm. Solid walls in this design intervention become an orientation device to lead visitors on a path to distinguish spirituality from physical domains, just as from a city to a garden, from ground to underground, from noisy to clam, and from bright to dark.









Figure 37-40: Walls, The Water Temple, Hompuki, Japan

Kenneth Frampton, Tadao Ando: buildings, projects, writings P449

C: Lights / Shadows

"Light is the origin of all being. Striking the surface of things, light grants them an outline; gathering shadows behind and gives them depth. Things are articulated along borders of light and darkness, and obtain their individual form, discovering interrelationships, and become infinitely linked. Light grants autonomy to things and, at the same time, prescribes their relationships. We might even say that light elevates the individual to distinction in the context of its relationship. Light: the creator of relationships that constitute the world; yet although the origin of all being, it is by no mean an immobile source. Light is, rather, tremulous motion – out of its ceaseless transformation, light continually reinvents the world."

Light and shadow like a twin, cannot exist separately. Light connects spaces and forms as well as gives objects existence. The appearance of shadows is changeable within architectural space when light varies in intensity with the shifting of time and changes of seasons. It creates an interaction of light and dark is based on personal spatial experiences, whether interior or exterior. Light is a primary factor in the contemporary garden intervention; it is a Yang force bringing inexhaustible energy to each corner of the garden spaces as well as giving the underground interior spaces warmth, vitality, balance and harmony. Light is creating, transforming and colouring the garden environment.

In this contemporary Chinese garden, light has a transitional inflow from open to semi-enclosed. Light entering into natural plants will continue extending, and finally flowing into every corner of spaces. Some spaces such as the underground stairway and lotus seat reveal a special soft beauty when light enters through the interior space. Perhaps because of this kind of special light transition, it creates a unique and contemporary style of architecture with poetic spaces. Pavilions, columns and bridges inside of the Chinese garden become clearer and softer under the light. The shadow of the moon, the shadow of plants and the shadow of water were the tools to read light in this contemporary Chinese garden. They produced a profound spiritual imagery. Lights create different effects in this garden depending on the amounts of lightness or darkness. Lights in the garden gather in a long and narrow dark pathway underground, suddenly become extensive underground and then when moving onto a pathway with bamboo grove beside, create indistinct shadows. Architectural forms in the garden become more outstanding, brighter and significant under the light. This is a special and essential part in this Chinese garden.

⁴¹ Kenneth Frampton, *Tadao Ando: buildings, projects, writings* P470



Figure 41: Light and shadow, Church of Light, Osaka, Japan

VI Conclusion

This whole thesis used the most iconic Chinese architectural symbol, the Chinese Garden, as a vehicle to design a contemporary Chinese garden. This contemporary design intervention is an incorporative product of four types of traditional Chinese garden, it represents connotative traditional Chinese philosophies but it wholly disengaged from Chinese traditional architectural design. Through the analysis of these four major Chinese gardens, and an exploration of their respective characteristics, symbols, theories and philosophies, essential garden elements of mountain, water, rocks and plants have re-interpreted into this contemporary garden design intervention by a contemporary method. When the Dunedin traditional Chinese garden used the traditional garden making method of 'blocking up' the entire garden with enclosed walls to hide western urban contexts; this contemporary garden design intervention challenged an opposite way of a Chinese garden that is not only installed within a noisy city center, but also incorporating western urban contexts into the garden site to become part of the garden elements. This contemporary design intervention is a new translation of traditional Chinese philosophies; it will be an evolution to Chinese contemporary garden, not only within China, but also outside of China.

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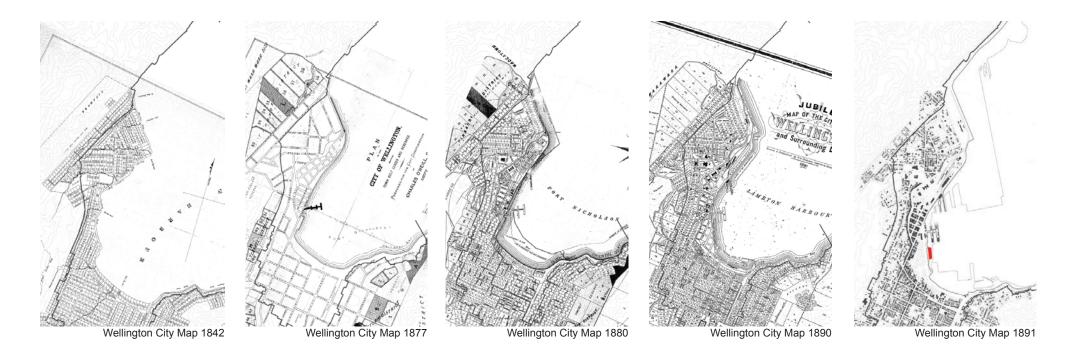
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PART B: SITE ASSESSMENT

11: Urban context - Wellington Central City



Reclamations in Lambton Harbour

Land was scarce in Wellington from its conception, when 1100 town-acre lots were pegged out in 1840, with few spaces for public buildings or parks, and public access to the harbour restricted to the northern end of the city. During 1870s, there were around 70 acres of land that had been reclaimed by the government and provincial and city councils. The Wellington harbor board was formed after 1880. There are a few major developments, including reclamation north of Pipitea precinct for railway land, and south of Queens Wharf the Te Aro area was extended seaward with reclamations. By the end of the 19th century the 1840 shore line had disappeared. In the 1960s and 1970s, reclamation as carried out on both sides of Queens Wharf and the container terminal was created by a large reclamation at Thorndon. The Frank Kitts Park was appeared after 1890s.



Figure 42: Panorama of the city centre taken from Mount Victoria

11: Urban context - Wellington Central City

The Frank Kitts Park is located on the waterfront of Wellington. It is approximately 18,000 square meters in area, and it has become a vital green park and a centre for outdoor activities both on and off the water. It is surrounded by mountain-scape and cityscape; the natural conditions allow for designing a contemporary Chinese Garden to integrate with mountains, water, plants and architecture. Frank Kitts Park is an open site located adjacent to a relatively noisy urban environment and it also neighboring to the busiest main road – Jervois Quay. As such, Frank Kitts Park is not a 'perfect' existing site for designing a traditional Chinese Garden. This site has important 'positives' and also potential 'negatives'.

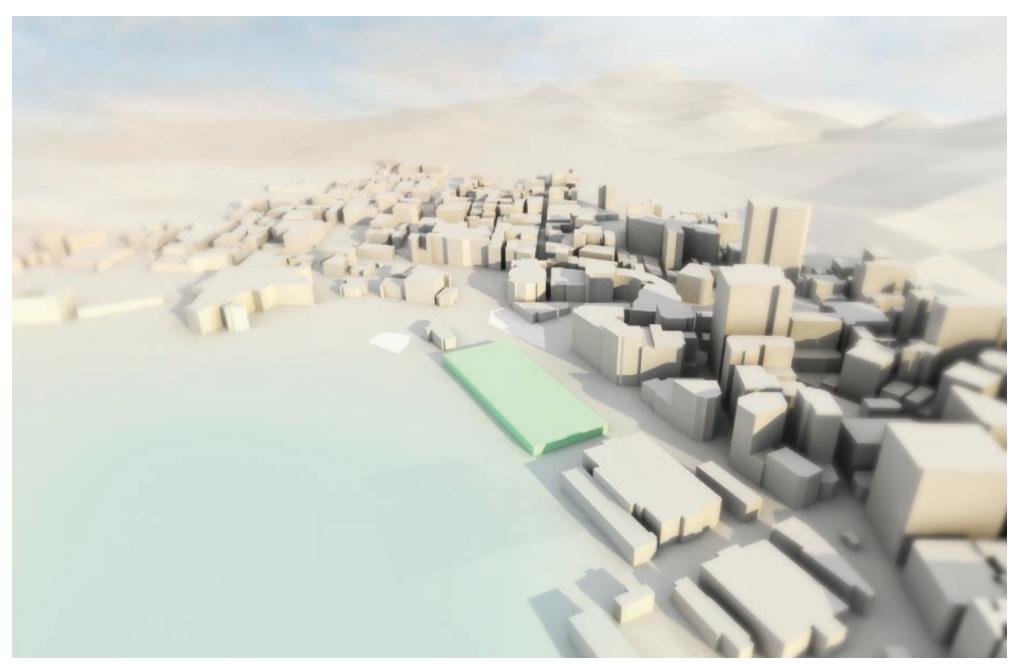
Positives:

- Nearby the sea side and a lagoon
- Has far-off mountain-scape scenes
- Flat land
- Excellent sunlight and good 'Chi' (air floating)
- Mountain (shan) and water (shui) views

Negatives:

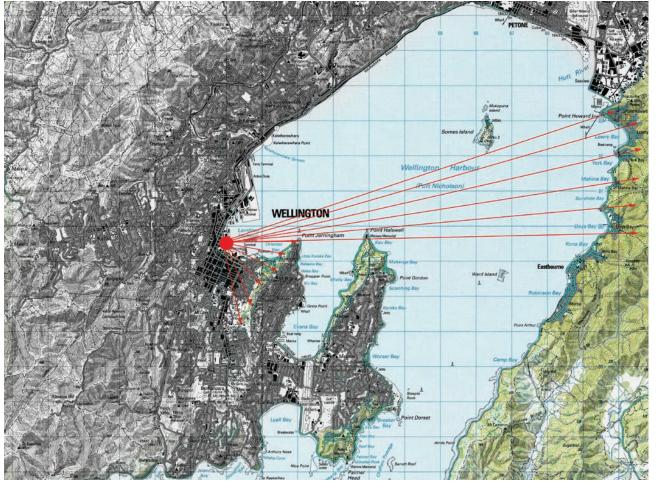
- · Located within a central city
- Nearby main road and busy streets
- · Heavy traffic during day time
- Noisy
- · Nearby tall commercial buildings

The 'negative conditions' of this site are that it is located in an inner city, and it also connects to busy streets with surrounding noises. But the 'positive conditions' of this site are that it is beside a lagoon and the sea, which have the essential garden elements, Shui (water); mountains from the Southern and Eastern sides surround the site, which has another essential garden element Shan (mountain). This design thesis will take the 'negatives' and translate them into positives in a contemporary way. Integrating negatives such as cityscape, streets and people into this garden, buildings become artificial 'mountains'; streets become extensions of pathways; and pedestrians become visitors in the contemporary garden.



Rendered Perspective - Frank Kitts Park is located within Wellington Central city

11: Urban context - Wellington Central City





Mountains on the East of Wellington - Eastbourne



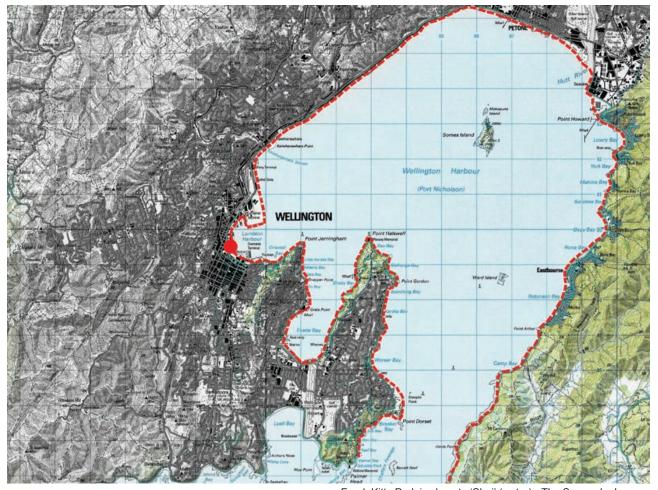
Mountains on the Southeast of Wellington - Oriental Bay



Frank Kitts Park faces to 'Shan' (mountain)

Mountains on the South of Wellington - Mount Victoria

Frank Kitts Park is located in the central Wellington city. It faces towards the far-off mountains on the East as well as facing to close mountains on the Southeast. The mountain element is essential in a Chinese garden making method; their arrangement (far-off and close up) also created a 3-Dimensional Chinese landscape painting. When visitors walk on the site, the contextual environment created an 'eye' for enjoying precipitous mountains, and highlighted the moods of changing seasons. Mountains represent 'dragon' in Chinese Fengshui principle, when a site is located near to mountains or hills, it will suffer from poor crop growth and as well as will be protected by dragon.





Close to a lagoon



Near The sea

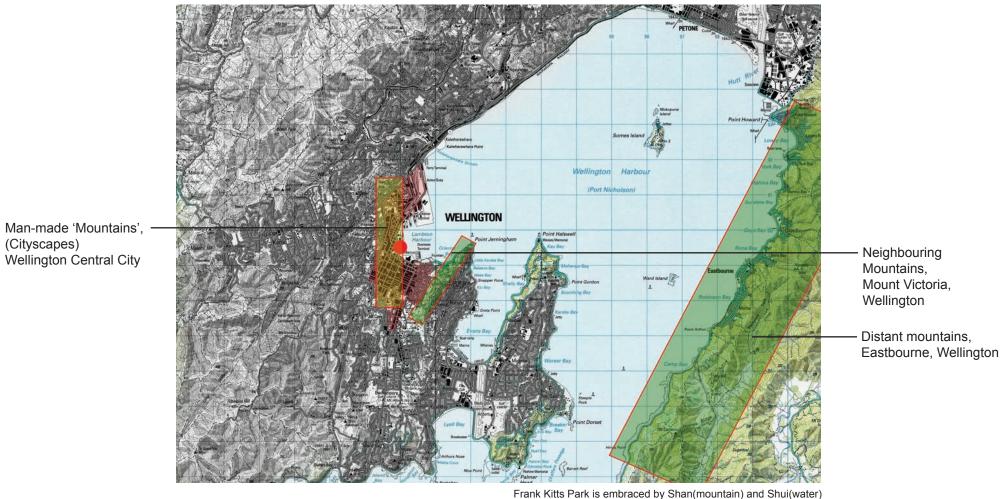


Frank Kitts Park is close to 'Shui' (water) - The Sea and a Lagoon

Aerial view of Wellington Central City

Eastern Frank Kitts Park is near the Wellington harbour, and it is embraced by water. The sea as contextual natural resources occupies an important place in a traditional Chinese resort scenery Garden. Water forms the earth's arteries and also symbolizes both life and feminine principle of universe (yin). Its flat surface works like a mirror and seems to increase the dimensions of the surroundings. Water is essential to the representation of nature as a whole, and its horizontal line counterbalances the effect of the mountains.

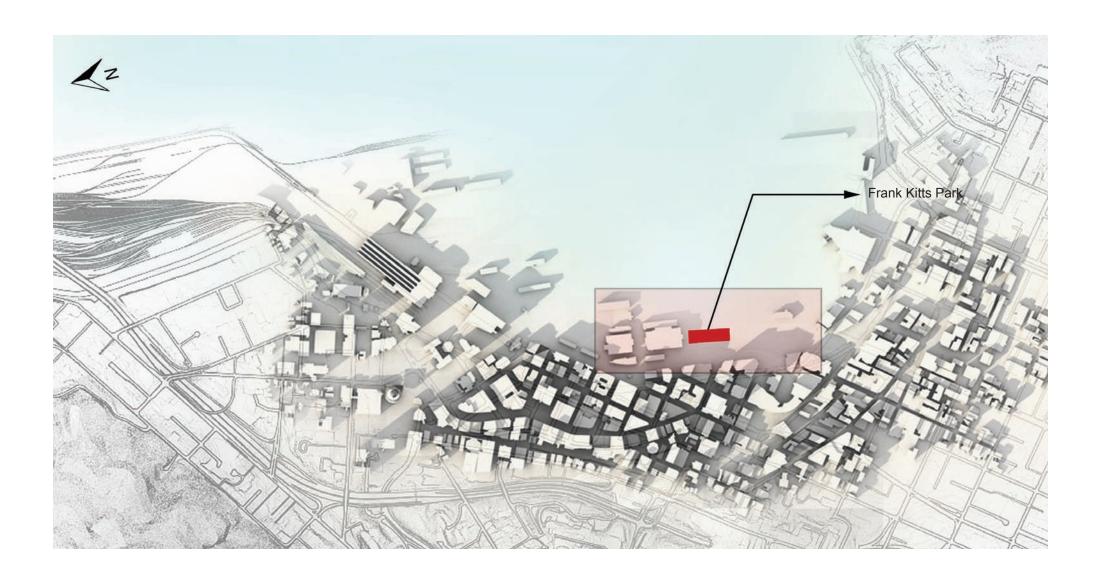
11: Urban context - Wellington Central City



Frank Kitts Park is embraced by Shan (mountain) and Shui (water). When the site connects to the nature (Shan-Shui) and it also is surrounded by nature, the nearby natural resources bring a good flow of Qi (air) to the site. Without Qi (air), everything will die. Qi is in fact the most important theory in Fengshui principle.



In fact, inner-city sites are not intrinsically suitable for Chinese garden making. Frank Kitts Park is adjacent to the main road, Jervois Quay road, and Western Frank Kitts Park is blocked up by dense commercial buildings. The noisy environment, crowded people and busy streets in the inner Wellington city are disadvantages for a traditional Chinese garden making with a traditional way. But they also are potential 'negatives' for making a contemporary Chinese garden by a contemporary way. Man-made city-scape can become part of the garden and become a 'city-wall' or 'mountains'.





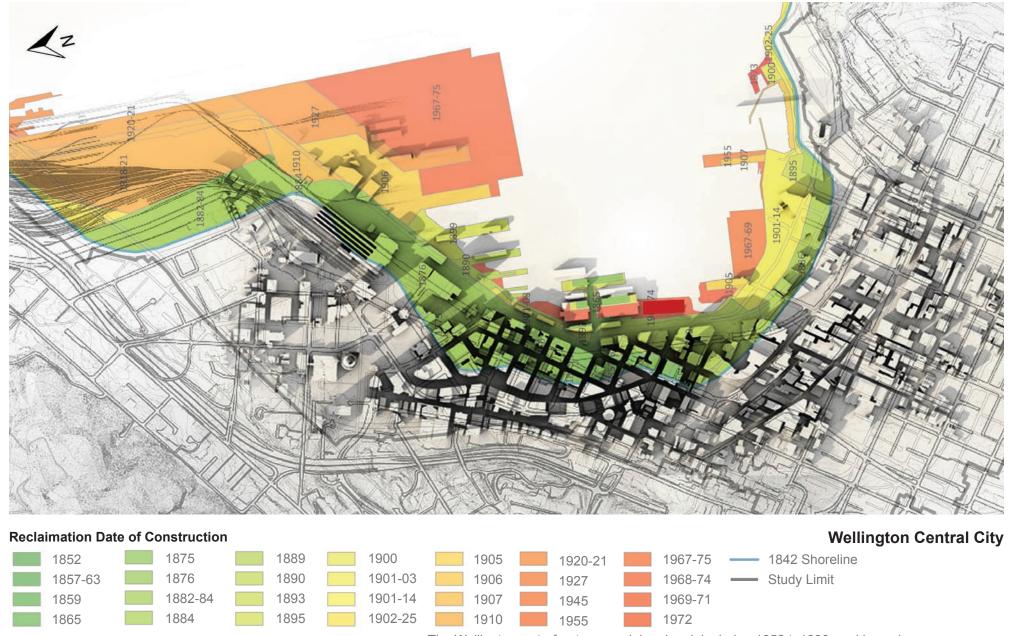
1842 Land Form - Conjecture

1842 Shore Line

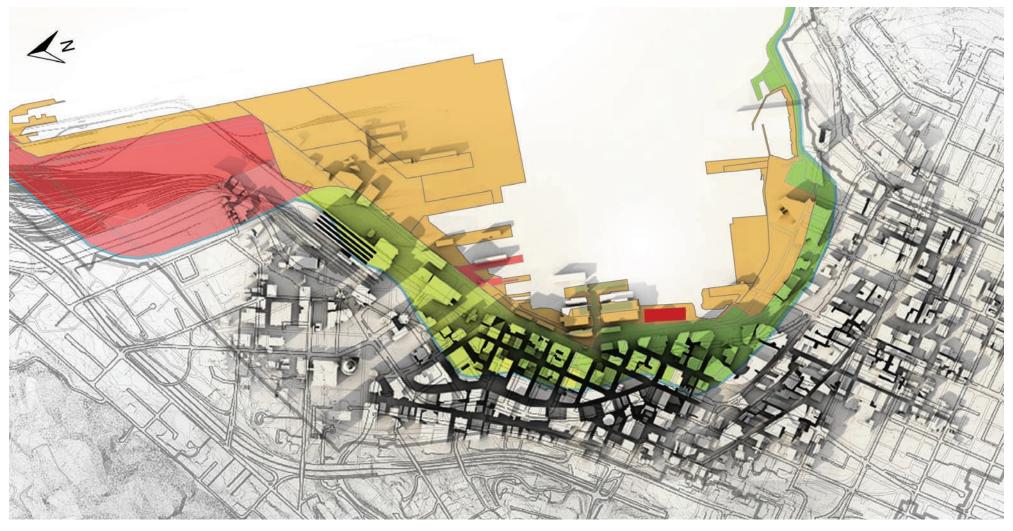
Supposed Location of Swamp in 1842

Stream as shown in Mein Smith Survey 1842

Study Limit



The Wellington waterfront was reclaimed mainly during 1852 to 1890, and long shore areas were reclaimed around year 1900 to 1905. Frank Kitts Park was appearance around 1960.



Reclaimation Developer Wellington Central City

New Munster Government

Private Owner

Provincial & General Government

Provincial Government

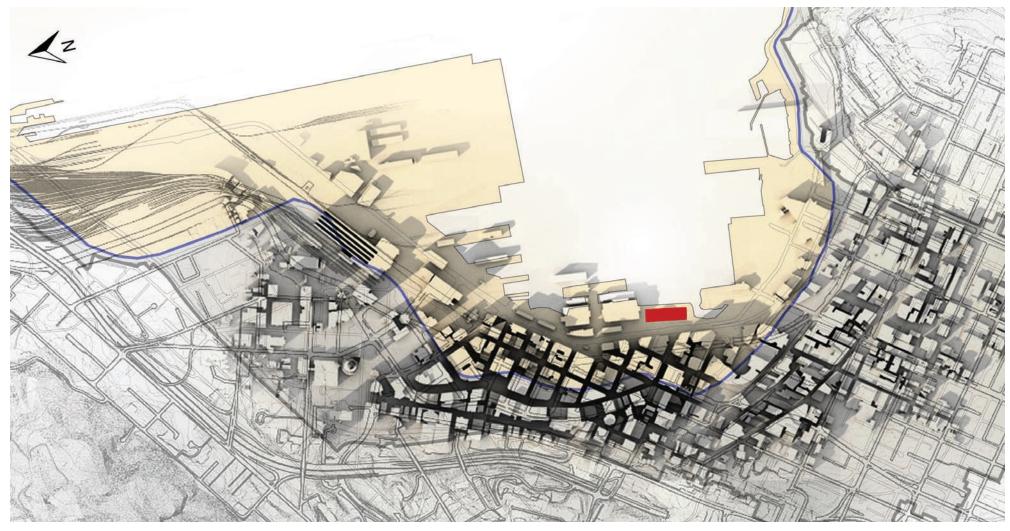
Wellingt

unknow

Wellington City Council

Manwatu Railway
New Zeland Railway
Wellington Habour Board
unknown
1842 Shoreline

Frank Kitts Park is part of a habour context; it belonged to the public space in the central city.



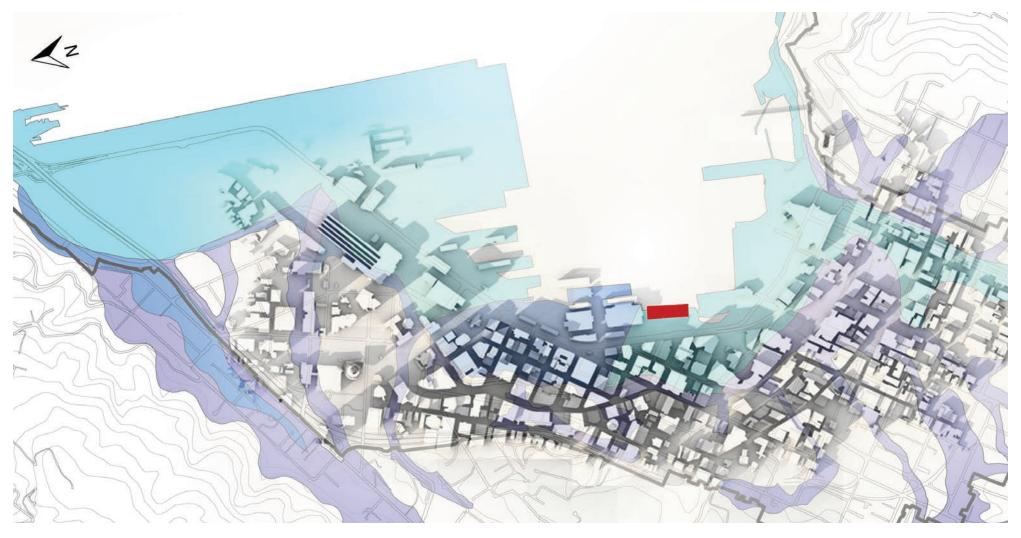
Reclaimed Land Wellington Central City

Non reclaimed Area, 412.7 hec.

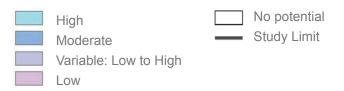
Reclaimed Area, 185.4 hec.

— 1842 Shoreline

Study Limit



Ground Liquefaction Potential



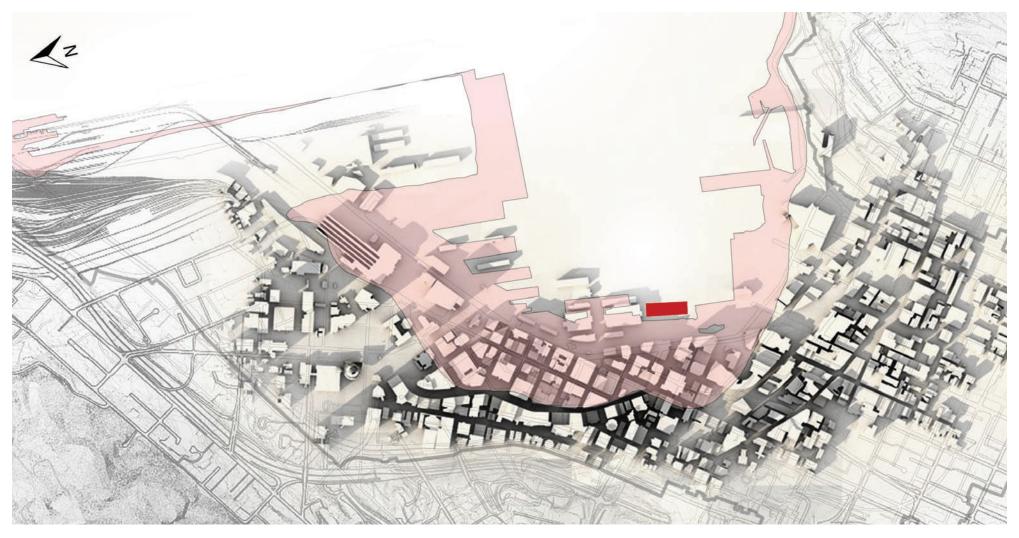
The liquefaction potential rating is based on soil type and strength, groundwater level, and the location and strength of earthquakes. Areas of Frank Kitts Park rated as having "high liquefaction potential" have soil types and strengths that are the most prone to liquefaction.



Wellington Earthquake Fault Lines

Fault line
Study Limit

This site analysis shows the most active Earthquake geological faults in the Wellington central city, and the Wellington Fault forms distinctive landscape features running right through the central city.



Area of Land Under Inundation Threat Due to Tsunami Risk

Area under Tsunami Inundation Threat

Study Limit

A tsunami of that size would threaten Wellington's commercial heart – the waterfront, the central business district and all the flat land as far south as the Basin Reserve.



Parks and Green Spaces

Wellington Central City

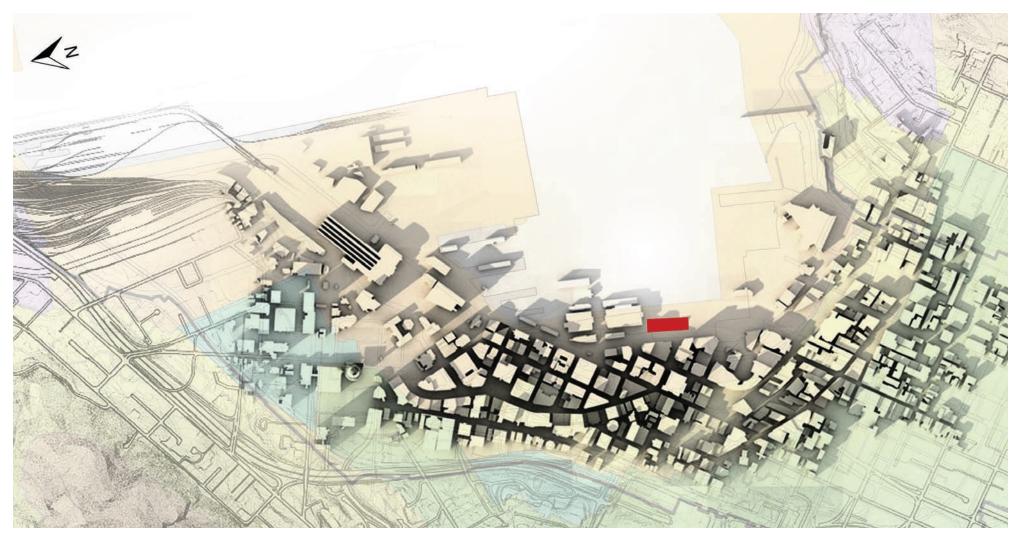
Sports Fields

Parks, Vegetation Area, Green Spaces

Building Footprints

Study Limit

Frank Kitts Park is the nearest green park in the Lambton Quay for office workers to relax, play or have lunch.

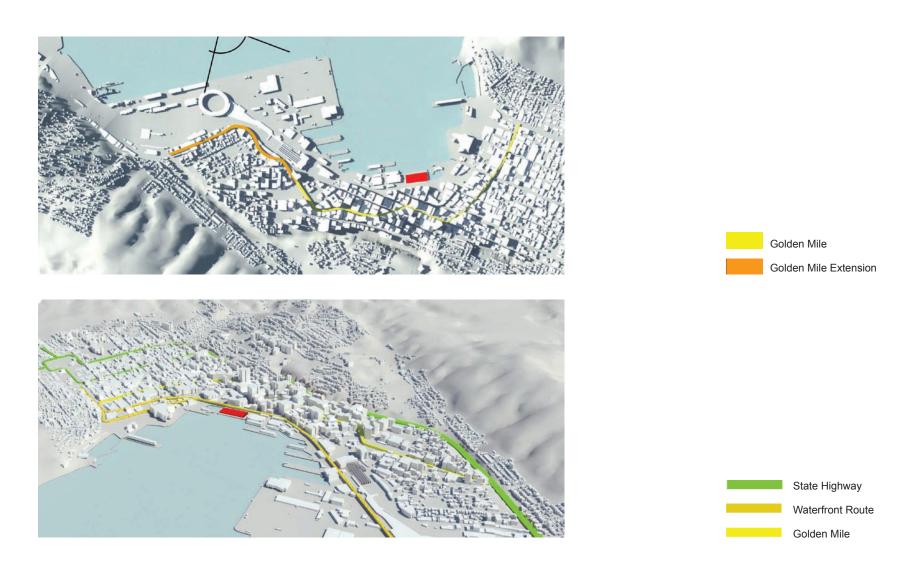


Wind Zone Determined by BCLS- Impacting Building Design



Frank Kitts Park is located nearby harbour and reaches a very high wind zone. The negative windy weather becomes a positive condition for a Chinese garden making on the site; wind brings good Qi (Air float) to the Frank Kitts Park.

11: Urban context - Wellington Central City



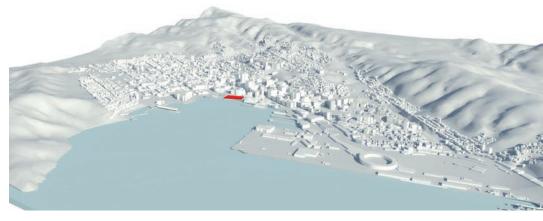
These diagrams show the major traffic routes in the Wellington CBD, and these routes bring people to the Wellington CBD from South and North side mainly. The Waterfront Route is an important road adjacent to the Frank Kitts Park site, which will become one of the extensions of the garden paths.



Site Evolution Wellington 1842 Original Land Form - Conjecture



Reclaimed Land as in 2009



Reference: Rendered Map, Wellington City Council, 101Wakefield Street, Wellington, New Zealand

Wellington Actual

11: Urban context - Wellington Central City



This section shows a diagram of sunlight analysis in a summer and winter season for the Wellington CBD, it indicates a different sunlight movement in the morning, noon, afternoon at night time. Sunlight is a vital natural element that controls this existing opening of Frank Kitts Park, its' changeable movement gives the site different surfaces of lights and shadows, and it also influences visitors' feelings and moods when experiencing this contemporary Chinese Garden.

12: Site Analysis – Frank Kitts Park



Frank Kitts Park, East side



Frank Kitts Park, South side

12: Site Analysis – Frank Kitts Park

Diagram 1:

The site of Frank Kitts Park is adjacent to the main road Jervois Quay, which connects to north Wellington suburbs and south Wellington suburbs. These three major parallel streets Hunter Street and Harris Street link to main road and created three skewed cross point between the city side and Frank Kitts Park.

Diagram 2:

Two sides of the Frank Kitts Park are surrounded by water, south side is near to the clam lagoon and east side is adjacent to the wide harbour. This arrangement has a positive natural environment for a Chinese resort scenic garden making. It has not only created a soft and harmonious atmosphere, but also brings good air flow to the site.

Diagram 3:

Frank Kitts Park is located within a city and is adjacent to dense commercial buildings on the west side. This negative site condition has potential to achieve a opposite garden making way, which is taking the disadvantages to become advantages, solid buildings become yang and masculine 'walls 'or 'mountains' to be part of the garden element.

Diagram 4:

When the cityscape becomes garden 'walls' or 'mountains', streets of the city become extensions of the garden paths. Parallel streets connects the site toward to the water side, it is a path to approach a sacred space from a secular space.











12: Site Analysis – Frank Kitts Park

Diagram 5:

Red lines indicate an internal circulation of the Frank Kitts Park. The entire site is enclosed by a outer pathway, and it has been divided to two major parts by a skewed central path, left part is mainly green park and right part is an existing Wilson car parking building with green park above.

Diagram 6:

Two major skewed streets connect to the site; the middle street creates a straight view towards to the mountain and sea view from the city side. A horizontal path connects the north city buildings and south lagoon, it creates a skewed cross point with the middle oblique street, which become a vital pivot on the Frank Kitts Park.

Diagram 7:

These dots indicate different noisy environments on the site. Jervois Quay with busy traffic creates a noisy environment, as well as these dense commercial buildings accommodate a large number of office workers. During the lunch time, office workers come down and gather on the streets.

Diagram 8:

Frank Kitts Park is divided into four major green spaces by a horizontal path and a skewed path. These green spaces offered a green playground for people to relax, play and enjoy.



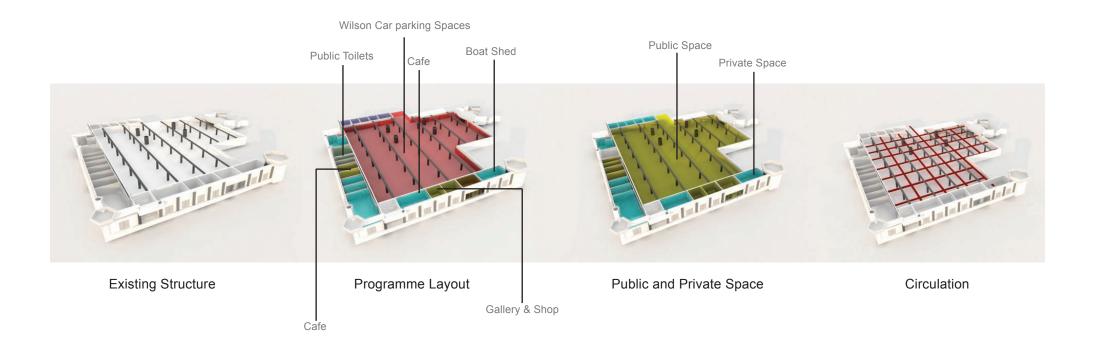








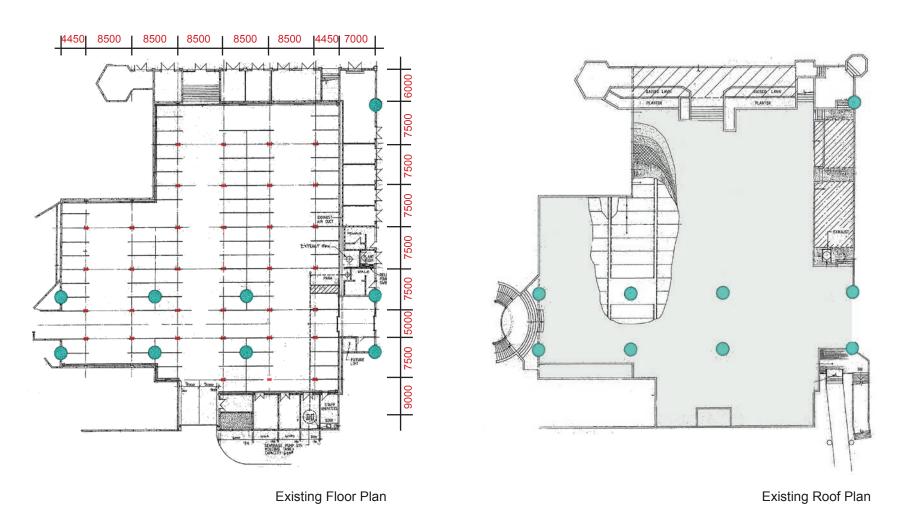
13: Existing Building Analysis - Wilson Car Parking Building





Wilson Car Parking spaces

13: Existing Building Analysis - Wilson Car Parking Building



The Frank Kitts Park is constructed from seven major concrete columns (800mm Diameter) and thirty-five precast concrete driven piles (350 x350mm). The existing floor plan shows regular dimensions between each structural grid. The roof on the Wilson car parking building is arranged as a green park links to the rest of the green park spaces on the Frank Kitts Park.



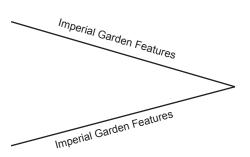
Existing East Elevation

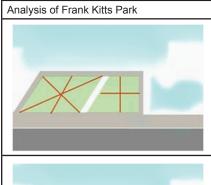
These existing elevations show façades and a physical boundary of the Wilson car parking building. West elevation shows a sloping pathway connects to the roof of the car parking building and rest lower green park spaces. A South elevation faces to the lagoon, and there are public toilets, a café and boat sheds services available for people to use. An East elevation faces to the sea side and it is a longitudinal edge of the entire park.

PART C: DESIGN INTERVENTION

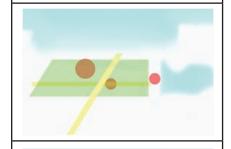
14: Design Matrices

Traditional Chinese Garden Layout	Chinese Garden Methods
1	Imperial Garden:
= - =	Imperial Gardens are on a vast scale, fully-formed layout, completely functional, fully equipped and extravagant. The layout of Imperial Gardens is divided by symmetrical lines in order to keep a balanced system between left and right.
	Imperial Garden:
— E *	The symmetrical layout embodies the powerful royal authorities and a solemn atmosphere, symbolizing the paramount status of the emperor.
	Private Garden:
	Private Gardens are created mainly by water, and merged with 'mountains', rocks, plants and architecture.
	Imitating nature is a fastidious way for private garden-making within the small scaled garden.
	Monastic Garden:
	Monastic Garden is a sacred place of the 'god'; it represents the Tao philosophy of 'Heaven on the Earth' and the Buddha philosophy of 'Islands of the fairies'.
	Scenic Resort Garden:
	They take advantage of the lay-out of existing and near-by natural mountains and water to match the surrounding environment and to construct garden architecture, in order to develop a public Scenic Resort Garden.









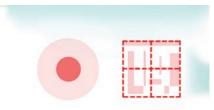


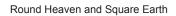
Monastic Garden Features

Private Garden Features

Scenic Resort Garden Features

New Design Diagram







Pathway creates an enclosure



Skewed pathway creates pivots



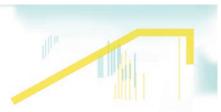
Hierarchical stairway



Different pivots



Paths connects heaven and the earth



Skewed path crosses a stairway



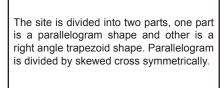
A central path divides spaces



An asymmetric arrangement



Circle and rectangular shapes create an interior enclosure

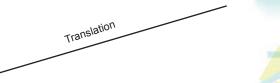


Existing site conditions

Green zones are located asymmetrically within the site. A horizontal path divides Frank Kitts Park into two irregular parts.

Red circles indicate a few circular architectural forms in the park: a circular water fountain, the entrance to the car parking building and a circular landscape terracing, which are irregularly located in the garden.

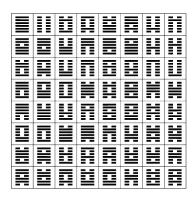
Frank Kitts Park is near to a lagoon and adjacent to the sea, it is embraced by mountains. These natural conditions bring a good Fengshui and spiritual atmosphere to the site.



Re-interpretation

15: Design Approach





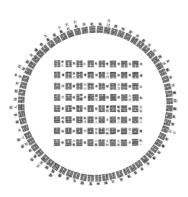


Figure A: 'Yi Jing Needle'. The Yijing needle is a reflection of the earth. It is a small universe which is divided by two opposite poles, one is Yin and one is Yang; one is the heaven and one is the earth. These two poles are divided by four animal symbols: Tortoise (Black Warrior), White Tiger (Kirin), Red Bird (Phoenix) and Dragon. These four animal symbols are then divided by eight diagrams representing eight natural phenomenon in the universe, sky (Northwest), earth (Southwest), thunder (East), wind (Southeast), water (North), fire (South), mountain (Northeast), and pond (West).

Figure B: 'Yi Jing Hexagram'. The square is a metaphoric notion that reflects a level playing field when men meet and society grows. The sophistication of man to converge (in language, norms, technology etc) will decide the border of square. In ancient China, the notion of square encompasses the four cardinal directions of the known world from the center of city wall up to border of the sea and the Great Wall. This is the place where man bleeds and integrates, and worldly affairs evolve. So Chinese have 64 hexagrams to constitute square.

Figure C: The figure C is created by 64 hexagrams which presents the six-bit binary combinations in two different arrangements: an eight-by-eight matrix (in ascending binary order) and a "heaven"-ordered circle. In the Yi Jing divination, each line of the result can be either static or changing (the resulting hexagram is always turning into some other hexagram). This gives 4096 possible readings.

"If from the 12-line diagrams we continue generating undivided and divided lines, eventually we come to 24-line diagrams, for a total of 16,777,216 changes. Taking 4,096 and multiplying it by itself also gives this sum. Expanding this we do not know where it ultimately ends. Although we cannot see its usefulness, it is sufficient to show that the Way of Change is indeed inexhaustible." ⁵³

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The Mystery of the Binary, http://www.pelulamu.net/binmyst

Inspiration



Figure 43: The Heaven Temple, Bejing, China



Figure 46: Chinese Traditional Architecture: Tulou Fujian, China



Figure 44: The Huangdi Tomb, Shanxi, China



Figure 47: Chinese Traditional Architecture: Tulou Fujian, China

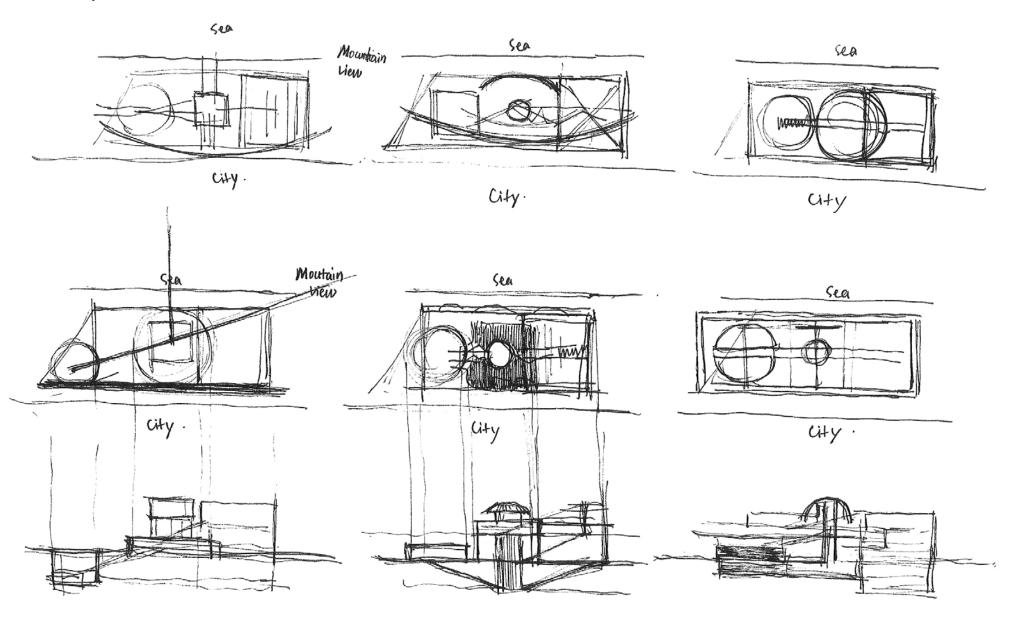


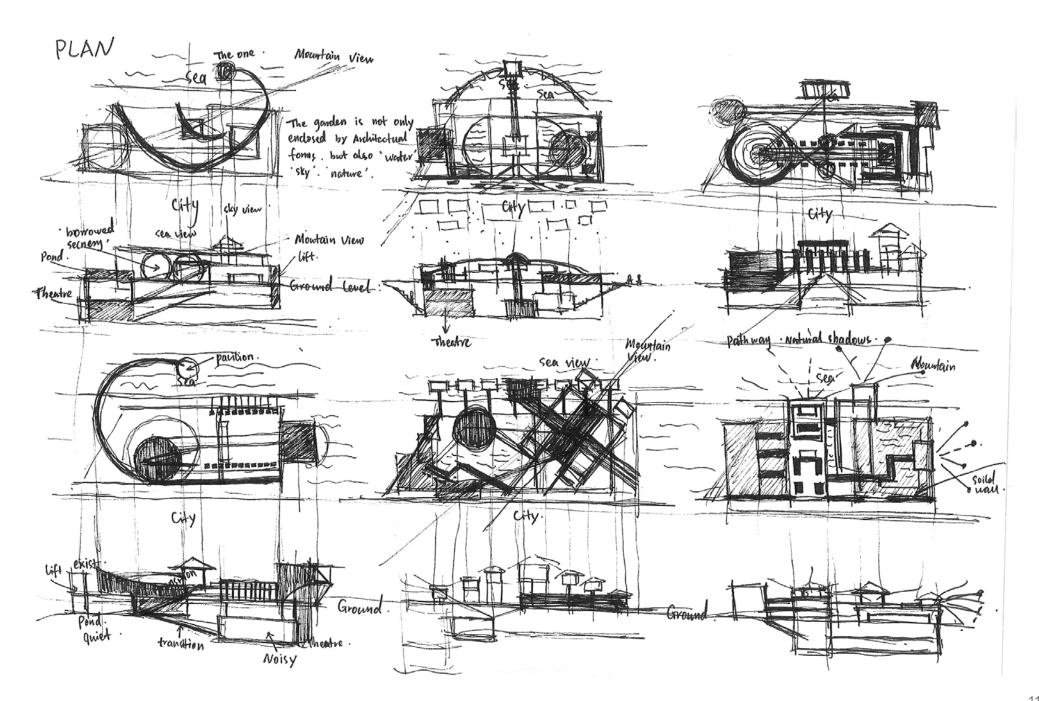
Figure 45: The Heaven Temple, Beijing, China



Figure 48: Chinese Contemporary Architecture: 'The Bird's Nest' and 'Water Cube' Beijing, China

16: Conceptual Sketches





17: Design Experiments





while the frequent juxtaposition of ordered symmetry, of man-made structures like pavilion or pagodas which conforms to the rigidity of Confucianism and represents Yang aspects of the garden.

time and space. It indicates the four directions - phasis. north, south, east, and west.

The sacred ground reflects the inner harmony of balance and symmetry; it offers a microcosm of enclosure, and hierarchy and horizontality em-

Circular paths. Circle: the word originally had magical and religious connotations, as in the ancient idea of the magic circle. Encirclement, an enclosed battleground: Area, district, area within a particular radius.



Space is not created by architecture, but it is revealed by it. An entire garden space shall be defined in both exteriority and interiority.

Yin is passive while Yang is active. Yin is void while Yang is solid.

Psychologically a bridge is an intermission through which one prepares oneself for a new space.

Water takes the shape of its container. A regular shaped pool is mechanical and strangles the water it contains.



Bridges and paths in particular have zigzag patterns to avoid 'sha chi' and evil influences.

It is a game of hide-and-seek, to hide is to increase the fun of seeking.

Walls provide defence, protection and privacy. In gardens the walls are used to define space and create distance or depth.

When two forces act in opposite directions, there lies the secrete of all creation.

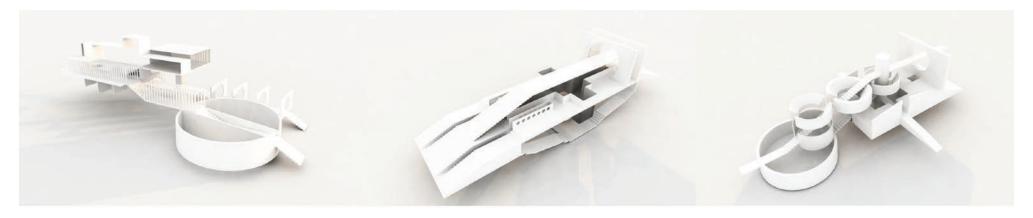


Bamboo create natural shadows, from invisible to visible.

We shape clay into an urn. It is the empty void that makes it useful. We form doors and windows for a house. It is through these empty voids that the house becomes useful.

When one is walking inside the garden or sitting idle in a pavilion one must not be disturbed by the outside world but surrounded by trees, rocks and water or birds.

18: Conceptual Design



A water pond underground is divided by a hierarchical path to two parts symmetrically; it brings visitors to a scared place from the chaos.

Two paths approach to the underground and others are located on a ground level. A central stairway drills through a round moon gate; it is a 'path' for visitors to meet with heaven.

When a central path connects with a circular terrace, visitors are enclosed by the surrounding semicircular terrace.

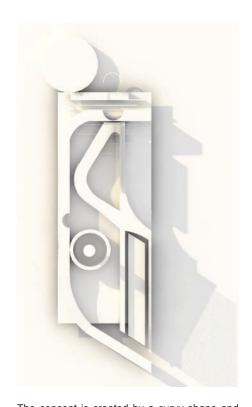


A lotus seat is a final destination of the journey; it indicates four directions, north, south, east and west. It symbolizes the infinite source of energies.

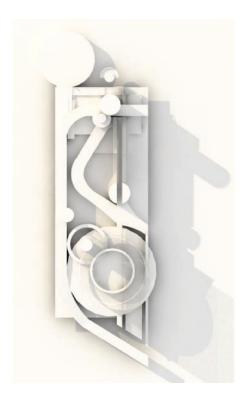
A stairway from the ground level to a higher level and link square form, this arrangement reflects a solemn and magnificent atmosphere in a traditional Chinese Imperial Garden. Continued paths lead visitors experience different psychological circumstances by different directions.

When a columnar form insert into the ground, it is 'channels' connects Yin force and Yang force, dark earth and bright sky, cold and warm.

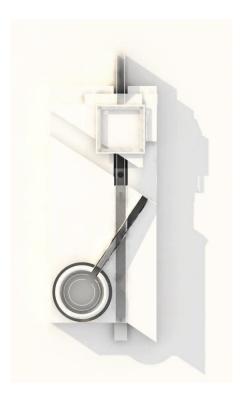
19: Developed Design



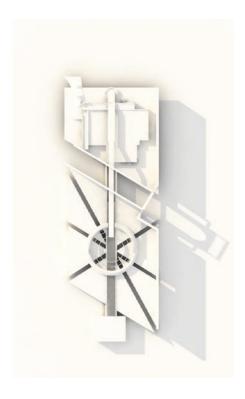
The concept is created by a curvy shape and circles which is a reflection of Yin-Yang symbol.



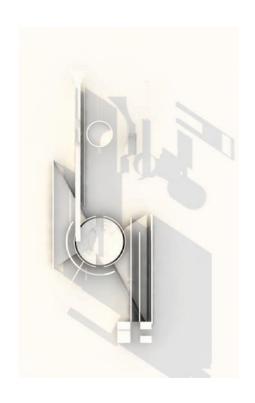
A curvy route connects two parts (Yin and Yang), one (Yin) characterized as void, diffused and passive. Other (Yang) by contrast, is solid, focused and aggressive.



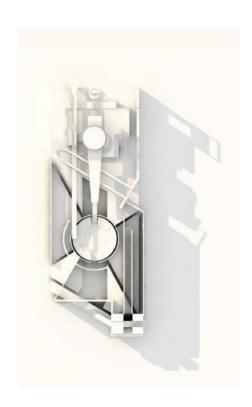
A square is divided by a vertical path into two parts symmetrically. A circle is divided into two equal parts by a skewed path. When two paths joint together, it become one path connecting a square and a circle and creating skewed pivot.



An existing oblique path separated the entire site into two parts. A vertical route is shifted to the middle of entire garden, and links to the existing car parking building as well as joint with the skewed existing path.



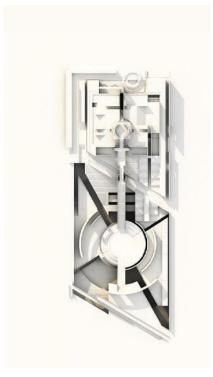
A circle is shifted to a central point of the parallelogram, points to each angle of the parallelogram. Two vertical paths link the central edge of the circle on each side.



A small circle is located above the central of the car parking building, and connects to the big circle. One is above and other is below.

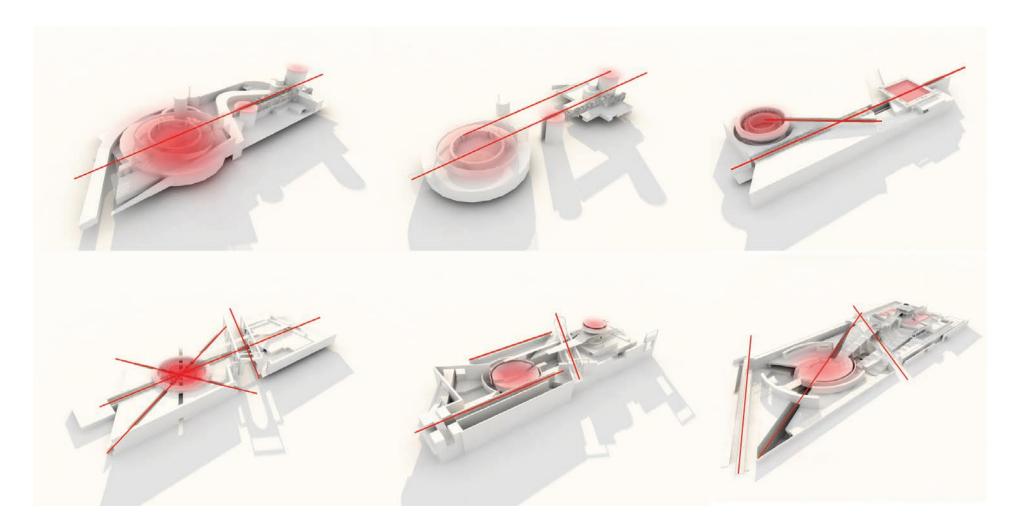


The big circle below starts to expand, similar to expansion of ripples in a pool of water. A skewed path is located on the edge of the parallelogram reflects to the existing skewed path in the middle.

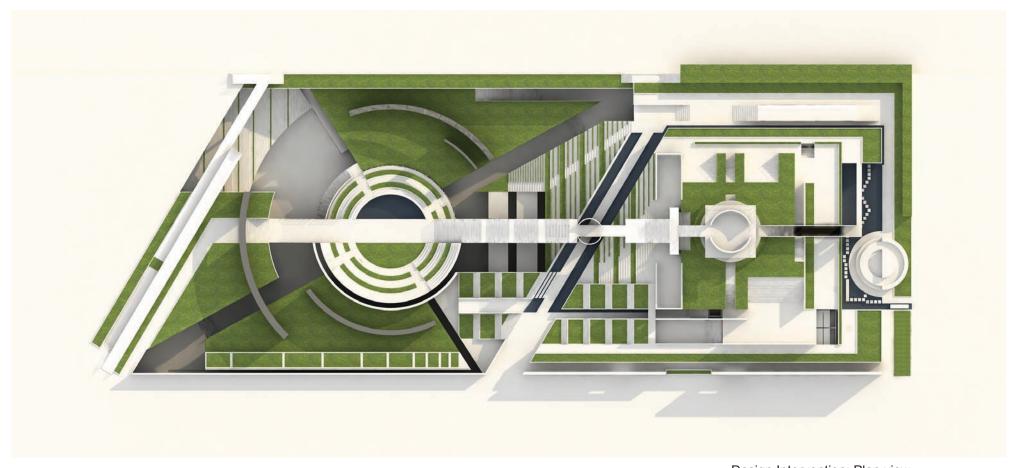


A square and a circle are linked by a central route, and create a pivot with the existing skewed path. Four paths links to each angle of the parallelogram and connect with the big circle. Different axis lead visitors experience different circumstances within the unique contemporary garden.

19: Developed Design



This group of three dimensional concepts shows a development of architectural forms. Red signs indicate the remained major architectural forms; it is shifted from an uncertain position to an appropriate position. Red lines show the potential axis point to different directions. They are vital paths leading people to experience the journey of the contemporary garden design.



Design Intervention: Plan view

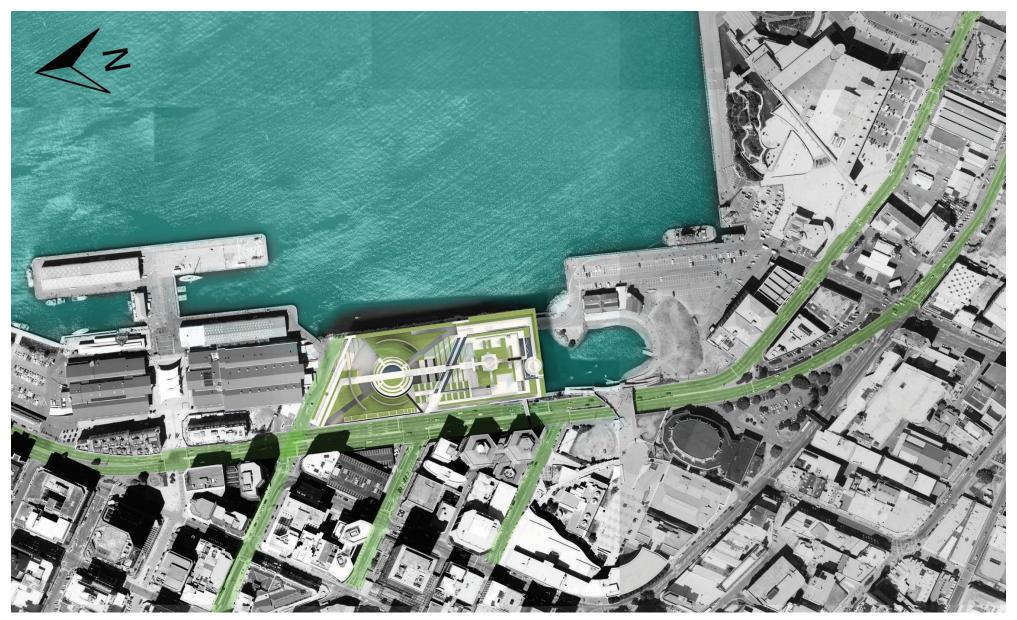
This plan shows the final contemporary garden design intervention. It has not only demonstrated a translation from Chinese traditional cultural imperatives into a contemporary architectural language, but also created a spiritual journey for people in Wellington to experience connotative Chinese theories and philosophies.

20: Design Analysis

The Dunedin Chinese garden was surrounded by high physical walls and fully installed within Western context, in order to hide Western views and Western architecture to make the whole Chinese garden look authentic and to retain its original flavor. Blocking out elements of the surrounding urban environment is a traditional way to enable visitors to experience the Chinese garden as a holistic landscape and microcosm in a Western context.

While the Dunedin Chinese garden decided to hide the western urban context through a surrounding wall, this design thesis seeks to embrace the surrounding western urban contexts by incorporating them into the garden and also demonstrating a way for traditional gardens to flourish within contemporary times. The buildings of the city are treated as the 'mountains'; the roads of the city become extensions of the garden paths. The harbour and lagoon also become incorporated into the garden such that it embraces the urban context beyond the walls of the garden itself.

This design thesis embraces western urban contexts and integrates these natural elements into the garden, in order to achieve a contemporary design intervention while still maintaining all the requisite 'traditional' garden characteristics in a contemporary way.



Design intervention with contextual environment: roads

20: Design Analysis

This Design thesis challenges the contemporary Chinese garden as a composite product of the imperial garden, private garden, monastery garden and scenic resort garden. This contemporary Chinese garden integrates the most significant characteristics of each type of Chinese garden. First of all, the layout of this contemporary garden is divided by a symmetrical route; it enables a balanced system between left and right. It is also a ritual way to approach the heaven from the earth. This symmetrical layout in an imperial garden embodies the powerful royal authorities and a solemn atmosphere. Secondly, the contemporary garden explored in this design thesis integrates with natural elements such as grass, and also merging with 'mountains', water stream, pond, plants and architecture asymmetrically. These elements are essential for a private garden-making. Thirdly, a contemporary pavilion is located in the centre of the square; it reflects a traditional monastery garden (temple) design, but has been instead defined by contemporary design intervention. This pavilion is a sacred place of the 'god'; it represents the Tao philosophy of 'heaven on the earth' and Buddhist philosophy of 'Islands of the fairies'. Finally, this contemporary garden introduces the principle of scenic resort garden which takes advantage of the lay-out of existing and nearby natural mountains and water to match the surrounding environment creating a garden architecture that becomes a public garden.

These green arrows encourage visitors to move along the axis to discover the entire garden. The axes revolve around three critical centre points: A, B and C. A is the centre point of a circle, B is the centre of a skewed cross, and C is the centre of a square. Point A reaches the lowest point and digs into the ground which creates a circular circulation and expands gradually. Point C reaches the highest point and allowing visitors to face to the North, South, West and East side. B acts as a pivot connecting to the circle and square as well as the city and sea. In Chinese mythology, the four directions, East, South, West and North, represent the four seasons: Spring, summer, autumn and winter. Together with the center, which in Chinese mythology is synonymous with China itself, they form the five cardinal points. The Four Directions are also symbolic representations of the four celestial animals, the dragon for the East, the phoenix for the South, the tiger for the West, and the tortoise for the North. Each animal has its own color: the dragon is the green of spring, the bird the red of fire, tiger is the white of autumn and the tortoise is black, for night, or water.

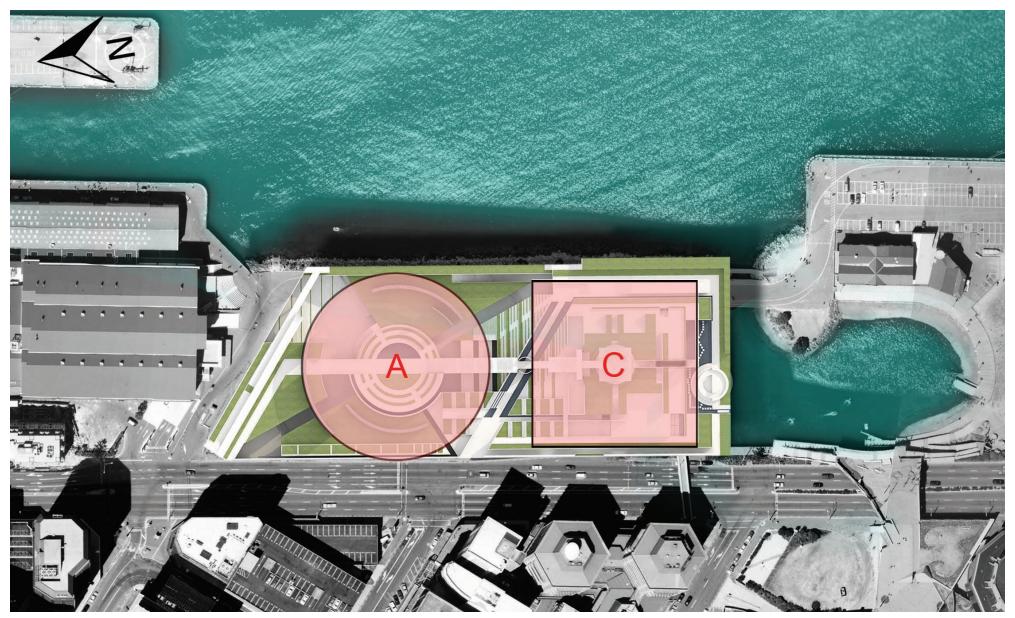


Design intervention: axial foci

20: Design Analysis

In the theory of 'Round Heaven and Square Earth', the circle represents the heaven, and embodies infinity, movement, instability and a rhythmic change of time. The square represents the earth, and embodies immobility, illiberality and constringency. The Chinese culture of 'Round Heaven and Square Earth' represents the fusion of heaven and humans (so-called "Tian Ren He Yi" in Chinese). This aspect emphasizes the harmonious relationship between the humans and nature, on balancing yourself with the nature. It advocates people to pursue 'development' and 'change', in order to gain successful career, harmonious society and progressive human being; it also advocate people to expect 'immobile' and 'stable' in order to gain comfortable life and peaceful world. Therefore, most traditional Chinese architectures built in ancient China represent the theory of 'Round Heaven and Square Earth' through location, layouts, architectural forms or decorations, to embody the Chinese ancients' pursue and wish of the universe.

This design thesis is inspired by the theory of 'Round Heaven and Square Earth', which is mainly constructed by a circle and a square. It is a product of 'fusion of heaven and humans' representing a harmonious relationship of human and nature. This contemporary garden is a gift to the Wellington city, to improve the relationship of China and New Zealand, to give and take, to develop together in order to gain and create a better life in the future.



Design intervention: major architectural forms

20: Design Analysis

Diagram 1:

The circle represents infinity, perfection and endlessness; the square represents solidity, honesty, shelter and safety. Point A creates the starting point of an expansion and shows the infinite rounded circulation. Point C shows the gradual enclosed circulation. The route of circle reflects the journey of the spirit through ignorance to enlightenment. Moving along the row of circle walls framing the central aisle, visitors are bathed in a medium intensity of illumination.

Diagram 2:

Point A points to the North and South as well as the city and sea through a skewed cross that is oriented towards the cardinal directions.

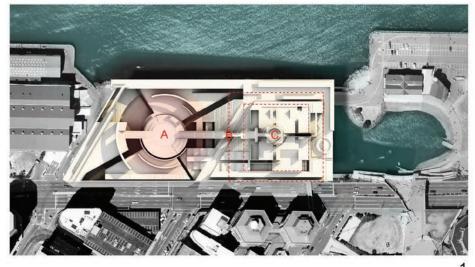
Diagram 3:

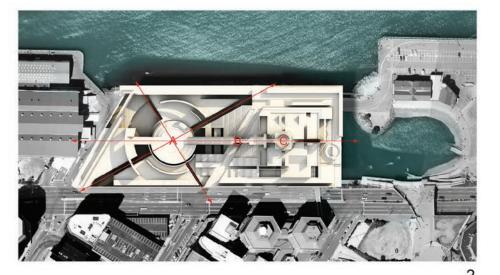
Point B connects the circle and square, it harmonizes solemnity and balance. It is the centre of a skewed cross link city side and sea side, to become parts of the entire garden.

Diagram 4:

Point C is the centre of a square; it points to each side of the site and creates the best view on a high level. The circle is oriented toward the four cardinal directions, while the square is oriented toward the dour site directions.











New plan analysis

20: Design Analysis

Diagram 5:

The circulation paths indicated in red creates two skewed passageways that allow visitors to pass the main gateway physically, as well as to experience the visual gate physiologically. The visual gate is the extension of Willeston Street, which towards to the sea view.

Diagram 6:

Point B is the centre of a skewed cross that creates symmetry and asymmetry. The parallel pathways connect to the circle and square, symbolizing the Chinese theory of "fusion of heaven and nature", to pursue social development and a better life. A skewed pathway is located between the circle and square asymmetrically, which creates a visual pathway facing to the mountain-scape. The central point B connects to the parallel pathway which creates a physical route allowing visitors to experience the transition from a sacred space (lotus seats) to a secular space (pavilion); it also connects to the skewed pathway that creates a visual gate towards to the nature.

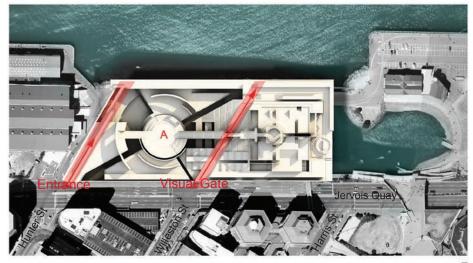
Diagram 7:

Chinese square is constituted by 64 hexagrams, which represent different meaning individually. These 64 hexagrams represent Creative, Receptive, Initial Difficulty, Innocence, Waiting, Contention Conflict, The Army, Union Holding Together, Taming Force, Treading Carefully, Tranquility, Stagnation, Companionship, Great Possession, Humility, Happiness, Following, Disruption etc 64 different meanings. The major square in the garden is formed by different sizes of rectangular shapes. The square represents the connotative Chinese philosophy of these 64 hexagrams.

Diagram 8:

Circle A is the central point of the circle digs into the ground creates a sacred water pond reflects the inner harmony of balance and symmetry; it offers a microcosm of time and space. Square C is the central point of the square extends to a highest level in order to create the best views of north, south, west and east. Point B creates a visual gateway on the pathway from A to B, and it also frames sea scenery from the beginning of the skewed route, Circle D is the existing water fountain, which invites existing elements beyond the site to achieve connections to the garden.











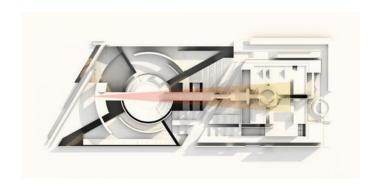
New plan analysis

21: Final Design Intervention

In this contemporary design intervention, the architectural forms of gate, path and pavilion externalize this journey of consciousness in a spiritual garden. This configuration reflects the source, journey, and goal of human spirit's adventure, this fundamental pattern unfolds whenever we give architectural form to inner thought and feeling. This contemporary Chinese garden will become a place of 'spiritual microcosm' for people to pause for contemplation, and it will form an eternal impression in visitors' heart when they contemplate in this unique garden.

The main pathway represents the beginning of a journey and time of transformation. They are the ways of gaining knowledge and awakening consciousness. It also leads visitors to experience the transformation from unknown to known, from physical to spiritual. The journey down the pathway gives visitors time to reflect transforming one's mind before ascending the steps towards the heavens. When visitors walk through the pathway, it is 'unknown' when have been sheltered by the theatre stairway; and to be 'known' when they approach the pavilion which is located in the highest level of the garden, providing the best views.

While the traditional 'borrowed scenery' method used physical walls, doors or windows to borrow outer landscape within a traditional Chinese garden, this contemporary garden is challenging through a contradicting method by using soft plants to borrow urban landscape in contemporary ways. Bamboos borrow nearby sea, cityscape and far-off mountain scenes into the garden. These architectural forms of central pathway, theatre, stairway and pavilion are framed by soft bamboos.



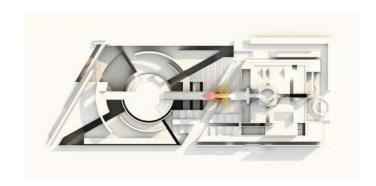


Design Intervention 1 – Spiritual pathway

21: Final Design Intervention

This pavilion is located above the existing car parking building, acting as a pivot connecting to the central pathway and the lagoon. It is the tallest architectural element in the garden facing to the West (cityscape), East (seaside), South (mountain-scape) and North (cityscape). It is formed by a pyramidal shape roof with a hollow circle form, and four columns. The roof is a re-interpretation from traditional square shape roofs.

In Chinese philosophy, four ends of the ridge represent four animals which are the dragon, phoenix, tortoise and tiger. They are jointly called the 'four spiritual beasts' as well as 'gods auspicious beast'. These four animals divided the heaven into four parts, and each of them guards each direction; the Dragon towards the East, the phoenix towards the South, the tiger towards the West, and the Tortoise towards the North. The dragon represents a lucky and auspicious symptom it becomes the symbol that pursues good fortune and avoids disaster. The characteristics of phoenix gather many kinds of fairy beasts and efficacious birds and shape up gradually; it has expressed people's pursuit and expectation to ideal life fully. The tortoise is often ridden by the immortal has the ability of avoiding ghost and evil. The tiger is the god of war, and in this capacity it not only assisted the armies of the emperors, but fought the demons that threatened the dead in their graves. Therefore, this reinterpreted pavilion with these four preservers is a gift to the Wellington city to pursue good fortune and avoids disaster.



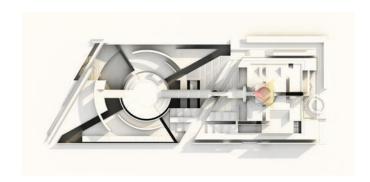


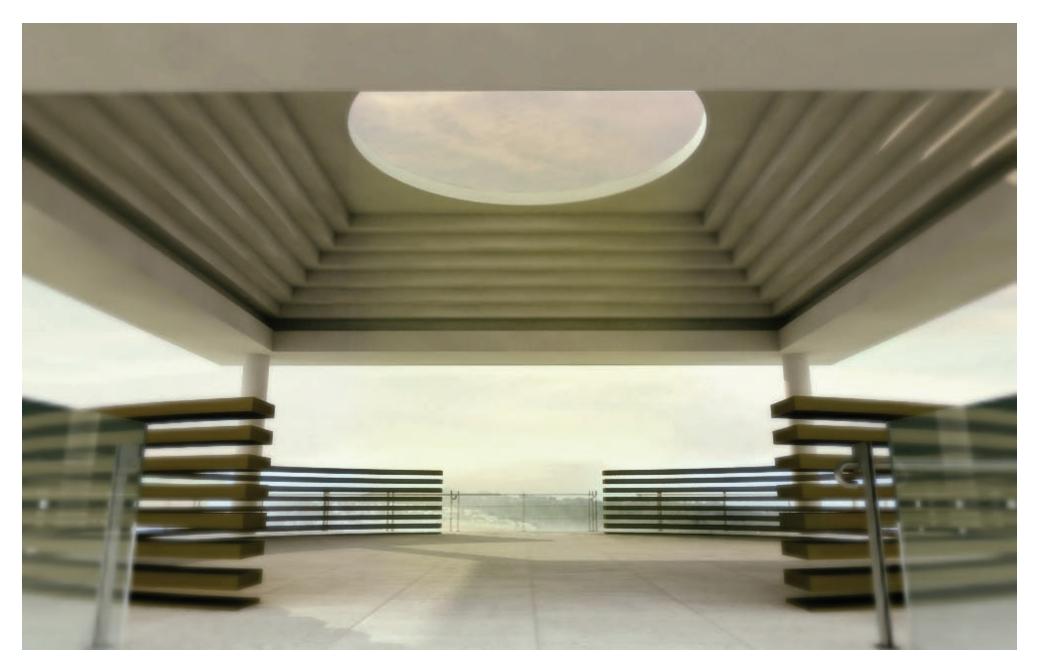
Design Intervention 2: Pavilion

21: Final Design Intervention

This is the end point of the axial pathway; it is also a 'spiritual microcosm' where human and heaven meet. When natural sunlight penetrates into the pavilion through the circular skylight, the movement of sunlight embraces people inside the pavilion, it represents the Chinese philosophy of 'the fusion of heaven and humans'. The circular skylight brings inexhaustible natural sources and energies into the shrine; it also emphasizes the inner harmony of heaven, the earth, human and nature.

Two columns on each side framed outer natural landscape, they created different views within a three dimensional (3D) Chinese landscape painting. Two columns on the south framed a mountain-scape landscape painting, it is not only demonstrated by using traditional Chinese garden making methods – 'by framing', but also re-created through microcosm of nature. It borrowed the best nearby Mount Victoria mountain scape as 'Chinese landscape painting' into the garden; this 'borrowed scenery' method challenged to borrow western urban contexts into a contemporary garden through contemporary ways.





Design Intervention 3: Meet with heaven

21: Final Design Intervention

While the Dunedin Chinese garden used enclosed walls to block up the entire traditional Chinese garden through traditional ways, in order to disengage with the western urban context; this Wellington contemporary Chinese garden is challenging an opposite way to install the entire garden on an open ground as well as engaging with the surrounding urban environment. This open theatre reflects how a contemporary Chinese garden is not only surrounded by physical walls, but it also embraces the surrounding buildings (in this case western urban contexts), and incorporates them into the garden within a contemporary way. The buildings of the city become part of the garden elements.

This 'circle' theatre is divided into two parts symmetrically by a central pathway, one semi-circular terrace is upward and another is downward. This arrangement is formed as a hierarchical terrace towards to the sea side, which allows visitors to view the natural landscape by different angles.



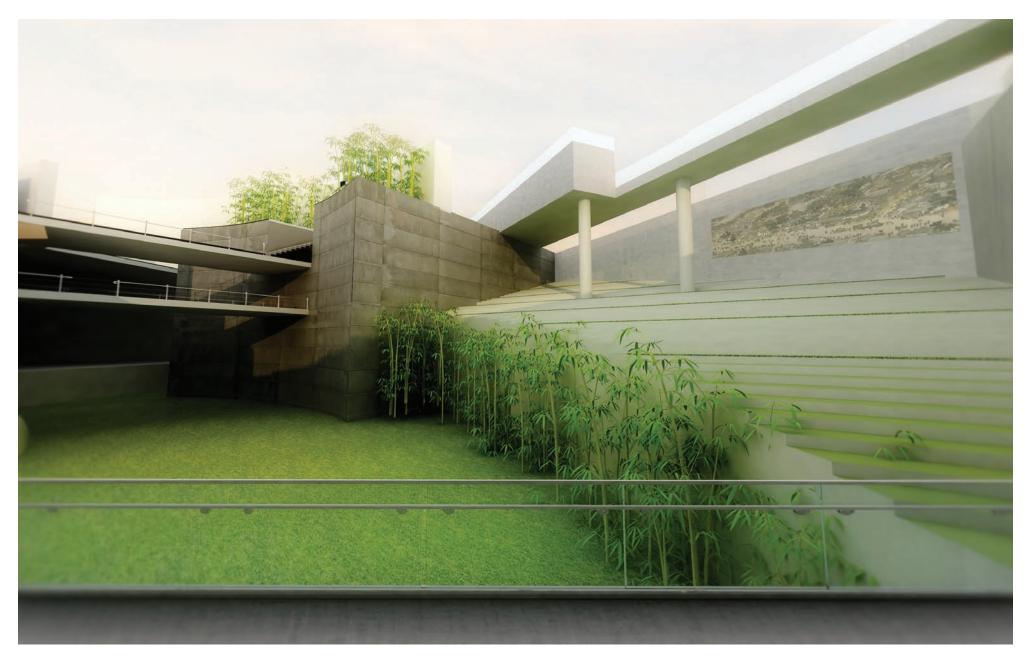


Design Intervention 4: The terrace

21: Final Design Intervention

This contemporary garden design intervention demonstrated existing urban elements that can be interpreted as landscape elements by translating traditionally soft plant elements into architectural elements. Soft plant is an essential feature for a Chinese garden making; it creates a reflection of the microcosm and embodies all the yin-yang dualisms projected in manifestation. This entire garden is embraced by soft plants, grass and bamboo. When soft plants are incorporated into the garden and against with hard architectural forms, it represents the Chinese philosophy of yin-yang principle. Bamboos and grass are soft and beautiful as well as symbolizing the feminine power; concrete architectural forms are hard and masculine, they are especially noted for their yin-yang qualities. Though yin as a tree, the concrete express yang masculine dignity and rigidity in contrast to the feminine gracefulness, pliability and charm of the bamboo, both were considered necessary to maintain the yin-yang harmony.





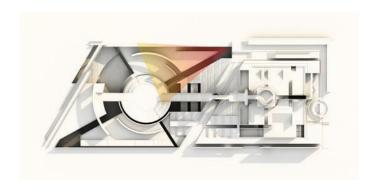
Design Intervention 5: Soft plants against hard architectural forms

21: Final Design Intervention

This contemporary design intervention demonstrated that the entire garden is not only surrounded by the psychological walls, city-scape and mountain-scape; this design is also challenging to use physical walls to create interior enclosure, but only in somewhere in the garden.

Physical walls keep all the energies inside the enclosure and isolates visitors from the chaos. They are shaped as a secure place for people not only in a physical way, but also in a psychological aspect. A pair of walls shapes a pathway guiding visitors' attention along their length to the open space from the beginning of a point to the end. People's consciousnesses are psychologically blocked by the wall panels and they assist us to focus on the central point in the front. Joining a pair of walls together create a corner which provide the first impression of interior and exterior space. Interior corners are inclined to stimulate our awareness to be engaged at this point.

Walls are able to cut through the amorphous and immaterial elements of sunlight, sky, wind, air and landscape, which create a close relationship between the internal world and external field. Walls also become an orientation to lead visitors to distinguish spirituality from physical domains, just as from a city to a garden, from ground to underground, from noisy to calm, and from bright to dark. It provides a spiritual focus both in space and time. When walls cut into these natural elements of sky, sunlight, wind and landscape, interior architecture and exterior architecture can reflect a demonstration of power.



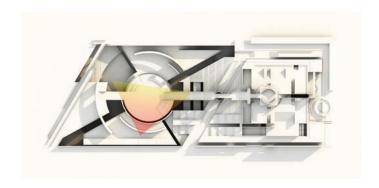


Design Intervention 6: Walls create an interior enclosure

21: Final Design Intervention

When visitors walk down to the underground from the stairway, they are separated from the profane world. The curved pathway leads visitors to a scared 'lotus seat', providing a place where the God is worshiped. When sunlight penetrates into the scared interior space, the tranquil space surrounded by a clearly finished architectural element is liberated to become soft, the infinite energies centre to an immovable spot.

Water is an essential element in this design intervention; the importance of water in this contemporary Chinese garden is not only due to yin-yang symbolism but to the wide significance of water itself as, next to the dragon, the greatest Taoist symbol. It is strength in weakness, fluidity, adaptability, coolness of judgment and gentle persuasion. Waters are formed by a solid circle pond, and are embraced by natural sunlight. The lunar power represents the Yin waters, and the solar power represents the Yang sky. This place simply maintains the balance and harmony between the yin and the yang.



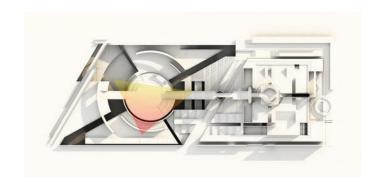


Design Intervention 7: The sacred ground reflects inner harmony

21: Final Design Intervention

The 'lotus seat' is the final destination of the journey under the ground, it is a sacred place which reflects the inner harmony of balance and symmetry and it also offers a microcosm of time and space. When sunlight penetrates into the interior space, the water pond becomes the core of the world as it symbolizes the infinite source of energies. The center of the universe is divided by three territories which are the underworld, the earth and the sky. When people pass through pathways and arrive at the lotus seat, this is where the end point creates a peaceful fulfillment for washing the soul. It is a rebirth and the recovery of self.

When natural sunlight penetrates the space, it gives all the architectural forms existence as well as bringing inexhaustible energy to the interior space. When light is being isolated within an interior space, it lingers on the surfaces of objects and evokes shadows from the background. The interior environment is affected and controlled by the movement of the sun. During the day, whether it is sunny or cloudy outside, the interiority of the 'lotus seat' still remains in darkness because of the enclosed solid concrete walls. The only visible natural lights are from these hollow curvy gaps which exist between the ceilings and walls. The sacred ambiance is enclosed and controlled by these natural lights from outside. They are not just ecumenical natural lights, they are symbolizing the spirit.





Design Intervention 8: The Lotus Seat signals arrival at the goal

22: Design Conclusion

Through a process of a design analysis, design experiment, conceptual design and design development, this contemporary Chinese garden design intervention demonstrated a translation from Chinese cultural imperatives into an innovative contemporary garden design. This design is created by an opposite method of a traditional Chinese garden making. This design intervention took advantages from local conditions (such as the sea, a lagoon and existing car parking building) and integrated with urban contexts (such as mountain-scape, cityscape and city roads) in the design, to engage with these urban elements and to become a part of the contemporary garden elements; as well as incorporating with soft plants.

This translated contemporary garden design is disengaged completely from traditional Chinese architectural style, but it retains connotative Chinese traditional cultural imperatives of Chinese theories, philosophies, symbolism and traditional garden making methods. It is also a 'composite' garden design of imperial garden, private garden, monastery garden and scenery resort garden, this design reflects the feature and characteristics of each type of traditional garden in a contemporary way. This contemporary garden design considered important garden elements of gate/path/lotus seat, exterior/interior and light/shadow, these elements create a unique and contemporary garden in a contemporary way. This challenge is an evolution of traditional Chinese garden making.



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Source: Original photograph taken by Cissy Zhang

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Figure 10: Dunedin Chinese Garden, Dunedin, New Zealand Source: http://en.wikipedia.org/wiki/Dunedin Chinese Garden

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Source: http://www.solgm.co.nz/NZPOSTAWARDS/NZPost+Entries+and+Winners/2008/Joined+Up+Local+Government.htm

Figure 13: Wellington City Map, Wellington Central City

Source: Wellington City Council. May Produced by: Urban Design Team, Wellington City Council, 101 Wakefield Street, Wellington, NZ

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Source: Wellington City Council. May Produced by: Urban Design Team, Wellington City Council, 101 Wakefield Street, Wellington, NZ

Figure 23: Japanese Tsukiyama gardens (Wet). Japan

Source: http://mojotravel.wordpress.com/2011/03/07/what-to-see-in-japan/

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Source: http://kyoto.asanoxn.com/places/kinkaku/ryoanji.htm

Figure 25: Tadao Ando, Oyamazaki Museum, Kyoto, Japan

Source: Original photograph taken by Cissy Zhang

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Source: http://pixela-3d.com/tag/3d-artwork

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Figure 45: The Heaven Temple, Beijing, China

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Figure 46: Chinese Traditional Architecture: Tulou, Fujian, China

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Figure 48: Chinese Contemporary Architecture: 'The Bird's Nest' and 'Water Cube', Beijing, China

Source: http://www.flash-screen.com/free-wallpaper/olympic-venues_28238.html

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