

BEIJING'S DRUM AND BELL TOWERS AREA: A CULTURAL LANDSCAPE
UNDERSTOOD, INTERPRETED AND REINVIGORATED WITH COMPATIBLE
USE

by

HUI ZOU

(Under the Direction of Cari Goetcheus)

ABSTRACT

The cultural landscape concept is a broad topic that covers conservation of both natural and man-made landscapes. As one of the first nations to focus on this area of study, the United States has set many precedents. Yet at the same time, the concept of cultural landscapes has also been discussed internationally; numerous countries and international organizations have crafted guidelines regarding developing cultural landscapes. Three case studies located in two western countries and in China have been reviewed to assist in informing a proposed redesign for the Drum and Bell Towers area in central Beijing. This thesis asks the following broad question: What is the best way to interpret the history and cultural background of a site to improve exposure of its historic significance while proposing compatible design? A proposed conceptual design integrates aesthetics with preservation and reinvigoration principles that are then applied to the design site.

INDEX WORDS: Cultural Landscape, Historic Preservation, Interpretation Methods, UNESCO, World Heritage, Historic Urban Landscape, Drum and Bell Towers Area, Chinese Philosophy, Hutong Life Style

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DEDICATION

To family and friends who have supported me throughout graduate school.

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CHAPTER 1

INTRODUCTION

Introduction

This thesis research combines my interest in cultural landscapes, Chinese history, interpretation and design. A cultural landscape is typically understood as a landscape with multiple layers or traces of human manipulation. Among several famous definitions of cultural landscape in the geography field, the classic definition from Carl O. Sauer in the 1920s was the most influential. The National Park Service (NPS), as the leading U.S. land management agency addressing cultural landscape issues since the late 1970s, has written much about how cultural landscapes have been valued and developed. They offer guidelines and precedents for any kind of work on cultural landscapes in the U.S., and to a degree, abroad.

Internationally, the cultural landscape definition and conversation also developed over time, the term becoming a concept accepted within the academic arena, and variously used, applied, developed, and refined around the world. The United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Committee defined the term cultural landscape as an international applicable definition in 1992. The definition clearly explained that the cultural landscape includes both preservation of history and conservation of nature. Other common terms related to cultural landscape include historic preservation, historic significance, historic integrity, historic context, World Heritage, historic urban landscape, outstanding universal value, etc. All these

terms will be defined in the literature review chapter. International organizations, including UNESCO and the International Council on Monuments and Sites (ICOMOS), provide multiple guiding documents and standards, listing the specific requirements and meanings behind protection, preservation, and conservation.

Every culture has its own philosophy, aesthetic preferences, and values based on its history. In China, both Confucianism and Daoism have greatly influenced Chinese philosophy and culture. Under the influence of various dynasties over time, Chinese culture has been manipulated and changed, like any culture. However, as a result of the Chinese furnace, a large number of different schools of literature and paintings developed, each with their own influence on traditional Chinese garden design. Each school had its own understanding of the relationship between culture and landscape.

China has been aware of the concept of cultural landscapes since the 1980s. Although there have been many discussions of this topic, very little research and guidance has been utilized to help inform historic urban landscapes successfully. Hence, one of the primary purposes of this thesis is to discuss how to apply international guidance and recommendations to a Chinese site while integrating traditional Chinese aesthetics into a proposed design.

As a part of the design process, it is important to understand meanings and tools of interpretation. Interpretation is the key element through which people's understanding of a culture can be deepened and their connection to a place can be enhanced. Interpretation has developed into various kinds of methods that can be used in different sites and situations. An effectively designed interpretive program can not only touch visitors' feelings, but also offers visitors information about the site at the same time.

Interpretation through design, which integrates interpretation with aesthetics, can be coupled with designing the visiting experience to help visitors understand a site. Most aesthetic principles can be applied universally. However, separate regions have unique local aesthetics significantly different in materials, colors, and building structures. For example, western cultures tend to craft buildings with stone and paint, while Asian cultures prefer to use wood, brick and tiles. The thesis project site area in Beijing has its own special materials and building structures, which are further understood through the site analysis process.

Heritage is what human beings have created and inherited from ancestors and nature; it indicates where a culture originates from, and helps shape people's identity. This interpretation of heritage emphasizes the emotional connection between heritage and human beings. This connection can occur anywhere, even an urban context. Why did I choose a study site located in Beijing? As the capital city of China, the city has been under massive pressure from urban development and globalization for decades. As the understanding of the importance of heritage has grown, people's awareness of conservation work has also improved. The Drum and Bell Towers area is one of the historic landmark places on the Central Axis of Beijing—a property on the World Heritage tentative list—which will be discussed further in the literature review chapter. It has been a prosperous area since first developed. This area is a good example showing the challenge historic sites have between balancing traditional culture and urban development.

The thesis research question is, **“How can the historical significance of the Drum and Bell Towers area be thoroughly understood so that the area can be**

interpreted and reinvigorated with compatible use using cultural landscape methods?” It will explore methods through which the historic significance of the site can be interpreted through design, and ultimately enhance the public’s understanding of the long-term culture of the site.

Methodology

To understand current trends in our society regarding cultural landscapes, a thorough study of the evolution of cultural landscape thought and precedents within the field will be explored. There has been a lot written about successful cultural landscape interpretation and rehabilitation examples in the U.S. However, the principles of treatments conducted by the NPS, although broadly applicable, may not be appropriate in other countries. Consequently, guidance and recommendations applicable in the international scale will also be reviewed and applied to the project site.

As the project site is located in Beijing, China, it is critical to study Chinese philosophy and aesthetic principles as applied to traditional Chinese art and gardens. Research supporting aesthetic principles related to cultural landscapes involves two subjects, namely: philosophy inherited from scholars, and paintings and literature. Following a thorough understanding of the previous subjects, identification of case studies that represent an urban context, contain historic objects within the site, have a long and rich history and cultural background, and not only are exposed to development pressures but have future development opportunities will be studied and compared.

In order to provide a specific design proposal for a historic landscape in an urban context, this thesis will emphasize a small project site—the Drum and Bell Towers area of Beijing. The history and city development of the area will be studied, along with

existing conditions and a site analysis, to understand contemporary development issues. A proposed site design will build upon this knowledge, as well as the case study insights, and suggestions offered by international organizations and precedents from the NPS.

Organization of Document

After the Introduction, Chapter 2 is a review of literature regarding the concept of cultural landscapes, historic preservation, UNESCO, historic urban landscapes, the World Heritage List, Chinese philosophy, and traditional Chinese gardens to build a framework for the remainder of the thesis.

Chapter 3 focuses on the history of Beijing city and the project site—the Drum and Bell Towers area. The chapter will cover the developmental history of Beijing, including variations through several dynasties, the urban fabric forged through the development, and the special Hutong lifestyle in the city core area. The project site's important location and its richness in history is closely related to the development of the city. The site demonstrates the typical urban fabric, street patterns, and traditional lifestyle.

A comparative case study of three historic urban landscapes is then conducted in Chapter 4. Each of the three case studies were chosen for how they integrated new design with compatible use at a historic site. The following were chosen as the case study sites: Moore Square (North Carolina, the U.S.), Petar Zoranić Square and Šime Budinić Plaza (Zadar, Croatia), and Kuanzhai Xiangzi (Chengdu, China). Each case was inventoried, analyzed and evaluated by defined criteria. Criteria included the preservation of history, interpretation methods, appropriate new design, and the improvement of historic significance.

Chapter 5 describes a detailed project site analysis, evaluated through descriptive data and site diagnosis for the potential performance of the site's landscape. Finally, Chapter 6 proposes a conceptual design for the Drum and Bell Towers area in Beijing, China.

CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter acts as an introduction to several topics that are integral to the development of this thesis and to answering my research question, including: the concept of a cultural landscape approach, international organizations and guidance that affect cultural landscape projects, Chinese philosophy as it relates to garden and landscape design, and cultural landscape interpretation and rehabilitation.

The cultural landscape section will briefly describe the history of cultural landscape philosophy in the United States and worldwide. Because the U.S. has played a leading role in the cultural landscape field, its standards of treatments and examples are essential references when dealing with real projects. However, because U.S. National Park Service (NPS) references are only applicable in the U.S., and my site is in Beijing, China, applicable international organizations, guidelines and approaches will also be explored. Cultural landscapes at an international scale are primarily guided by the UNESCO World Heritage program, hence its guidelines will be studied. Because China has many properties listed on the World Heritage List as well as the tentative list, and my site is currently on the tentative list, it will be important to not only reflect on Chinese philosophy through the lens of garden design, but also study examples of cultural landscape rehabilitation and interpretation in China and across the world. Finally, current

treatments of Chinese World Heritage properties can be important precedents, so they will also be studied.

Cultural Landscape

Although embraced by the field of landscape architecture since the 1980s, geographer Otto Schlüter¹ was the first person to formally use *cultural landscape* as an academic term in the early 20th century. However, it was not until 1925 that Carl O. Sauer developed the concept of cultural landscape as a method of understanding and investigation by explaining and defining it in *the Morphology of Landscape*.² In his paper, Sauer explained the concept using a clear diagram connecting the ideas of population, housing, production, communication, etc., as all being cultivated through time from the natural landscape by culture (See Figure 1).

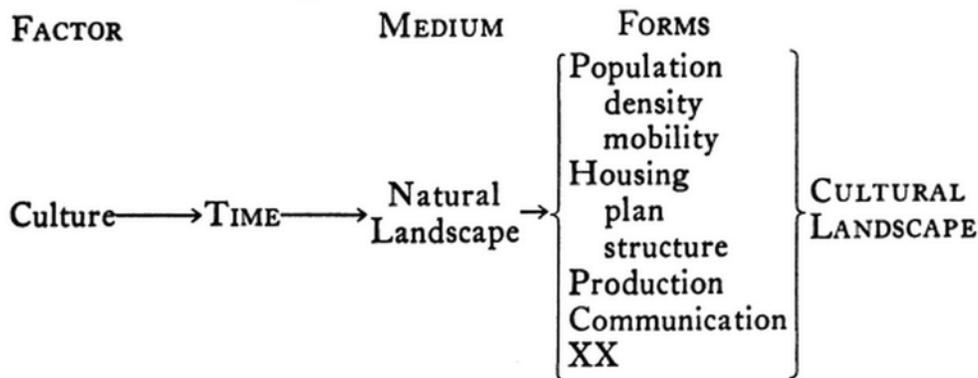


Figure 1 Sauer’s diagram describes the concept of the cultural landscape with nature being impacted over time through human manipulation of the land. (Carl O. Sauer, *Land and Life*, 1963)

Sauer stated “The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the natural area is the medium, the cultural landscape

¹ Otto Schlüter (1872 - 1959) was a German geographer. He was credited with creation of the term cultural landscape.
² Carl O. Sauer (1889 - 1975) was an American human geographer. His definition of cultural landscape influenced and promoted this concept in the academic arena.

is the result.”³ Thus, the natural landscape is the resource that the culture uses to shape the form of the human-influenced landscape.

An important player in the process of making cultural landscapes is humankind. J.B. Jackson in *Landscape in Sight* notes that “... because values change in the course of time, the organization of space also undergoes a change. That is one reason why the contemporary landscape is so different from that of even a hundred years ago.”⁴ Thus, it is the cultural landscape, which is transformed by people, that shows the values they cherished. Space can be shaped by people and evolves through people’s change. Further, it helps people understand that the past is worth preserving because of their personal connection.

However, cultural landscape is not only about human beings and their various cultures, it also deals with nature. The natural habitat of a physical environment plays a central role in a cultural landscape. The “land ethic” that Aldo Leopold postulated best explains the relationship between human society and nature: “The land ethic simply enlarges the boundaries of the community (beyond human beings) to include soils, waters, plants, and animals, or collectively: the land.”⁵ According to Leopold’s philosophy “our economic wellbeing could not be separated from the wellbeing of our environment.”⁶ Therefore, both the preservation of cultural heritage and the conservation of nature work towards the same goal of helping develop society in a healthier way.

³ Carl O. Sauer, *Land and Life: A Selection from the Writing of Carl Ortwin Sauer*, ed. John Leighly (Berkeley: University of California Press, 1963) 343

⁴ John Brinckerhoff Jackson, *Landscape in Sight: Looking at America* (New Haven : Yale University Press, 1997) 309

⁵ Aldo Leopold, *A Sand County Almanac. With other essays on conservation from Round River* (New York, Oxford University Press, 1966) 219

⁶ “The Land Ethic,” the Aldo Leopold Foundation, accessed April 24th, 2014, <http://www.aldoleopold.org/AldoLeopold/landethic.shtml>

Although cultural landscapes connect both nature and culture, sometimes they are not easy to see and understand. The cultural landscape may be more evident in a city where hardscapes from different eras overlay one another, so they can be more noticeable by revealing the layers of development through their form, features, and the ways they function. However, cultural landscapes do exist everywhere that human activities have affected the land.⁷

The United States has been a leading international influence in the identification, assessment and management of cultural landscapes via one of their federal agencies, the National Park Service (NPS). The National Park Service was created as a separate bureau of the U.S. Department of the Interior in 1916. According to the National Park Service Organic Act of 1916 (16 U.S.C.1.), the NPS has the mission “...to promote and regulate the use of the...national parks...which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”⁸ Although early NPS efforts emphasized natural resource conservation, the NPS also recognized the concept of historic conservation soon after it was established, placing most of its early focus on monuments.

Since then, the National Park Service has managed America’s national parks and influenced cultural resource management thought, especially cultural landscape management. The United States was the first nation to ratify the World Heritage

⁷ Arnold R. Alanen and Robert Melnick, *Preserving Cultural landscape in America*, (Baltimore, Md. : Johns Hopkins University Press, 2000., 2000) 3

⁸ “The National Park Service Organic Act of 1916,” accessed April 7th, 2014, http://planning.nps.gov/document/organic_act.pdf

Convention⁹ as a State Party¹⁰ in 1973. The National Park Service administers most U.S. World Heritage Sites.¹¹

Fifty years after the creation of NPS, in 1966, the National Historic Preservation Act (NHPA) (Public Law 89-665; 16 U.S.C. 470) was created, putting the NPS in a leadership role creating national standards and guidelines for historic preservation work. NHPA states as:

“The spirit and direction of the Nation are founded upon and reflected in its historic heritage; the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people; the historic properties significant to the Nation’s heritage are being lost or substantially altered, often inadvertently, with increasing frequency; the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans.”¹²

For NPS, historic preservation is “the act of protecting and sustaining cultural resources in perpetuity, through the methods of research, planning and stewardship.”¹³ The NPS is responsible for preserving both natural and cultural heritage resources.

According to the NPS, a cultural landscape is defined as “a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with an historic event, activity, or person, or exhibiting other cultural or

⁹ The World Heritage Convention is a convention concerning the Protection of the World Cultural and Natural Heritage. It links the concepts of nature conservation and the preservation of cultural properties in one document.

¹⁰ States Parties are “countries which have adhered to the World Heritage Convention. They thereby agree to identify and nominate properties in their national territory to be considered for inscription on the World Heritage List”¹⁰. A country that nominates a property must offer specific information regarding protection, and a management plan for future maintenance. States parties also need to retain the outstanding universal value of the property, and provide periodic updates reports regarding the property’s current condition. As of September 2012, 190 States Parties have ratified the World Heritage Convention. “States Parties,” UNESCO World Heritage Center, accessed April 7th, 2014, <http://whc.unesco.org/en/statesparties/>

¹¹ “World Heritage Convention,” Office of International Affairs, National Park Service, accessed April 7th, 2014, <http://www.nps.gov/oia/topics/worldheritage/worldheritage.htm>

¹² “National Historic Preservation Act of 1966,” accessed by April 7th, 2014, <http://www.cr.nps.gov/local-law/nhpa1966.htm>

¹³ “Preservation,” National Park Service, accessed April 7th, 2014, http://www.nps.gov/cultural_landscapes/Preservation.html

aesthetic values.”¹⁴ Cultural landscapes have been recognized by the NPS as cultural resources since 1983.¹⁵ Cultural resources are resources with historic or cultural significance, including both tangible and intangible qualities. Tangible heritage resources include landscape sites, buildings, structures, and objects. Intangible heritage resources can be traditional knowledge, craftsmanship, and local lifestyles. Cultural landscapes may encompass both of those aspects, and can range in size from sites with thousands of acres to a small area in a central city core with less than one acre. Furthermore, NPS defines four general types of cultural landscapes in Preservation Brief 36 that are not mutually exclusive, including: historic designed landscapes,¹⁶ historic vernacular landscapes,¹⁷ historic sites,¹⁸ and ethnographic landscapes.¹⁹ These categories are only applicable in the U.S.

As one of the preservation guidance documents created by NPS, National Register Bulletin 16A notes three key criteria used by the National Register of Historic Places program to determine a property’s eligibility for listing—historic significance, historic

¹⁴ “Park Cultural Landscapes,” National Park Service, accessed April 7th, 2014, http://www.nps.gov/cultural_landscapes/index.html

¹⁵ “Preservation,” National Park Service, accessed April 7th, 2014, http://www.nps.gov/cultural_landscapes/Preservation.html

¹⁶ Historic designed landscape: a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person(s), trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates. (From “Preservation Briefs 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes” access April 27th, 2014, “Operational Guidelines 2008, Annex3”, UNESCO, January, 2008, accessed March 28th, 2014, <http://whc.unesco.org/archive/opguide08-en.pdf#annex3>)

¹⁷ Historic vernacular landscape: a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes. (Ibid)

¹⁸ Historic site: a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and president's house properties. (Ibid)

¹⁹ Ethnographic landscape: a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components. (Ibid)

integrity, and historic context. Historic significance can be shown by association with events, activities, patterns, or important persons or by having distinctive physical characteristics of design, construction, or form, or by having potential to yield important information. Historic significance is defined as “the importance of a property to the history, architecture, archeology, engineering, or culture of a community, States, or the nation.”²⁰ Historic integrity refers to “the authenticity of a property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s prehistoric or historic period.”²¹ Historic integrity is composed of seven qualities: location, design, setting, materials, workmanship, feeling, and association. The historic context is “information about historic trends and properties grouped by an important theme in the prehistory or history of a community, state, or the nation during a particular period of time.”²² It has three elements—theme, place, and time—which links historic properties to related history.²³ Historic context helps the property to be better understood by setting it into a specific context as a production of that time period, event and place.

NPS addressed cultural resources conservation a little later than natural resources conservation during its early period. However, currently it considers both historic sites and natural sites equally valued. The following are representative NPS cultural sites within urban contexts.

Alcatraz Island in San Francisco, California, is a typical NPS-managed historic site. It was the first Army prison in the nation and the period of significance is from 1847 to 1971. Now, the island is part of the Golden Gate National Recreation Area with a Draft

²⁰ “How to Complete the National Register Registration Form,” NPS, U.S. Department of the Interior, 1997, access April 24th, 2014, <http://www.nps.gov/history/nr/publications/bulletins/pdfs/nrb16a.pdf>

²¹ Ibid.

²² Ibid.

²³ Ibid.

Management Plan and Environment Impact Statement providing guidance for future management. Jefferson National Expansion Memorial landscape, also known as the St. Louis Arch, is a historic designed landscape. Originally designed by landscape architect Dan Kiley and architect Eero Saarinen, a management document known as a Cultural Landscape Report (CLR) was created for the site in 1996 and updated in 2010. The proposed rehabilitation design work for the site was a winner of a competition aimed at revitalizing downtown St. Louis and its waterfront area.

As noted previously, there is a management document known as a CLR. Making a Cultural Landscape Report (CLR) is an efficient reference to guide professionals as they are working on cultural landscapes, because a CLR is the “primary report that documents the history, significance and treatment of a cultural landscape.”²⁴ It is often prepared to define the history, significance and integrity evaluation of a historic property when a change is proposed. The CLR contains compiled information on the property’s geographic context, features, materials, and use to protect the property’s character-defining features from undue wear, alteration or loss.²⁵ The CLR is a useful tool to help professionals propose contextual alterations and respectful decision-making as it yields much information for reference. The following are the essential steps in the CLR development process.

Historic Research is a process of consulting primary and secondary archive sources, including historic plans, surveys, aerial photos, paintings, journals and so on. Contemporary resources, like recent studies, should also be referenced during historic

²⁴ “Preservation Brief 36 : Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes,” NPS, accessed April 12th, 2014, <http://www.nps.gov/history/tps/how-to-preserve/briefs/36-cultural-landscapes.htm>

²⁵ Ibid

research. This historic research is an essential process for helping understand the characteristics of the landscape and the association between the property, its history and cultural significance. The historic research also works as the foundation for further steps. Some historic period plans can be generated from this step. The goal of inventory of historic features and documenting existing conditions is to create a detailed record of current existing features, including existing structures and plants, geographic context, and the site boundary. “All features that contribute to the landscape’s historic character should be recorded.”²⁶ Reading the landscape is a step that should be conducted to understand the site’s context of place and time, based on the basic information acquired from earlier steps. In order to read a landscape for a broader view, different levels of reading should be considered. The combination of on-the-ground observation and a bird’s-eye perspective can begin with an aerial photo of the site and end with studying features on the ground. A historic plant inventory can be produced after this step, if necessary. Site analysis compares plans from different historic periods. The integrity and historic significance of the property can then be evaluated based on remaining historic features. The historic integrity is the “recognized importance a property displays.”²⁷ The integrity “is a property’s historic identity evidenced by the survival of physical characteristics from the property’s historic or pre-historic period.”²⁸

The breadth of content of any CLR allows professionals sufficient information for making decisions regarding appropriate future treatment. Furthermore, their comprehensive understanding of the property can help them to generate more compatible use concepts if a new design proposal is necessary.

²⁶ Ibid

²⁷ Ibid

²⁸ Ibid

The NPS addresses the preservation of the cultural landscape similarly as it does for other cultural resources.²⁹ Preservation is defined as keeping something in its original state or in good condition, to keep it safe from harm, loss, and decomposition.³⁰ Thus, NPS offers a system for guiding the process of intervention on a historic property through Preservation Brief 36, *Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes* and the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. They are two key references for preservation practice. Preservation Brief 36 offers accurate definitions for all types of cultural landscapes, what the content of a Cultural Landscape Report (CLR) should be, and describes choices for appropriate treatments for historic buildings or landscapes. The Guidelines outline the standards for four treatments, and offer specific design instructions on historic properties that can be useful when dealing with different aspects of the landscape, such as topography, vegetation, circulation, water features, and structures on the site. And as a good reference, *The Secretary of the Interior's Standards for the Treatment of Historic Properties* sets out the four types of historic preservation treatments, ranging from low to high intervention: preservation, rehabilitation, restoration, and reconstruction.

Preservation is defined as “the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. New additions are not within the scope of this treatment.”³¹ It emphasizes the maintenance of existing physical features as current condition and the retention of the property's appearance as it

²⁹ “Preservation,” National Park Service, accessed April 7th, 2014, http://www.nps.gov/cultural_landscapes/Preservation.html

³⁰ Definition from Merriam Webster, accessed April 9th, 2014, <http://www.merriam-webster.com/>

³¹ “Preservation Brief 36 : Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes,” NPS, accessed April 12th, 2014, <http://www.nps.gov/history/tps/how-to-preserve/briefs/36-cultural-landscapes.htm>

has evolved over time. It involves the simplest, most inexpensive and the minimal change to properties. Rehabilitation is defined as “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical or cultural values.”³² It accepts, if necessary, alteration or addition to a historic property to meet continuing or changing uses. However, at the same time, retaining the property's historic character is the core focus to preserve significance. Restoration is defined as “the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.”³³ It modifies a property into one particular period of time in its history, but removing evidence of all other periods is a requirement. Reconstruction is defined as “the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.”³⁴ It recreates vanished historic components or creates new portions of a property for interpretive purposes.³⁵

Compared to the other three approaches, rehabilitation’s difference is that it emphasizes the creation of possible compatible use for the property through repair, alterations, and additions, although it still pursues preserving the property’s features that can be the testimony of its historical and cultural significance. Just as the NPS states, “when repair and replacement of deteriorated features are necessary; when alterations or

³² Ibid.

³³ Ibid.

³⁴ Ibid.

³⁵ “Four Approaches to the Treatment of Historic Properties,” National Park Service, accessed by April 7th, 2014, <http://www.nps.gov/history/tps/standards/four-treatments.htm>

additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment.”³⁶

International Organizations and Guidance for Cultural Landscape Projects

UNESCO

The United Nations Educational, Scientific and Cultural Organization (UNESCO) was created in 1945 by the United Nations with the belief, that “political and economic agreements are not enough to build a lasting peace”, but “peace must be established on the basis of humanity’s moral and intellectual solidarity.”³⁷ UNESCO is considered the “intellectual” department of the United Nations.³⁸ Its existence encourages the possibility for communication between civilizations, cultures, and peoples, based on commonly shared values. The core content of UNESCO’s work is to achieve the global wide goals of “sustainable development encompassing observance of human rights, mutual respect and the alleviation of poverty.”³⁹ UNESCO holds two over-arching objectives: to ensure “Culture of Peace and Non-Violence”⁴⁰ and to support “Education for Sustainable Development.”⁴¹

As the world’s technology and knowledge develops, people become increasingly aware of the importance of heritage. UNESCO defines heritage as “our legacy from the

³⁶ “Standards for Rehabilitation,” National Park Service, accessed April 7th, 2014,

<http://www.nps.gov/history/tps/standards/four-treatments/landscape-guidelines/rehab/index.htm>

³⁷ “Introducing UNESCO,” UNESCO, accessed March 28th, 2014, <http://en.unesco.org/about-us/introducing-unesco>

³⁸ Ibid.

³⁹ “Introducing UNESCO: what we are,” UNESCO, accessed March 28th, 2014,

<http://www.unesco.org/new/en/unesco/about-us/who-we-are/introducing-unesco/>

⁴⁰ “Culture of Peace and Non-Violence.” UNESCO, accessed April 17th, 2014, <http://www.unesco.org/new/en/bureau-of-strategic-planning/themes/culture-of-peace-and-non-violence/>

⁴¹ “Education for Sustainable Development,” UNESCO, accessed April 17th, 2014,

<http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/>

past, what we live with today, and what we pass on to future generations.”⁴² Both cultural and natural heritage are irreplaceable testimonies of who we are and where we come from. Designated World Heritage Sites belong to the whole of mankind regardless of a heritage site’s geographic territory making the concept of World Heritage universally applicable. As these legacies are threatened with destruction from both natural deterioration and social change, an increasing number of people are trying to find an effective measure to protect and conserve cultural and natural heritage worldwide.

UNESCO adopted the World Heritage Convention in 1972 to encourage the identification, protection, and preservation of uniquely valuable cultural and natural heritage around the world. The Convention sets out the duties of States Parties (190 countries so far, including China⁴³) in identifying, protecting, and preserving potential sites. Each State Party agrees not only to conserve the World Heritage sites in its territory, but also to protect its national heritage by adhering to the Convention.⁴⁴ The Convention combines the preservation of cultural sites and the conservation of natural properties. It also encourages States Parties to use the potential power of their own heritage to influence regional planning and education programs and in turn to enhance the work of protection and preservation.

The Convention defines cultural heritage as referring to “monuments, groups of buildings and sites with historical, aesthetic, archaeological, scientific, ethnological, or anthropological value.”⁴⁵ Natural heritage refers to “outstanding physical, biological and

⁴² “World Heritage,” World Heritage Centre, UNESCO, accessed March 29th, 2014, <http://whc.unesco.org/en/about/>

⁴³ China joined the Convention in 1985; this was a political suggestion brought up by four famous scholars who were in History, Geography and Architecture. The same year, China became an official party state of the Convention.

⁴⁴ “The World Heritage Convention,” UNESCO World Heritage Centre, June, 2008, accessed March 28th, 2014, <http://whc.unesco.org/en/convention/#What-the-Convention-contains>

⁴⁵ “World Heritage Information Kit,” UNESCO World Heritage Centre, June, 2008, accessed March 20th, 2014, http://whc.unesco.org/documents/publi_infokit_en.pdf

geological formations, habitats of threatened species of animals and plants and areas with scientific, conservation or aesthetic values.”⁴⁶

World Heritage Sites are different from national heritage sites due to their outstanding universal value. All sites included are properties belonging to all the peoples of the world, so support for World Heritage sites must command every nation’s attention.

The World Heritage Center was established in 1992, as “the focal point and coordinator within UNESCO for all matters related to World Heritage.”⁴⁷ The Center organizes the annual sessions of the World Heritage Committee and is responsible for the continued management of the World Heritage Convention by participating in establishing management plans and providing technical assistance and professional training.

The World Heritage List includes 981 properties that the World Heritage Committee considers as having outstanding universal value. They are located in 160 States Parties, including 759 cultural, 193 natural and 29 mixed properties.⁴⁸ Among all these properties, there were 12 sites inscribed to the list in 1978⁴⁹, including 3 natural sites⁵⁰, 8 cultural sites and 1 natural site in danger.

The Historic Centre of Kraków, Poland is an example of a cultural site. Kraków is the former capital of Poland and had Europe’s largest market square when it was a 13th-century merchant town. All historical houses, palaces and churches are outstanding examples of medieval architecture.

Mixed cultural and natural sites weren’t inscribed to the list until the first group of three sites in 1979. The Tikal National Park in Guatemala was among these three sites. It

⁴⁶ Ibid,

⁴⁷ “World Heritage Centre,” UNESCO, accessed March 28th, 2014, <http://whc.unesco.org/en/world-heritage-centre/>

⁴⁸ “World Heritage Lists,” UNESCO World Heritage Centre, accessed April 4th, 2014, <http://whc.unesco.org/en/list/>

⁴⁹ 1978 was the year that enlists the first group of world heritage properties.

⁵⁰ Yellowstone National Park is one of the three natural sites.

is one of the most important sites of Mayan civilization covering 22,100 ha of rainforest, which has great importance to archaeology and ecology. Besides the rich vegetation included in Tikal, there are 54 species of mammals and 333 species of avifauna. The Mayan civilization site is in the heart of the jungle with temples, palaces, public squares, and dwellings around the ceremonial center.⁵¹

For worldwide applicable terminology of heritage resources, UNESCO offers clear definitions for both cultural and natural world heritage resources in order to craft and allow application of guidelines to support identification and evaluation of historic properties. In the 2008 *UNESCO Operational Guidelines*, world heritage is classified into four categories: cultural landscapes, historic towns and town centers, heritage canals and heritage routes.

In 1992, the World Heritage Convention acknowledged cultural landscapes as cultural properties that represent the “combined works of nature and of man.”⁵² They demonstrate the work of humans over time, which evolves due to the physical nature of environment and change of social, economic, and exotic influences. Hence, as noted earlier, cultural landscapes are outcomes from the interaction between human beings and the natural context. For a cultural landscape to be nominated to the World Heritage List, it should have outstanding universal value and represent the cultural element of that region.

UNESCO clearly defined landscapes were designed and created intentionally by man.⁵³ It has defined three main categories of cultural landscapes, which include gardens

⁵¹ “Tikal National Park,” UNESCO World Heritage Center, accessed April 15th, 2014, <http://whc.unesco.org/en/list/64>

⁵² “Operational Guidelines 2008, Annex3,” UNESCO, January, 2008, accessed March 21st, 2014, <http://whc.unesco.org/archive/opguide08-en.pdf#annex3>

⁵³ Ibid

and parks for specific reasons; organically evolved landscapes,⁵⁴ fall into two sub-categories—relict landscape⁵⁵ and continuing landscape;⁵⁶ and the associative cultural landscape.⁵⁷

As noted earlier, aside from cultural landscapes, another broad category of world heritage that is closely associated with urban areas are historic towns and town centers. These fall into three main categories: towns with unchanged archaeological evidence of the past that are no longer inhabited; historic towns that are still inhabited and will evolve in the future; and new towns of the twentieth century.

Among these three categories, conservation of the inhabited historic town has the most challenges. Owing to urbanization and globalization, the urban fabric of the surrounding area of the historic town has usually already been interrupted heavily. There are four subcategories for the inhabited historic towns: towns which are typical of a specific period or culture; towns that have evolved along characteristic lines and have been preserved; “historic centers” that cover exactly the same area as ancient towns and are now enclosed within modern cities; and sectors, areas or isolated units. All of these categories need to have a great influence on the history of town planning in order to be nominated.⁵⁸

To be eligible for world heritage status, a property must bear the distinction of “outstanding universal value”⁵⁹ by meeting at least one of ten select criteria. The ten

⁵⁴ Organically evolved landscape: This results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. (Ibid.)

⁵⁵ Relict landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. (Ibid.)

⁵⁶ Continuing landscape is one, which retains an active social role in contemporary society closely, associated with the traditional way of life, and in which the evolutionary process is still in progress. (Ibid.)

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Outstanding Universal Value: Outstanding Universal Value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of

criteria for outstanding universal value are explained in the *Operational Guidelines for the Implementation of the World Heritage Convention*, for both cultural and natural property. The following are the cultural criteria:

- i. represent a masterpiece of human creative genius;
- ii. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- iii. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- v. be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change; and
- vi. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria)⁶⁰

The World Heritage Center is not only the home for the register of World Heritage Sites; it also provides useful advice on preserving heritage sites. Normally,

all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole. The Committee defines the criteria for the inscription of properties on the World Heritage List. (Ibid.)

⁶⁰ Ibid.

World Heritage properties will be protected by States Parties according to management suggestions offered by the World Heritage Convention, which is continually updated. The Center publishes brochures, information kits, manuals, maps, and paper series in different languages for sites to receive acknowledgement of their world heritage status while also offering useful management suggestions for professionals. For example, the *Managing Cultural World Heritage Manual* discusses introducing, assessing, and improving management systems based on the essential information of a site's heritage and its management. The Center also publishes a series of papers on different World Heritage topics. Paper 26 focused on the conservation and management of cultural landscapes in general. The document sets out six guiding principles for cultural landscape management, noting:

- i. People associated with the cultural landscape are primary stakeholders for stewardship.
- ii. Successful management is inclusive and transparent, and governance is shaped through dialogue and agreement among key stakeholders.
- iii. The value of the cultural landscape is based on the interaction between people and their environment; and the focus of management is on this relationship.
- iv. The focus of management is on guiding change to retain the values of the cultural landscape.
- v. Management of cultural landscapes is integrated into a larger landscape context.
- vi. Successful management contributes to a sustainable society.⁶¹

⁶¹ "World Heritage Series No.26 Cultural Landscapes," World Heritage Center, UNESCO, March, 2010, accessed April 24th, 2014, <http://whc.unesco.org/en/series/26/>

Furthermore, Paper 26 also defines the management process as landscape assessment, planning, implementation, monitoring and adaptive management. Paper 27 addressed historic cities by covering 10 different topics on issues, tools, policies and management strategies of historic urban landscapes.

Periodically there are threats to World Heritage Sites. During a time of emergency, and when the property is inscribed on the List of World Heritage in Danger, the World Heritage Committee will take immediate action to offer solutions for the situation. At the same time, the Convention can help garner worldwide attention for the property. Some successful restorations are Angkor Wat in Cambodia, the Old City of Dubrovnik in Croatia, the Wieliczka Salt Mine in Poland, and the Ngorongoro Conservation Area in the United Republic of Tanzania. The city of Dubrovnik was seriously damaged by artillery fire in December 1991. As a result, UNESCO provided technical advice and financial assistance to the Croatian Government for restoration. As a result of the efforts, seven years later, the city was finally removed from the List of World Heritage in Danger.

China's Properties on the World Heritage List

China is a recognized State Party of UNESCO, with 47 properties inscribed on the World Heritage List and an additional 47 properties on the tentative list.⁶² All these sites include both cultural and natural types.

Wulingyuan Scenic and Historic Interest Area was the first natural type Chinese property inscribed on the World Heritage List in 1992 (See Figure 2). It is a site that “covers more than 26,000 ha and is dominated by more than 3,000 narrow sandstone

⁶² “China,” UNESCO World Heritage Centre, accessed Oct. 13th, 2014, <http://whc.unesco.org/en/statesparties/cn>

pillars and peaks, many over 200 m high.”⁶³ Besides the peaks, there are lakes, valleys, waterfalls, caves, and natural stone bridges scattered around the scenic area.



Figure 2 Wulingyuan Scenic and Historic Interest Area (Photo from UNESCO website <http://whc.unesco.org/en/list/640/gallery/>)



Figure 3 Mount Taishan (Photo from UNESCO website <http://whc.unesco.org/en/list/437/gallery/>)

Mount Taishan is the first mixed type Chinese property inscribed on the World Heritage List in 1987 (See Figure 3). It is the most famous sacred mountain of China, with outstanding historic, cultural, and aesthetic values. As the brief synthesis narrative from UNESCO states: Mount Taishan is a “large rock mass covering 25,000 ha and rising to 1,545 m above the surrounding plateau.”⁶⁴ Mount Taishan is considered one of the best scenic spots in China and has been an object of worship for several empires, nearly 2,000

⁶³ “Wulingyuan Scenic and Historic Interest Area,” UNESCO World Heritage Centre, accessed April 5th, 2014, <http://whc.unesco.org/en/list/640>

⁶⁴ “Mount Taishan,” UNESCO World Heritage Centre, accessed April 5th, 2014, <http://whc.unesco.org/en/list/437>

years. Temples and portraits of Gods there are in great harmony with the natural landscape.

As for cultural heritage, the Imperial Palaces of the Ming and Qing Dynasties in Beijing and Shenyang were among the first set of Chinese cultural heritage properties inscribed on the World Heritage List in 1987 (See Figure 4). The Forbidden City in Beijing, with its nearly 10,000 rooms filled with great works of art and the imperial gardens “constitutes a priceless testimony to Chinese civilization during the Ming and Qing dynasties (1416-1911).”⁶⁵ The Imperial Palace of the Qing Dynasty in Shenyang consists of 114 buildings that were constructed between 1625–26 and 1783.⁶⁶ The Palace contains an important library and witnessed the early stage of the last dynasty (Qing dynasty before 1644) of ancient China before the empire spread out to the southern part



Figure 4 Imperial Palaces of the Ming and Qing Dynasties in Beijing and Shenyang (Photo from UNESCO website http://whc.unesco.org/pg.cfm?cid=31&l=en&id_site=439&gallery=1&&maxrows=51)

⁶⁵ “Imperial Palaces of the Ming and Qing Dynasties in Beijing and Shenyang,” UNESCO World Heritage Centre, accessed April 5th, 2014, <http://whc.unesco.org/en/list/439>

⁶⁶ Ibid.

of China and finally moved its capital to Beijing.

Among all the other Chinese properties that are on the World Heritage List, the Historic Centre of Macao in some respects can be seen as having some typical characteristics as a historic urban core area. The property is 16 ha and was inscribed to the World Heritage List in 2005.⁶⁷ It presents “a group of 22 principal buildings and public spaces that enable a clear understanding of the structure of the old trading port city.”⁶⁸ The Historic Centre of Macao generates a unique atmosphere with its historic streets, residential, religious, and public buildings with both Portuguese and Chinese design elements. All of these attributes demonstrate aesthetic, cultural, religious, and architectural influences from two countries. The brief narrative from UNESCO states: “It bears witness to the first and most enduring encounter between China and the West, based on the vibrancy of international trade.”⁶⁹ The essential location of this district and the interchange of various fields of culture, art, and architecture over several centuries are typical of most historic urban core areas. Although Macao has been under the pressure of rapid development over the recent decade, it demonstrates another important aspect of urban cores, which is the integrity of the major monument and the original urban fabric, which revealed the characteristics of this historic area.

Beijing, having a density of 1230 people per kilometer,⁷⁰ is the capital of the People’s Republic of China and one of the most populous cities in the world.⁷¹ Beijing is a prime example of the pressures of rapid development in urban core areas. It also has

⁶⁷ “Historic Centre of Macao,” UNESCO World Heritage Centre, accessed April 5th, 2014, <http://whc.unesco.org/en/list/1110>

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ “Beijing ren kou mi du yi chao cheng zai nengli [Beijing population density exceeded carrying capacity of the land],” accessed by April 8th, 2014, <http://bjyouth.yynet.com/3.1/1303/20/7897626.html>

⁷¹ “Beijing,” Wikipedia, accessed April 5th, 2014, <http://en.wikipedia.org/wiki/Beijing>

several properties on the World Heritage Tentative list, such as the Central Axis of Beijing. Beijing is located in the northeast part of China and is the nation's political, cultural, and educational center. It has been the capital since 1153 as the "Central Capital" of Jurchen Jin dynasty.⁷² After that period, Beijing has been the capital city for all three dynasties: the Yuan dynasty (1271-1368), the Ming dynasty (1368-1644) and the Qing dynasty (1644-1911). As the imperial palace from the Ming dynasty to Qing dynasty, the Forbidden City is located in the center of Beijing and is the most important landmark as well as the geographic center of the city's urban fabric, with five "ring roads" that concentrically surround it. Within the urban core, which is the area located inside the Second Ring Road, the city streets generally follow a checkerboard pattern from ancient times. Chang'an Avenue is the most important lateral thoroughfare, and the Central Axis of Beijing is the most important longitudinal street. Together, these two streets form a cross in the inner city.

The Central Axis of Beijing is listed on the World Heritage Site tentative list⁷³ and described as "7.8 kilometers long starting in the south of the city from the Yongding Gate, running across the Zhengyang Gate, Tian'anmen Square, the Forbidden City, the Jingshan Hill, and ending with the Drum Tower and Bell Tower in the north."⁷⁴ On this map (See Figure 5), three orange traces indicate three ring roads in Beijing, inside which can be designated as the core city area. The red dashed line shows the Central Axis, which goes through the Forbidden City marked with yellow.

⁷² "Ji nian jin zhong du jian du 860 zhou nian te zhan [Special exhibition to commemorate the anniversary of Jin Zhongdu 860]", China Daily, accessed by March. 28th, 2014, http://video.chinadaily.com.cn/2013/0917/1248_20.shtml

⁷³ A Tentative List is an inventory of those properties which each State Party intends to consider for nomination, according to "Tentative Lists", UNESCO World Heritage Centre, accessed March 28th, 2014, <http://whc.unesco.org/en/tentativelists/>

⁷⁴ "The Central Axis of Beijing (including Beihai)," UNESCO World Heritage Centre, accessed March 29th, 2014, <http://whc.unesco.org/en/tentativelists/5802/>

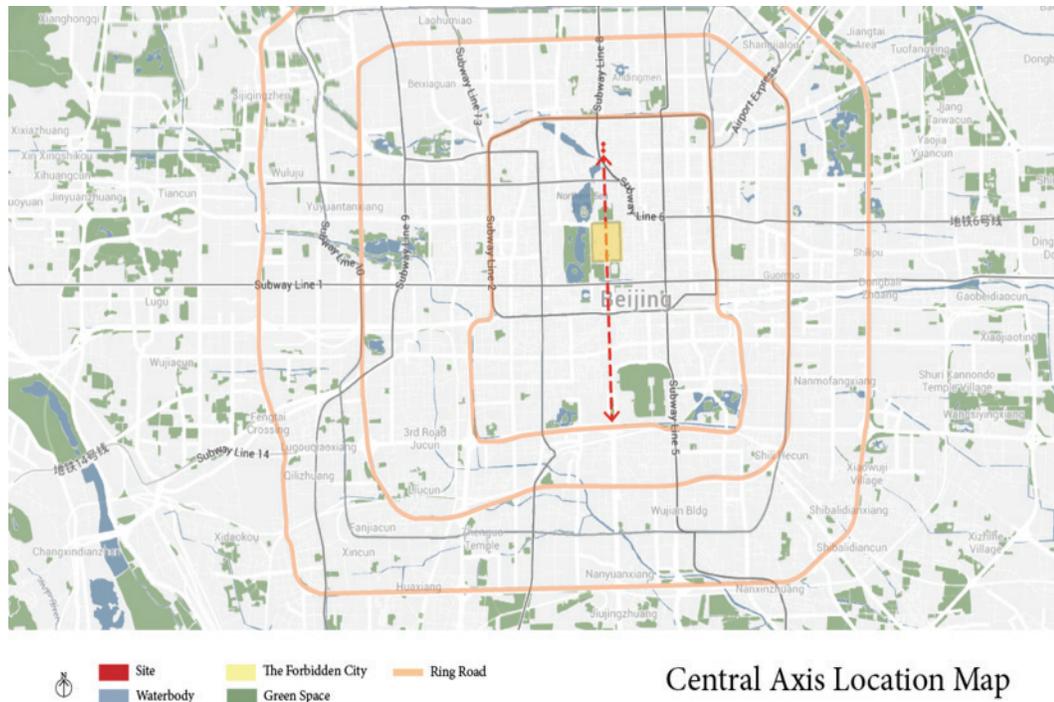


Figure 5 Central Axis Location map (By author)

The Axis allowed for organizing many famous features along a linear roadway. Beside these historic sites, other important buildings and sites are also positioned along the Axis, including the imperial gardens, several temples and altars, numerous Hutongs (a typical street pattern in Beijing) and courtyard neighborhoods of old Beijing. The Axis represents a typical ancient urban planning and development situation in China.

“Its location and design not only represent the ‘value of the center’ in traditional Chinese culture, but also highlight Chinese philosophy's respect of nature and its appreciation of the mutual existence between man and nature.”⁷⁵ The integrity of the Central Axis of Beijing in terms of time and space exhibits the ritual system in Chinese culture which is applied to urban planning and demonstrates the great achievements of ancient Chinese urban planning philosophy.⁷⁶

⁷⁵ Ibid.

⁷⁶ Ibid.

The Central Axis of Beijing witnessed the rise and fall of several dynasties of ancient China as well as significant moments of modern China under development over the past eight centuries. The Axis endured through the Yuan (1271-1368), Ming (1368-1644) and Qing (1644-1912) dynasties, the Republic of China, and the People's Republic of China. During centuries of development and change, some landmarks along the Central Axis were demolished or reconstructed for various reasons; for example, the Yongding Gate and Di'an Gate, and Tian'anmen Square, along with other parts of the urban fabric along the Axis were altered. However, "the Central Axis as a whole has always been the major axis and the fundamental basis of Beijing's urban planning and enjoys full respect."⁷⁷

ICOMOS -- International Scientific Committees (ISCs)

Working in collaboration with UNESCO, the International Council on Monuments and Sites (ICOMOS) was founded in 1964.⁷⁸ It is the only global non-government organization that works for the conservation and protection of cultural heritage places. Similar to UNESCO, ICOMOS has a focus on cultural landscapes.

As its own website states: "ICOMOS is dedicated to promoting the application of theory, methodology, and scientific techniques to the conservation of the architectural and archaeological heritage."⁷⁹ ICOMOS bases its work on principles that were established by the 1964 International Charter on the Conservation and Restoration of Monuments and Sites (the Venice Charter).

⁷⁷ Ibid.

⁷⁸ "Non-Governmental Organizations," UNESCO, accessed April 4th, 2014, <http://www.unesco.org/new/en/culture/themes/illicit-trafficking-of-cultural-property/partnerships/non-governmental-organizations/>

⁷⁹ "Introducing ICOMOS," ICOMOS, accessed April 4th, 2014, <http://www.icomos.org/en/about-icomos/mission-and-vision/mission-and-vision>

International scientific committees are ICOMOS “technical bodies.”⁸⁰ As described in the Eger-Xi’an Principles,⁸¹ “ICOMOS expects the ISCs to be at the heart of scientific inquiry.”⁸² So the ISC works to “research, develop conservation theory, guidelines, and charters, and foster training for better heritage conservation, promote international exchange of scientific information and carry out common projects.”⁸³ There are many important guiding documents known as charters adopted by the general assembly of ICOMOS, including the Venice Charter⁸⁴ and Washington Charter,⁸⁵ foundational documents of modern international conservation work. There are also a large number of resolutions and declarations. For instance, the Xi’an Declaration focuses on the need to protect the setting of heritage structures, sites and areas that face the pressure of urban development; The Quebec Declaration helps guide professionals to recognize the spirit of places in both tangible as well as intangible elements.

Potentially Applicable International Concepts

In the past several decades, historic urban core areas have become drivers of economic growth in many regions of the world because of the rapid growth of urban populations, the type and speed of development, and changing economic models. Simultaneously, some historic urban core areas have become centers for cultural and social development.⁸⁶ As a result, urban areas began to face a variety of new pressures,

⁸⁰ “International Scientific Committees,” ICOMOS, accessed April 4th, 2014, <http://www.icomos.org/en/network/international-scientific-committees>

⁸¹ “Eger-Xi’an Principles for the International [Scientific] Committees of ICOMOS” is a working document that was adopted during ICOMOS 15th General Assembly in 2005.

⁸² “Eger-Xi’an Principles for the International [Scientific] Committees of ICOMOS,” ICOMOS, accessed April 4th, 2014, http://www.international.icomos.org/isc/pdf/Eger-Xian_Principles_07-2008.pdf

⁸³ “International Scientific Committees,” ICOMOS, accessed April 4th, 2014, <http://www.icomos.org/en/network/international-scientific-committees>

⁸⁴ International Charter for the Conservation and Restoration of Monuments and Sites, 1964

⁸⁵ Charter for the conservation of Historic Towns and Urban areas, 1987

⁸⁶ “Recommendation on the Historic Urban Landscape,” UNESCO World Heritage Centre, November 10, 2011, accessed March 22th, 2014, http://portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION=201.html

such as urbanization and globalization, development, and environmental degradation. Urban growth and globalization are definitely changing the physical fabric of historic districts, but, at the same time, new development offers the hope of more economic opportunities to improve an area's standard of living in return.

The World Heritage Cities Program is a thematic program that was created by UNESCO as a result of the concern for the World Heritage Cities⁸⁷ facing difficulties in balancing conservation and development. In 2005, the World Heritage Committee requested "a new standard-setting instrument to provide updated guidelines to better integrate urban heritage conservation into strategies of socio-economic development."⁸⁸ After six years, UNESCO's General Conference adopted the new Recommendations on the Historic Urban Landscape on the 10th of November 2011.

The Recommendation on the Historic Urban Landscape is a tool that integrates policies and practices of conservation of the built environment into the wider goals of urban development with respect to the inherited values and traditions of different cultures.⁸⁹ The Recommendation, as UNESCO's approach to managing historic urban landscapes, integrated the preservation of urban heritage with social and economic development through considering urban heritage as a social, cultural, and economic resource for development. This new approach no longer simply focused on preservation

87 Historic City: Historic area/city refer to "Historic and architectural (including vernacular) areas" shall be taken to mean any groups of buildings, structures and open spaces including archaeological and palaeontological sites, constituting human settlements in an urban or rural environment, the cohesion and value of which, from the archaeological, architectural, prehistoric, historic, aesthetic or sociocultural point of view are recognized. Among these "areas", which are very varied in nature, it is possible to distinguish the following "in particular: prehistoric sites, historic towns, old urban quarters, villages and hamlets as well as homogeneous monumental groups, it being understood that the latter should as a rule be carefully preserved unchanged. (From the "Recommendation concerning the Safeguarding and Contemporary Role of Historic Areas", November 26th, 1976, access by April 23rd, 2014, http://portal.unesco.org/en/ev.php-URL_ID=13133&URL_DO=DO_TOPIC&URL_SECTION=201.html)

88 "World Heritage Cities Programme," UNESCO World Heritage Centre, accessed March 26th, 2014, <http://whc.unesco.org/en/cities/>

89 Ibid.,/

work of the physical environment, but also considered both tangible and intangible features within planning and design intervention.

The historic urban landscape is “the urban area understood as the result of a historic layering of cultural and natural values and attributes, extending beyond the notion of ‘historic center’ or ‘ensemble’ to include the broader urban context and its geographical setting.”⁹⁰ This definition includes both natural and cultural features of the site, including topography, hydrology, the built environment, open spaces, land use patterns and spatial organization, perceptions and visual relationships. The Recommendation forges the framework for a comprehensive and integrated system, which embodies the identification, assessment, conservation, and management of historic urban landscapes. Based on the 2008 Operational Guidelines from UNESCO, the historic urban landscape falls into the first category of UNESCO cultural landscape: the designed landscape created intentionally by man.

The Recommendation also offers definitions for historic urban area,⁹¹ urban heritage,⁹² and landscape approach.⁹³ The Recommendation defines the setting of a heritage structure, site, or area as “the immediate and extended environment that is part

⁹⁰ “Recommendation on the Historic Urban Landscape”, UNESCO World Heritage Centre, November 10, 2011, accessed March 22, 2014, http://portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION=201.html

⁹¹ Historic urban area (from the ICOMOS Washington Charter): Historic urban areas, large and small, include cities, towns and historic centres or quarters, together with their natural and man-made environments. Beyond their role as historical documents, these areas embody the values of traditional urban cultures. (From “Charter for the Conservation of Historic Towns and Urban areas”, ICOMOS, 1987, accessed March 22nd, 2014, http://www.international.icomos.org/charters/towns_e.pdf)

⁹² Urban heritage: monumental heritage of exceptional cultural value; non-exceptional heritage elements but present in a coherent way with a relative abundance; new urban elements to be considered.) (From “Recommendation on the Historic Urban Landscape”, UNESCO World Heritage Centre, November 10, 2011, accessed March 22, 2014, http://portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION=201.html)

⁹³ Landscape approach: The landscape approach is a framework for making landscape-level conservation decisions. The landscape approach helps to reach decisions about the advisability of particular interventions (such as a new road or plantation), and to facilitate the planning, negotiation and implementation of activities across a whole landscape. (Ibid.)

of, or contributes to, its significance and distinctive character.”⁹⁴ This emphasis on setting actually extends to the area that has cultural significance and needs to be noticed as well as structures themselves. As for cultural significance, the Recommendation sets out the definition as “aesthetic, historic, scientific, social or spiritual value for past, present or future generations. It is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.”⁹⁵

Chinese Philosophy and Gardens

A brief introduction to Chinese philosophy is important in understanding Chinese culture, because it is necessary to understand the Chinese ways of logical thinking and its views of nature and art. As a part of art, traditional Chinese gardens integrate poems and paintings into both imperial and private gardens. It shows aesthetics and Chinese philosophy through Chinese ways of interpretation.

Chinese Philosophy and view of nature

Values of nature differ between individual, cultures and nations as each have different and complex historic backgrounds. Because every country views nature through its own cultural lens, each country’s view of nature most symbolizes its cultural values. Hence, historic values should be taken into consideration for a better understanding of the value of nature. (A Brief Chinese Chronology is in Appendix A.⁹⁶)

Traditional Chinese Views

Philosophy is the origin of culture. Numerous cultural views can be traced to different philosophical perspectives. Chinese culture in general is developed based on the

⁹⁴ “Xi’an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas,” ICOMOS, October, 22nd, 2005, accessed April 23rd, 2014, <http://www.international.icomos.org/charters/xian-declaration.pdf>

⁹⁵ “The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance,” ICOMOS 1981, accessed April 24th, 2014, http://australia.icomos.org/wp-content/uploads/BURRA-CHARTER-1999_charter-only.pdf

⁹⁶ Patricia Buckley Ebrey, *the Cambridge Illustrated History of China*, trans. Zhao Shiyu, Zhang Shiling, Zhang Hongyan (Jinan, Shandong Pictorial Publishing House, 2002)

ancient Chinese philosophy of *Yijing* (*Book of Changes*) in the beginning period. Then Chinese philosophy evolved into Confucianism, Daoism, and Buddhism together as the core forces after the Hundred Schools of Thoughts.⁹⁷ Because “Chinese philosophy’s main focus is on such issues as how to rule the state, how to conduct oneself, how to do the right thing, etc,⁹⁸” Chinese philosophers’ goal is “to improve the world given”⁹⁹ instead of focusing on abstract things.

Because“... the ancient Chinese believed that there was a spiritual correspondence between the world of Nature and the world of men. The universe was thought to be an organic system, with all parts integrated into an ordered whole,”¹⁰⁰ Chinese people treated nature with a worshipful attitude during the ancient times. This kind of belief that nature, the human world, abstract spiritual things and material matters are in unity, in return became the foundational thesis for Chinese cosmology.¹⁰¹ Based on this cosmology and the development of divination over time, the *Yijing* became an important text for divination, and further developed into a philosophical text.¹⁰²

Yijing is a philosophy text, and also “the very foundation of the whole Chinese culture.”¹⁰³ It is a product including 64 hexagrams, which are based on 8 trigrams indicating natural elements formed by Yin and Yang, and *Ten Wings* as supplemental explanation text for hexagrams.¹⁰⁴ These eight natural elements, together with the 64 hexagrams, indicate not only natural things, but also show changes and relationships

⁹⁷ Nan Huaijin, Nan Haijin Xuan ji [Anthology of Nan Huaijin], Volume 4, (Shanghai, Fudan University Press, 2003)10

⁹⁸ Jeeloo Liu, *An Introduction to Chinese Philosophy: From Ancient Philosophy to Chinese Buddhism*, (Malden MA: Blackwell Publishing; 2006), 8

⁹⁹ Ibid.,9

¹⁰⁰ Ibid., 2

¹⁰¹ Ibid., 4

¹⁰² Ibid., xi, 3

¹⁰³ Ibid., 26

¹⁰⁴ Ibid., 29

between everything in the universe. So that “Yijing is indeed the archetype of Chinese philosophy,”¹⁰⁵ and the basis on which, during the Warring States era arose Hundred Schools of Thought.

Among the numerous traditional Chinese philosophers, four major schools are Confucianism, Daoism, Mohism, and Legalism.¹⁰⁶ Among the hundreds of scholars who influenced the Chinese view of nature, the two most influential traditional Chinese philosophical schools of thought are Confucianism (儒家) and Daoism (道家). Yijing’s cosmology is the foundation based on which these two schools developed.

Confucius, a 500 BCE philosopher, was considered a thinker, political figure, and educator in Chinese tradition.¹⁰⁷ He is “seen as the pioneering leader of a school of intellectuals known as ‘Ru-ism’,”¹⁰⁸ which is a school joining different scholars sharing the same Confucianism idea. Confucianism is notable for its humanism and has been the primary school of traditional Chinese philosophy for centuries. In this Confucianism field, especially for Confucius’ personal idea, an ideal person is “one who never lapses in the pursuit of self-improvement.”¹⁰⁹ So that, for a political perspective, Confucius’ ideal political state is “one that is governed by a ruler who has reached the ultimate goal of moral cultivation.”¹¹⁰ And, from Confucius’ point of view, the perfect relationship of nature and human beings is the harmonious co-existence between man and nature, and that human beings lives are based on natural resources.

¹⁰⁵ Ibid., 45

¹⁰⁶ Ibid., xi

¹⁰⁷ “Confucius,” Stanford Encyclopedia of Philosophy, accessed Oct. 2nd, 2014, <http://plato.stanford.edu/entries/confucius/>

¹⁰⁸ Jeeloo Liu, 47

¹⁰⁹ Ibid., 62

¹¹⁰ Ibid., 60

Another influential Chinese philosophy school is Daoism, and Laozi's *Daodejing* is considered as the origin of this philosophy school. In *Daodejing*, Laozi mainly focused on the nature of "Dao"¹¹¹ and its role in the changing world, also how a human being should follow the "Dao" to attain "De."¹¹² Furthermore, it is mostly known for its "negative moral principle"¹¹³ on life and its romanticism shown by Zhuangzi, who is another leader in Daoism. The way of life in Daoism is to devote one's life to seeking oneness with the spirit of nature. Laozi, as the key scholar of Daoism, described Dao as, "Man models himself after Earth, Earth models itself after Heaven, Heaven models itself after Dao, and Dao models itself after Nature." He also suggested "Wuwei" (literally means non-action or inactivity)¹¹⁴ as a way of behaving which indicates, "when things are running well, do nothing to interfere"¹¹⁵ according to *Daodejing*. So that, it doesn't mean do absolutely nothing, but do everything according to the way of nature; in other words, one should follow the trend of nature. Laozi's political ideal of having a sage as ruler has never been realized. However, "it has become an aesthetic prototype in many Chinese paintings"¹¹⁶ and captured by Chinese landscape as a Daoist utopia too.¹¹⁷

One can conclude that "Confucians all cherished the contribution of culture and civilization, Laozi advocated going back to Nature or the natural itself."¹¹⁸ Essentially, Chinese scholars often pursue Confucianism when they are successful and they retreat to their own place according to the spirit of Daoism when they fail.

¹¹¹ Dao: usually translated as ways, methods, and roads.

¹¹² De: usually translated as morals, kindness, and virtues.

¹¹³ Ibid., 144

¹¹⁴ Ibid., 144

¹¹⁵ Ibid., 145

¹¹⁶ Ibid., 150

¹¹⁷ Ibid., 150

¹¹⁸ Ibid., 150

Throughout time the concept of “oneness with nature” has described an essential spiritual relationship between nature and humans—human beings stay in harmony and unity with nature.

In summary, Confucianism views nature from the positive moral perspective as practical humanist. Daoism considers that everything comes from nature and will return back to nature as a new beginning. Nature is greatly valued by both Confucianism and Daoism although they value nature differently, based on their differing philosophical ontologies; both suggest the basic principle of human life is to be in harmony with everything, and everything means nature. Therefore, according to both of these two philosophies, the traditional Chinese view of nature includes several characteristics:

- i. nature is shaped by culture
- ii. it is a symbol of beauty and high morality
- iii. it is the terminus of an ideal life
- iv. the eternal value of a human life is to stay in harmony with nature

Brief Chinese Garden History

Traditional Chinese gardens have been developed based on the combination of culture, religion, and art. The trend of poets and scholars making their own private gardens reached an artistic peak in the Ming and Qing dynasties (1368 – 1911 CE).¹¹⁹ At that time, there were a huge number of private gardens of various sizes and types. Many existing imperial and private gardens were created during that period by professional gardeners. And from that time forward, private gardens became the place for scholars to escape from the realities of society, especially retreating from any political failures.

¹¹⁹ Peng Yigang, *Zhong guo gu dian yuan lin fen xi* [Analysis of the Traditional Chinese Garden], (Beijing, China Architecture and Building Press, 1986), 5

Traditional Chinese gardens can be divided into three main types according to their affiliations: imperial garden, private garden, and garden in Temple.¹²⁰ There are four distinguishable features in traditional Chinese gardens shared between these three types of gardens: inspiration from nature, but better than nature; the combination of beauty of both architecture and nature; inspiration from poems and paintings; and an artistic conception.¹²¹ So there are several key concepts, elements, and theories that arose from the development process of traditional Chinese gardens.

One important model of traditional Chinese gardens is the concept of “one lake, three mountains” (一池三山), which was established during the Qin and Han dynasties (221 BCE – 220 CE). This garden model was influenced by the endless searching for immortal islands by every emperor dating back to the Emperor Qin Shihuang (秦始皇 259 BCE – 210 BCE). There was a belief that three fairy mountain islands called Yingzhou(瀛洲), Penglai (蓬莱), Fangzhang (方丈) could be found in a large body of water.¹²² This belief had a profound influence in Chinese history and accelerated the transition of the traditional garden trend into a scenery landscape design period.¹²³ This archetype can be found in both imperial and private gardens and incorporate the four key design elements symbolically. The Summer Palace in Beijing and the Humble Administrator’s Garden in Suzhou both demonstrated this model (See Figure 6 and 7).

The Summer Palace was first built in 1750 CE during Qianlong’s reign in the Qing Dynasty for two reasons: celebrating Qianlong’s mother’s birthday and

¹²⁰ Zhou Weiquan, *Zhong guo gu dian yuan lin shi* [Traditional Chinese Garden History], (Beijing, Tsinghua University Press, 1999) 8

¹²¹ *Ibid.*, 13

¹²² *Ibid.*, 32

¹²³ *Ibid.*, 33

reorganizing the water system in the northwest of Beijing.¹²⁴ Although it was built on an existing landscape dating back to the Yuan Dynasty, the new plan used West Lake in Hangzhou as the original reference for the location relationships between land and waterscape.¹²⁵ The dense building complex, located at the south side of Wanshou Hill, was composed by a series of buildings using a central axis.¹²⁶ This magnificent series of buildings shaped a variety of spaces, which used the Kunming Lake as foreground, and became the focal point of the entire Palace. The design also had an urban-street scene at the north side of Wanshou Hill and imitated a real retail street in Suzhou. Also, there is a garden-within-a-garden, called Xiequ Garden, that used Jichang Garden as a reference, which is a typical private garden in Jiangnan region, China.



Figure 6 The bird's eye view of Summer Palace, the Kunming lake with three islands (The Summer Palace Administration Office¹)

The design of the Summer Palace shows how heavily the Imperial family was influenced by private gardens from the Jiangnan region (south of the Yangtze River) and

¹²⁴ “History of the Summer Palace”, the Summer Palace Administration Office, accessed Oct. 3rd, 2014, <http://www.summerpalace-china.com/jgjd.aspx?id=792>

¹²⁵ Zhou Weiquan, 414

¹²⁶ Ibid., 416

also indicated the great influence that Jiangnan private gardens had on the design of traditional Chinese gardens.

As one of the most famous private gardens in the Jiangnan region, the Humble Administrator's Garden was built in the early years of Zhengde in the Ming Dynasty (around the early 16 century).¹²⁷ The garden consists of three main parts: eastern, which is a relatively open space; central, which is the core area; and west, which has more complicated buildings than the other parts. It is a water-centered garden decorated with several small islands in lakes and surrounded by artificial mountains and forests. The mountain island in the central part was designed as a miniature version of the Tai Hu Lake, which was covered by citrus trees and other vegetation.¹²⁸ Also, many building names in this garden were drawn from famous poems or literature. There are different kinds of space in the core area, such as, a large open space shaped by the lake and artificial mountain, semi-open areas shaped by water and buildings, and intimate spaces between buildings.¹²⁹ Bridges and pathways connect all these spaces. Aside from space, visual relationships between buildings and natural features can be understood, including enframing buildings and their shadows through pavilions and borrowing the scenery of a tower outside the garden and bringing it into the garden to give visitors a feeling that the garden is endless.

¹²⁷ "Garden History," Suzhou Humble Administrator's Garden Management Office, accessed Oct. 3rd, 2014, <http://en.szzzy.cn/about/&i=7&comContentId=7.html>

¹²⁸ Zhou Weiquan, 476

¹²⁹ *Ibid.*, 478

These approaches can create different visual effects. For example: a small and narrow space first can make the following large open space seem larger and brighter. Also, dense placement of rocks, together with artificial mountains, can let visitors feel the delight of seclusion, while several rocks standing independently can provide visitors a chance to enjoy the details of the rocks; these same kinds of techniques can be used with buildings and vegetation.¹³²

The long development process of Chinese gardens shows that Chinese people have a truly deep interaction with nature. Traditional Chinese gardens' relationship between philosophy and nature can be summarized as: "the cosmological connections of the garden as a microcosm."¹³³ Also, the mutual aid relationship between painting, literature and garden design demonstrates the aesthetic values in traditional Chinese views. Although the traditional methods of garden design have been neglected recently because of political and cultural change in China, theories and existing gardens still work as important examples for contemporary landscape architecture design, and also have great influence on current understanding of landscape meaning and value of place.

In summary, from the ancient time to contemporary, Chinese philosophy always considers "in harmony with nature" the highest level of spiritual life. Confucius's concept of "nature is shaped by cultural" is in agreement with current cultural landscape views. Due to the long development process of traditional Chinese gardens, this philosophy gradually emerged through the integration of garden design with literature and paintings.

¹³² Peng Yigang, 26

¹³³ Craig Clunas, *Fruitful Site: Garden Culture in Ming Dynasty China*, (Durham, N.C., Duke University Press, 1996), 205

Interpretation

Freeman Tilden¹³⁴ was one of the first people who reflected on and talked about interpretation. He worked with the National Park Service to create basic principles and methods of interpretation. His six principles and theories in the heritage interpretation field are still valuable today. He sets out principles based on his belief that “Interpretation is the revelation of a larger truth that lies behind any statement of fact, and it should capitalize mere curiosity for the enrichment of the human mind and spirit.”¹³⁵ His six principles are:

- i. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
- ii. Information, as such, is not Interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
- iii. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable.
- iv. The chief aim of Interpretation is not instruction, but provocation.
- v. Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.

¹³⁴ Freeman Tilden (August 22, 1883 – May 13, 1980)

¹³⁵ Freeman Tilden, *Interpreting Our Heritage; principles and practices for visitor services in parks, museums, and historic places*, (Chapel Hill, the University of North Carolina Press, 1957) 8

vi. Interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach; to be at its best it will require a separate program.¹³⁶

In summary, interpretation is using art as a tool to transform information of a whole history into an active story in order to interest visitors by connecting to their personality, experience and ideals. Interpretation's aim and function is not instruction; its purpose is to stimulate visitors' curiosity and interest in the history. This concept is embodied in Freeman's famous quotation from a NPS administrative manual, "Through interpretation, understanding; through understanding, appreciation; through appreciation, protection."¹³⁷ Thus, interpretation is an efficient tool for education, and, at the same time, increases people's awareness of the meaning and importance of heritage.

Since the early era of thinking about interpretation, an increasing number of passionate pioneers in the historic landscape field have recognized the importance of interpretation because it helps visitors and readers to see beyond the existing realities and get a better understanding of the past through the strong connection between the property and background stories. This can be a vital step to rescue a threatened property. During the 1980s, Michael J. Ettema posed two different perspectives on interpretation: formalist and analytical. The formalist perspective made artifacts the center of interest and emphasized the history of objects. The analytical view focuses more on the history process and a broader social context of that time. The analytical perspective was influenced by an emerging social history view. Ettema used the metaphor "iceberg" to describe history as a seamless web, which was also known as "history from the bottom

¹³⁶ Ibid, 9

¹³⁷ Ibid, 38

up” by some of the new social historians. These social historians believed that the study of lives of ordinary people could shed light on how we live our lives in the present. Ettema stated, “the great people and events of history are just the tip of the iceberg beneath which float the condition and relationships through which people lived their lives. ... To understand the events, we must understand the structures of society and culture that support them.”¹³⁸ At the same time, since history is philosophically understood as a linear process and seamless web, in order to make the study of history useful to us in the present, “it is also necessary to know how social and cultural systems changed over time and how they led us to where we are now.”¹³⁹ This perspective is a nice explanation for why interpretation plays an important role for a historic property.

Catherine Howett describes which kind of interpretation can be an artful one in *The Role of the Interpretive Program in the Restoration of Historic Landscape*. Howett stated that “It is customary to presume, is it not, that first the property must be renewed in appropriate ways ... and then, with the renewal in place or at least well mapped out, an interpretive program must be developed that will articulate the key points—the narrative or storyline—by means of which the history and significance of the site will be explained to the visiting public.”¹⁴⁰ Also, she believed that a well-put interpretation, which made the physical site take on life and meaning, could move visitors profoundly and “even change us in some lasting way.”¹⁴¹ She also pointed out disadvantages of both the formalist and analytic approaches to interpretation. The formalist interprets artifacts

¹³⁸ Michael J. Ettema, “History Museum and the Culture of Materialism,” in *Past Meets Present: Essays about Historic Interpretation and Public Audiences*, ed. By Jo Blatti (Washington, D.C.: Smithsonian Institution, 1987) 75

¹³⁹ Ibid, 76

¹⁴⁰ Catherine M. Howett, “The Role if the Interpretive Program in the Restoration of Historic Landscape,” in *Breaking ground: examining the vision and practice of historic landscape restoration*, (Winston-Salem, N.C. : Old Salem, 1999) 48

¹⁴¹ Ibid, 50

without the complex social and cultural aspects that shaped the artifact itself; while the analytic interpretation can be drowned by too much social and cultural context and lose the meaning of reading the artifact. Since landscapes express meanings and values that the past treasured, the text and meanings that are woven into a design should first be understood by a careful reading and perception of the historic background.

According to the International Council on Monuments and Sites (ICOMOS) Charter on the Interpretation and Presentation of Cultural Heritage Sites (2008), “interpretation refers to the full range of potential activities intended to heighten public awareness and enhance understanding of cultural heritage sites.”¹⁴² It can provide visitors a better experience for helping them understand the property’s historic and cultural significance. Interpretation approaches vary due to different levels of historic integrity of properties and they range from self-guided brochures to on-site free-standing signs, educational programs, community activities, and interpretive infrastructure.¹⁴³ The ultimate goal of interpretation is to convey background meanings of the historic-related features of the property to visitors, in order to let them experience the property and understand the importance of its existence. The Charter also sets out seven objectives on which the interpretation and presentation should be based. These seven objectives are: access and understanding; information sources; attention to setting and context; preservation of authenticity; planning for sustainability; concern for inclusiveness; and importance of research, training, and evaluation.¹⁴⁴

¹⁴² “ICOMOS Charter on the Interpretation and Presentation of Cultural Heritage Sites,” ICOMOS, 2008, accessed April 15th, 2014, <http://www.icomos.org/en/charters-and-texts>

¹⁴³ Interpretive infrastructure refers to physical installations, facilities, and areas at, or connected with a cultural heritage site that may be specifically utilized for the purposes of interpretation and presentation including those supporting interpretation via new and existing technologies. (Ibid.)

¹⁴⁴ Presentation more specifically denotes the carefully planned communication of interpretive content through the arrangement of interpretive information, physical access, and interpretive infrastructure at a cultural heritage site. (Ibid.)

The Access and Understanding principle ensures the interpretation program can enhance visitor experience and create more accessible activities to the public. Information sources focus on the accuracy of the evidence upon which the interpretation is based. Also, all this information should be documented and archived for the public's access and future reference. The principle of attention to setting and context emphasizes the relationship between the property and the elements around it and contributes to the significance of the property, both tangible and intangible. It makes sure interpretation programs connect with "wider social, cultural, historical, and natural contexts and settings."¹⁴⁵ Preservation of authenticity helps guarantee interpretation programs are sensitive to character-defining features and helps to protect the cultural significance of the property. Planning for sustainability concerns itself with whether or not the interpretation programs are part of an overall planning and management plan, which will take "social, financial, and environmental sustainability together as its central goals."¹⁴⁶ Concern for inclusiveness ensures that professionals, hosts, communities, and stakeholders are involved with the interpretation program to support every party's interests and benefit. And finally the importance of research, training, and evaluation principle states that these three elements "are essential components of the interpretation of a cultural heritage site."¹⁴⁷

There are many methods and tools for heritage interpretation, some of which are described here. Among some personal methods, guiding is the most common form. Non-personal heritage interpretation methods can be exhibitions, paths with interpretive

¹⁴⁵ "ICOMOS Charter on the Interpretation and Presentation of Cultural Heritage Sites", ICOMOS, 2008, accessed April 15th, 2014, <http://www.icomos.org/en/charters-and-texts>

¹⁴⁶ Ibid.

¹⁴⁷ Ibid.

panels, and audio guides in museums. Every one of these methods has their own advantage and disadvantage. Signs and labels for both indoor and outdoor sites are the cheapest methods. Although it can offer basic information to visitors, it is not always creative or provocative enough to touch their feelings. For some outdoor situations, signs might even disturb the original atmosphere of a site. Brochures, including guidebooks and leaflets, are another common non-personal interpretation method. Tour guides, as the most common and traditional personal interpretation method, are very important for some large sites and sites that choose to use current technology for interpretation. Tour guides can be a very useful tool to answer visitors' questions and direct them throughout the whole trip. However, tour guides also have some drawbacks, such as limitation of visiting route and time.

Summary

As a summary of the topical research and discussions above, there are several key points which are important when creating a new design for a historic site:

- i. The personal emotional connection is very important in preserving a site.
- ii. For better planning purposes, conservation of nature and preservation of cultural heritage must be valued equally.
- iii. Cultural resources include both tangible and intangible qualities. Compared with noticeable tangible qualities, intangible qualities may be easier to be ignored.
- iv. Historic significance, historic integrity, and historic context are three key factors that influence the site.
- v. Historic research and reading the landscape are vital when doing site research, including incorporating historic photos, maps and understanding the current

situation.

- vi. People's interaction with their environment and the integrity of a site with a larger landscape context determines a successful design.
- vii. In a historic urban landscape, open spaces, land use patterns, spatial organization, and visual relationships are essential features within the planning and design intervention step.
- viii. Chinese philosophy and aesthetics, being in harmony with nature and integrating art, including painting and literature, has important meanings within traditional garden designs.
- ix. For a successful interpretation, the purpose is to heighten public awareness of a historic site through emotionally moving visitors and stimulating their interest in the history of the place.
- x. Key objectives of interpretation include preservation of authenticity, information and attention to setting and context.

Whether preservation or rehabilitation is the goal, improving people's understanding and evoking their awareness of the importance of historic properties is the purpose. Precedents from both NPS and guidance from international organizations shows the importance of understanding the site; proper and sustainable management that can improve the historic significance and merge the property into a larger context in the long term, and the interaction between people and the property are the primary focus.

Also, a positive integration can be helpful during preservation, which helps visitors understand the site in a more vivid way, and build up the connection between visitors and properties. Interpretation through new design is one method, which could

interest and attract more visitors. For the purpose of a better interpretation of the specific site of the thesis, understanding Chinese culture and its aesthetic can be influential factors. In addition, the special traditional lifestyle, architecture style in Beijing, and its urban fabric all contribute much to the design character.

CHAPTER 3

BELL AND DRUM TOWERS AREA:

History and Existing Conditions

Introduction

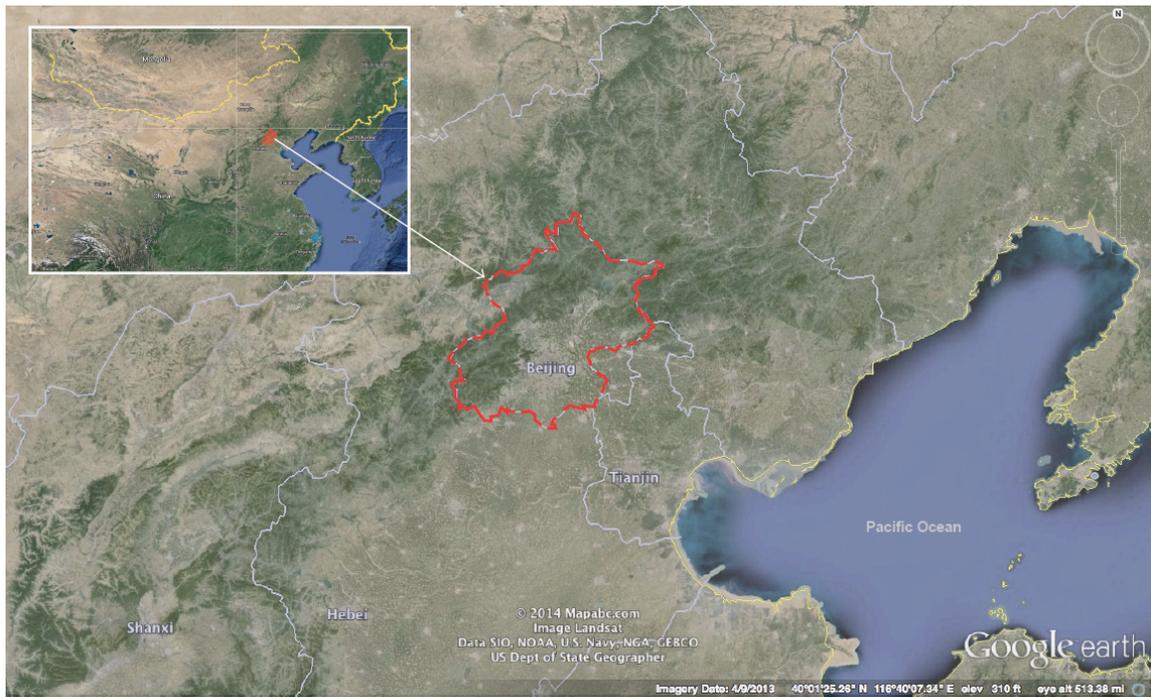
This chapter will discuss the developmental history of Beijing and citizens' life there. The developmental history shows the historic background and the current urban fabric in a macroscopic perspective. The history will emphasize transition of the location of the imperial palace and how it shaped the importance of the city's central axis. Further, the special urban fabric forged by a minority nationality, the Hutong, will be discussed as a special local life style.

The discussion will then focus on my study site—the Bell and Drum Towers Area, including its location, historic significance, and its current situation. The reason I chose this place as my design site is because it is a place with great historic significance and it is also under pressure by urban development. This kind of situation makes the place a spot where conflict between traditional and modern is apparent. There is a need for preservation in the face of development. Although due to the development, this area has changed a lot during the past several years, it still has a significant place in the history of the city.

Brief Beijing Developmental History

Today, Beijing is the capital city of the People's Republic of China (PRC), as a direct-controlled municipality under the national government, and is also the nation's

political, cultural, and educational center (See Figure 8). The city covers an area of 16410.54 square kilometers (6,336.14 sq mi) and has a population of 21.15 million.¹⁴⁸ The city contains six World Heritage Listed properties, including the Imperial Palaces of the Ming and Qing Dynasties in Beijing, Peking Man Site at Zhoukoudian, the Great Wall, Summer Palace, Temple of Heaven, and Imperial Tombs of the Ming and Qing Dynasties.¹⁴⁹




— Boundary of PRC — Boundary of Beijing

Beijing City Location Map

Figure 8 The Location Map of Beijing (Google Earth and author)

Beijing was originally called Ji (蓟) when it was the capital city of Yan (11th–222 BCE) during the Warring States Periods before the Qin dynasty. Soon after the unification by the First Emperor Qin Shihuang (221 BCE), the Great Wall of China was

¹⁴⁸ “Beijing,” Baike, Baidu, accessed by Aug. 5th, 2014, <http://baike.baidu.com/subview/2621/13223029.htm?fr=aladdin>

¹⁴⁹ “World Heritage List”, UNESCO World Heritage Center, accessed by Aug. 5th, 2014, <http://whc.unesco.org/en/list/>

built along the northwest corner of the city.¹⁵⁰ The city was then called Youzhou and Yanjing during the Han to Tang dynasty (202–907 CE), and was used as a northeastern outpost for military purposes.¹⁵¹ It was not the capital city until the Liao dynasty (916–1125 CE), when it was used as one of five capitals and named Nanjing (Southern Capital) in 938 CE.¹⁵² During this period, the city wall and the imperial palace were built.¹⁵³ When the Jin dynasty (1115–1234 CE) was established, it located its capital city in Beijing, but it was named Zhongdu (Central Capital) at the time. Jin rulers enlarged the original city wall area and built structures for the imperial’s retreat during the summer time. Those structures became the oldest elements of the future Imperial Palace and the Forbidden City.¹⁵⁴ The Jin dynasty ended, being usurped by the Song Dynasty and Mongol Empire. The Mongols founded their dynasty, Yuan (1271–1368 CE), and chose Beijing as their capital renaming it Dadu (Great Capital or Metropolis). Khubilai, the Great Khan of the empire, decided to rebuild the city and some of those decisions have had long-lasting impacts.¹⁵⁵ For example: the north-south axis running through the imperial palace; a chain of picturesque lakes enclosing the palace complex called Haizi, which is now called Shishahai; and the artificial hill in the north of the palace, called Jingshan, was created from the dirt dug out to create the moat.¹⁵⁶ Dadu’s urban plan used many old capital cities as models, such as Kaifeng and Luoyang,¹⁵⁷ and its design was

¹⁵⁰ Lillian M. Li, Alison J. Dray-Novey, Haili Kong, *Beijing: From Imperial Capital to Olympic City*, (New York : Palgrave Macmillan, 2007), 7

¹⁵¹ *Ibid.*, 7

¹⁵² Michael Meyer, *the last days of old Beijing: life in the vanishing backstreets of a city transformed*, (New York : Walker & Company, 2008.), 143

¹⁵³ Lillian M. Li, Alison J. Dray-Novey, Haili Kong, 9

¹⁵⁴ *Ibid.*, 12

¹⁵⁵ *Ibid.*, 16

¹⁵⁶ Zhou Weiquan, 272

¹⁵⁷ These two cities were old famous capital cities. Kaifeng was the capital city of Song dynasty and Luoyang was the capital city of Zhou and Tang dynasties’.

influenced by the ideal city concept from the Chinese classical text Zhou Li.¹⁵⁸ Dadu attracted people from distant places, from Arabia to Eurasia. The famous Italian merchant Marco Polo described how the huge population filled Dadu in his book *Travels*. He also mentioned that “booths and shops lined the main streets, especially near the Drum and Bell towers.”¹⁵⁹ From his description, Dadu was unusually large in size with a scale “on an order of magnitude rare in the thirteenth century.”¹⁶⁰ The Yuan rulers also improved part of the Grand Canal from Beijing to Tongzhou (which is called Tonghui River and further heading to Hangzhou) which was initially built up during the Sui Dynasty and used as an important transportation method moving materials from the south to the north, and is still in use;¹⁶¹ this site is one of the World Heritage Listed properties of China. The Ming dynasty (1368–1644 CE) played a crucial role in the development of Beijing City (See Figure 9). Beijing was originally called Beiping (Northern Peace) during the Ming dynasty. The founder, Zhu Yuanzhang, was a Han Chinese and originally chose Nanjing¹⁶² as the capital city. However, his son, the third emperor Zhu Di, who was known as Yongle Emperor, decided to move the capital city to Beijing in 1403 after he seized the throne. Aside from renaming the city Beijing, the Yongle Emperor also reconstructed portions of it over fifteen years, such that “Beijing more than ever became a magnet for people, goods, and services”¹⁶³ especially after it formally became the capital city in 1421. After the 16th century, Beijing, as the capital city, was not only a destination because it was the political center of the empire, but also because of its high

¹⁵⁸ Lillian M. Li, Alison J. Dray-Novey, Haili Kong, 16

¹⁵⁹ *Ibid*, 20

¹⁶⁰ *Ibid*, 21

¹⁶¹ “The Grand Canal,” UNESCO, accessed by Oct.2nd, 2014, <http://whc.unesco.org/en/list/1443/>

¹⁶² This Nanjing is different with the Nanjing during Liao dynasty; this Nanjing is a city locate near the Yangzi River

¹⁶³ Lillian M. Li, Alison J. Dray-Novey, Haili Kong, 27

cultural reputation and urban sights in the north part of the city.¹⁶⁴ The new layout of Beijing, still oriented along the north and south axis with the Imperial Palace in the center as originally laid out according to the Dadu, was squared by eastern and western city walls from the Yuan Dynasty. New northern and southern walls were also built altering the shape and location of the earlier layout, yet the core is basically kept up to today.¹⁶⁵

After the transition from the Ming to the Qing dynasty (1644–1911CE), the Manchus rulers divided the city into northern and southern parts (See Figure 11).¹⁶⁶ The northern city, which was called the inner city, became the preserve of the Qing military

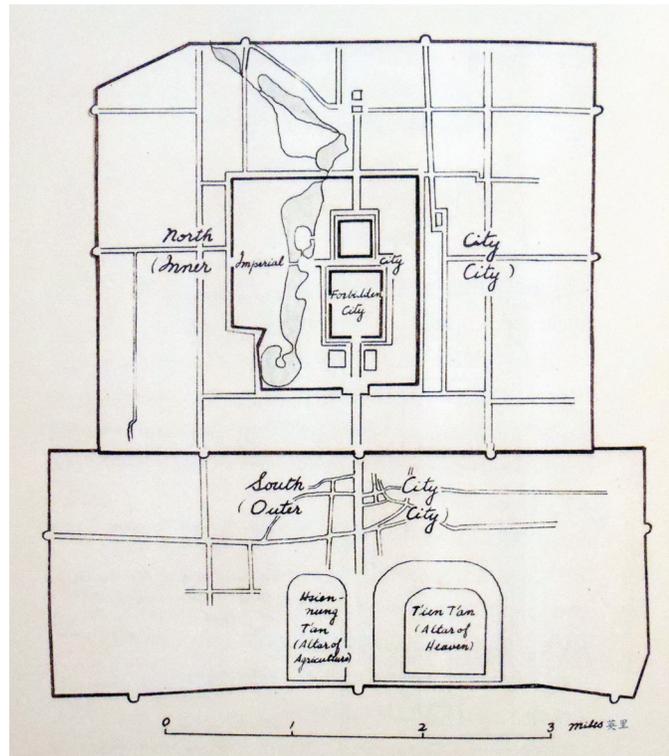


Figure 9 Beijing city during the Ming Dynasty (Hou, Renzhi, *A Historic Geography of Beijing*, 2013)

¹⁶⁴ Susan Naquin, *Peking: Temples and City Life, 1400-1900*, (Berkeley : University of California Press, c2000.) 282

¹⁶⁵ Ibid, 110, 119, 4

¹⁶⁶ Lillian M. Li, Alison J. Dray-Novoy, Haili Kong, 37

forces families (banners) and high officials. Both Han Chinese and nonbanner populations were located in the southern portion of the city, which was called the outer city.¹⁶⁷ As a result of the division of the city during the Qing era, dense development of commercial areas afforded much prosperity, but also created separations of various ethnic enclaves. The Imperial Palace was partially rebuilt and other imperial princes constructed their own mansions in the inner city during the Shunzhi reign.¹⁶⁸

The growing size and prosperity of the city at that time can be understood from its thriving street life (See Figure 10 for markets location map, marked as various shapes of dots). Citizens bought objects from stores, stalls, and even on the streets. Peddlers offered

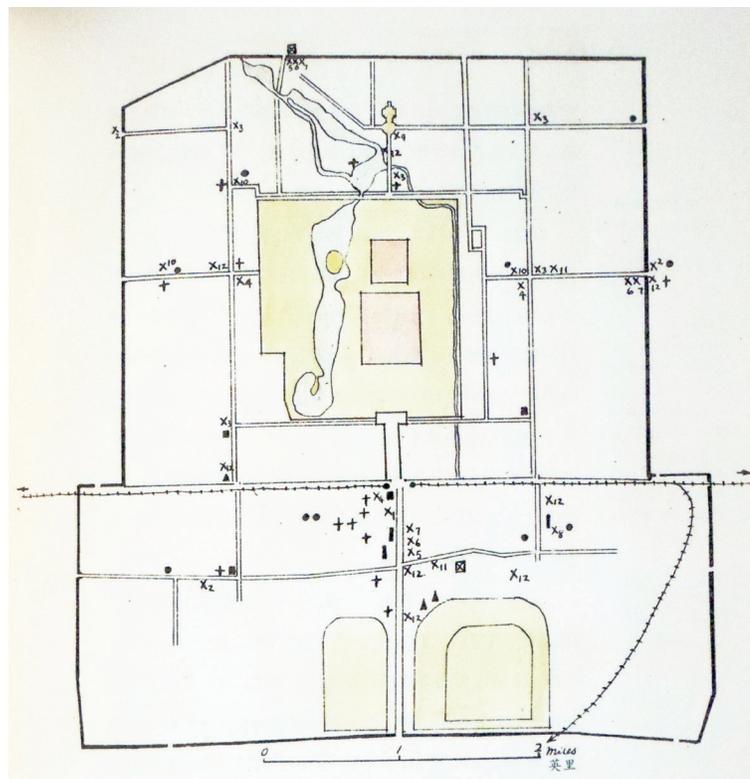


Figure 10 Markets in Beijing (during the Republic of China period) (Hou, Renzhi, *A Historic Geography of Beijing*, 2013)

¹⁶⁷ Susan Naquin, 291-292

¹⁶⁸ *Ibid.*, 295

clothes, household items, and services, including haircuts and knife sharpening. For the outer city, shops mainly were located around three gates along the city wall, especially Qianmen (the Front Gate) which is called Dashalar now.¹⁶⁹ There were several markets in the densely populated areas of the inner city, including the north-central Drum Tower Avenue, although some markets were also located south of the Forbidden City.¹⁷⁰ There was so much demand to be in this area that the government set out rules for merchants and built thousands of langfang (dwelling or shops with street frontage for merchant use) near main gates of the palace and the Bell and Drum towers area. There were fifteen thousand registered shop households in the inner city area by 1815.¹⁷¹

After several years of war during the Qing Dynasty, including the Second Opium War, the intrusion of the Eight-Nation Alliance, and the Revolution of 1911, the government of the Republic of China made Beijing its capital again in 1912.¹⁷² However, Beijing lost and gained its capital status several times in the 20th century before it finally became the capital city of the People's Republic of China in 1949. During the past 60 years, although the structure of the city core area remains, the city walls and most of the gates of the city wall were torn down for development reasons.

¹⁶⁹ Ibid., 625

¹⁷⁰ Lillian M. Li, Alison J. Dray-Novvey, Haili Kong, 31

¹⁷¹ Ibid., 625

¹⁷² "The Republic of China," Baike, Baidu, accessed Sep. 28th, 2014, <http://baike.baidu.com/view/22114.htm>

In summary, from the Liao to the Qing Dynasty, Beijing City was greatly enlarged, and its location shifted towards the southwest. The city plan during Jin Dynasty was based on the plan of the Liao Dynasty. Then the city moved in a northeast direction along the central line of the old Dadu and a new imperial palace was built during the Ming Dynasty. The core area of Beijing today still looks very much like it did during the Qing Dynasty, which was basically based on the Ming dynasty's planning (See Figure 11). There are still many traces of planning and urban design decisions made from previous dynasties in Beijing, including the urban fabric and street patterns of the city core area, many imperial retreats, and the relic of the urban walls of Dadu.

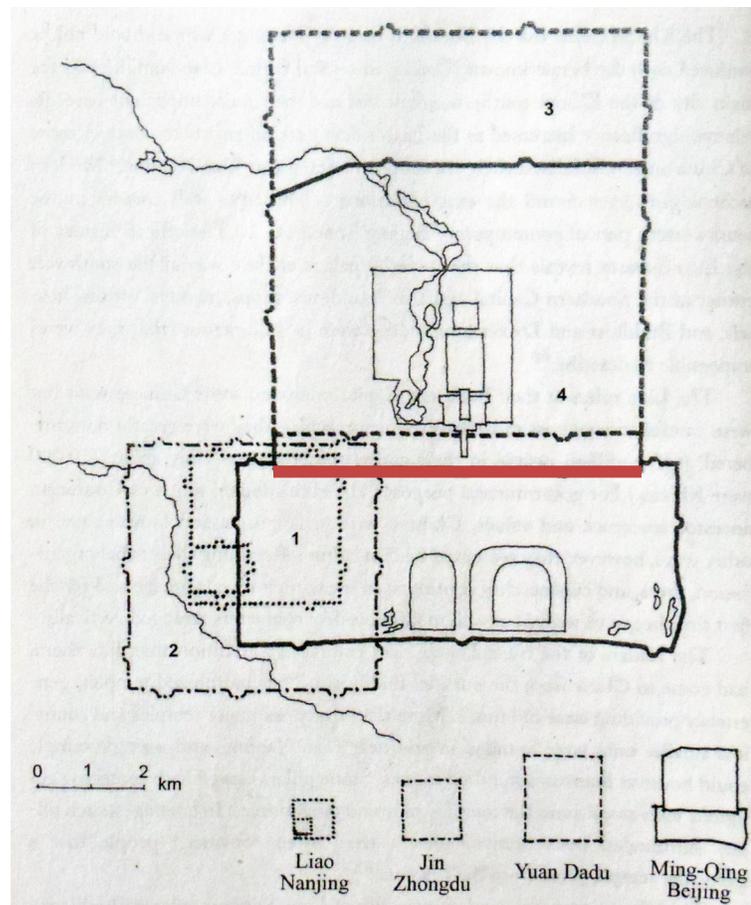


Figure 11 The city's location change from Liao to Qing, the redline is the separation line during the Qing Dynasty (Lillian M. Li, Alison J. Dray-Novey, Haili Kong, *Beijing: From Imperial Capital to Olympic City*, 2007)

Hutong Life Style

Hutong, is a special name for the kind of narrow street development that started in the Yuan dynasty, originally meaning “water well” in Mongolian. Siheyuan, which means single-story residence courtyards, a Beijing vernacular architecture style, lined every Hutong (See Figure 12). Different than langfang design for merchant use facing out towards the street, siheyuan turned inwards for residential use only. Each of these kinds of special courtyard structures accommodates more than three families. Typical Hutong life is about one’s whole life. An individual is born in their grandparents’ courtyard and grows up there with their friends in the neighborhood (See Figure 13). These friends become “faxiao” (friends grow up together), then they turn into classmates when attending school nearby. Afterwards, some of them might marry each other and build their own families. All neighbors help each other during daily life and they can be emotionally closer with each other even more so than blood relatives. Their courtyards contain their memories and traces of their life. For these residents, a shared value is to “keep one’s feet on the ground”.¹⁷³ This spiritual connection with the city, which a resident has, is reinforced by the physical place, as it is their own hometown to preserve. This traditional neighborhood is under threat of obliteration now, as new developments not only raze the neighborhood’s fabric, but also erase this unique life style and connection to a specific place.

¹⁷³ Michael Meyer, 7



Figure 12 Courtyard lined Hutong (Ailishi, website, circa date 1960s)



Figure 13 May 1946, children playing games in their courtyard (From www.360doc.com website)

A typical siheyuan, as a traditional housing complex, usually has four buildings located in the four cardinal directions. (See Figure 14 and 15) The one located on the north (facing south) is considered to be the main room for the entire yard. The east and west buildings are connected to the north building through pathways. Sometimes, a two-story building might be constructed behind the northern building, which is the only place for a two story building. Building materials include grey bricks, wood columns painted in red or taupe, and grey color tiles used for the roof. The yard enclosed by the four buildings acts as an open space for residents, where there is often located a table and chairs for tea, and pergola for vegetation.

All these buildings complexes, which formed the Hutong, influenced the grey color of the core city and hence become many tourists' impression of Beijing. Hutong life in Beijing demonstrates a way of staying in harmony with nature. The emotional connection between residents there and the earth can be the most important driving force for the preservation work of those properties and the life style as a whole. This preservation does

not only deal with forms of buildings and urban fabric, but also the atmosphere and daily life of neighborhoods (See Figure 16).



Figure 14 Typical siheyuan located at Jinsi Hutong no.12 (Beijing Daily, <http://bjrb.bjd.com.cn/>)



Figure 15 Typical siheyuan located at Jinsi Hutong no.12 (Beijing Daily, <http://bjrb.bjd.com.cn/>)

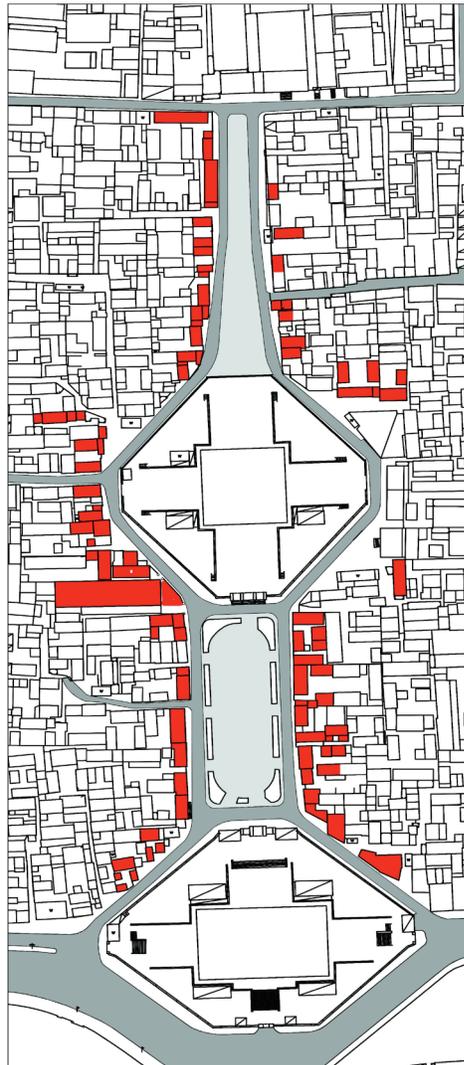


Figure 16 Hutong area around my study site. The red blocks show buildings that have been torn down so far as of Sept. 2014 (By author)

Site History

The Bell and Drum Tower area has been one of the most prosperous places in Beijing since the Yuan Dynasty.¹⁷⁴ Its richness in history and culture makes it a popular tourist attraction today. These two towers provided the time signal stroke during the Yuan, Ming and Qing Dynasties (1271–1911 CE), with the architecture of these two landmark buildings representing the ancient art of Chinese architecture (the Forbidden City is the best example). This area, as a typical Hutong residential area and one of the busiest market places, attracted a traditional catering industry and hosted local performance art since the Ming Dynasty (See Figure 17). After the end of the Qing dynasty, this area was the location of a cultural education institution for local people until Sep. 1983,¹⁷⁵ when restoration work started in 1984.¹⁷⁶

The Drum Tower was first built during 1264–1278 in the Yuan Dynasty and burnt down by fire shortly afterwards. It was rebuilt in 1297 after twenty-odd years.¹⁷⁷ After the building was rebuilt again in 1420, during the same time the entire city was expanding in the Ming dynasty, it experienced several periods of restoration—in 1539 (Ming dynasty), 1800 (Qing dynasty) and 1894 (Qing dynasty).¹⁷⁸ The Bell Tower was first built during the same era as the Drum Tower, located north of the Drum Tower. During 1745–1747 the Bell Tower was rebuilt in the Qing Dynasty as the government deduced that the reason for the number of fires of this building was because the building was made of

¹⁷⁴ Zhonggulou, Cultural and Historic Study Committee of Beijing Dongcheng District People's Political Consultative Committee, (Beijing, Cultural Relics Press, 2009) 82

¹⁷⁵ Ibid., 10

¹⁷⁶ Ibid., 320

¹⁷⁷ Ibid., 20

¹⁷⁸ Ibid., 73

wood.¹⁷⁹ So they redesigned the Bell Tower with masonry construction, and that building still exists today.

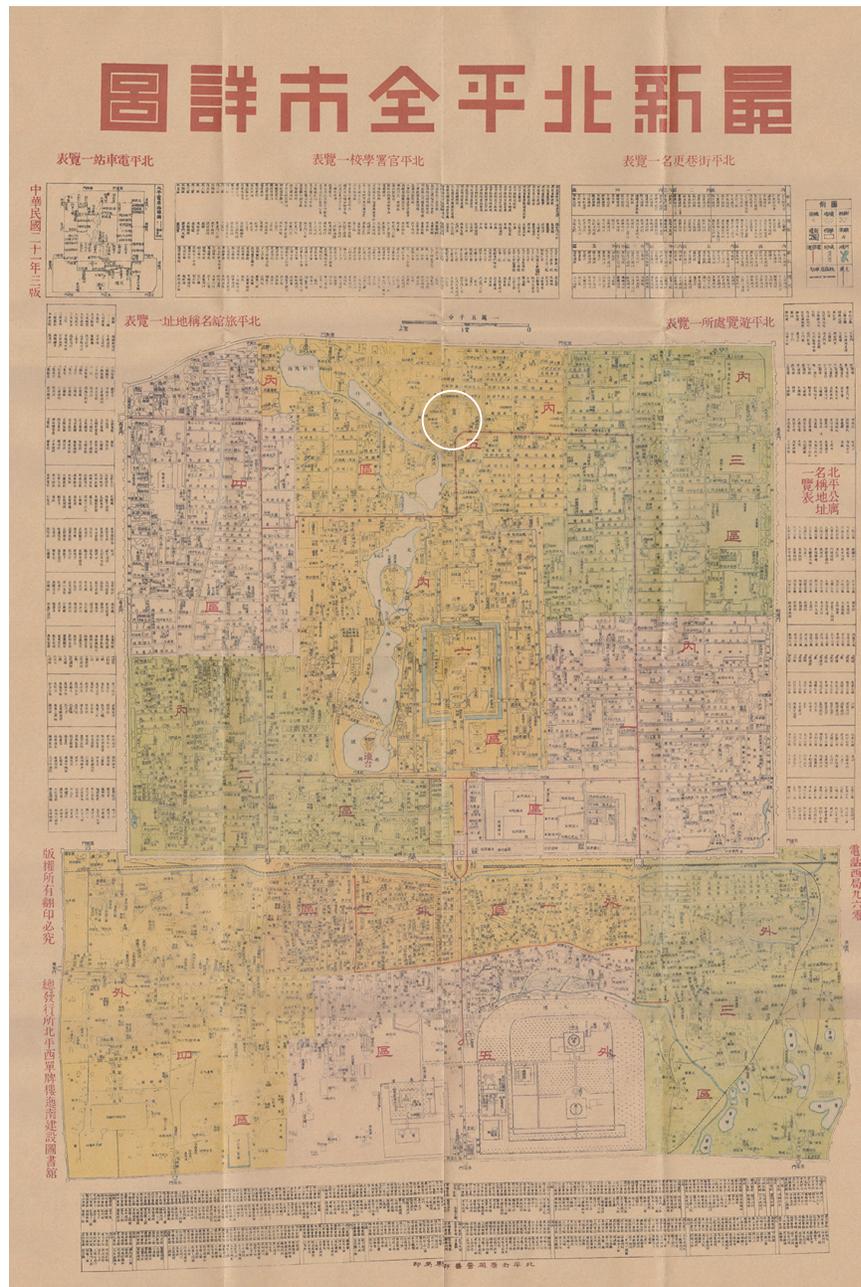


Figure 17 Map of Beijing in 1932. Site is marked out in white circle (Sinomaps, 2012)

¹⁷⁹ Ibid., 77

According to a text written by Yuan scholar Xiong Mengxiang,¹⁸⁰ the area around the Bell Tower had the broadest streets in the city and the transportation was very convenient, so that the Drum and Bell Towers area was one of the most prosperous and rich places during the Yuan dynasty and many scholars and artists lived in its surrounding neighborhoods.¹⁸¹

The current Drum Tower, built in 1420 during the Ming Dynasty is 46.7 meter (153.2 ft.) in height and has a footprint of 6856.5 square meters (1.69 acre) (See Figure 18).¹⁸² The adjacent Bell Tower, rebuilt in 1747 during the Qing dynasty, has a height of 47.9 meter (157.2 ft.) and a footprint of 5740 square meters (1.42 acre) (See Figure 19).¹⁸³ As these two buildings are located at the north end of the Central Axis of Beijing, they have great views of the Hutong area of ancient Beijing city (See Figure 20).



Figure 18 The Drum Tower view from Dianmen Street during 1924-1927 (Sidney Gambel, 1924-1927)

¹⁸⁰ Xiong Mengxiang, a scholar in the Yuan Dynasty. He wrote the book *Xijinshi*, which talked about culture in Beijing area in detail. The book was printed in Mandarin in 1983.

¹⁸¹ Cultural and Historic Study Committee of Beijing Dongcheng District People's Political Consultative Committee, *Zhonggulou*, (Beijing, Cultural Relics Press, 2009) 44

¹⁸² *Ibid.*, 73

¹⁸³ *Ibid.*, 78

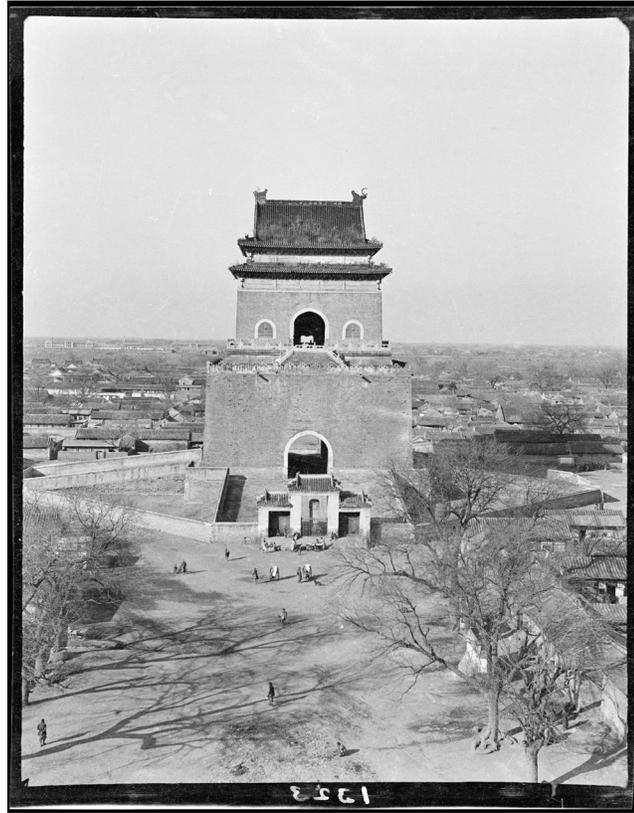


Figure 19 The Bell Tower view from the Drum Tower during 1917-1919 (Sidney Gambel, 1917-1919)

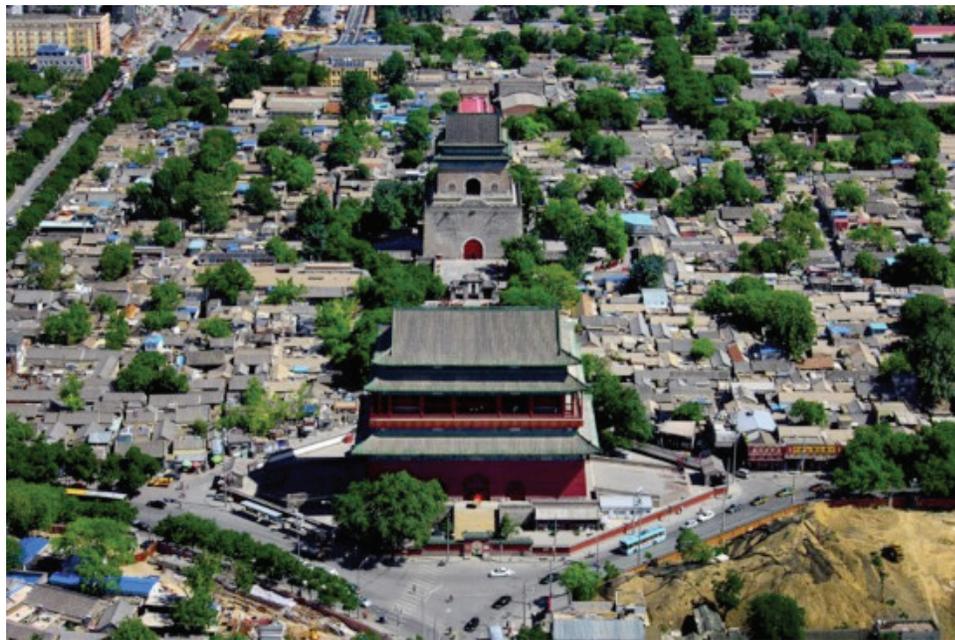


Figure 20 The panoramic view of the Drum and Bell Towers Area in 2011. Drum Tower in foreground, Bell Tower in background (Sun, Fengyang, 2011)

To the southwest of these towers are Beihai and the extension of the royal garden, Shishahai; they are the greatest waterscapes located in the city core, where many famous dignitary mansions reside. To the south of this area is Dianmen Outer Street, which connects Jingshan Park and the Forbidden City through Beijing's Central Axis. Standing on top of the Drum Tower, visitors can get a panoramic view of the entire Central Axis (See Figure 21). There is a neighborhood of Hutong residents to the east, which is preserved as a courtyard neighborhood. To the north is the Deshengmen Archery Tower, one of three existing historic gates among the nine gates of the inner city during ancient time. To the west is a scenic mountain range framing the city, where the peaks rise above the others in the distance.



Figure 21 The panoramic view of the Central Axis in 2011, from south to north, the Bell and Drum Towers area is pointed out with the white arrow (Sun, Fengyang, 2011)

Dianmen Street, which was historically known as Houmen Street, is a famous and busy market street since the Yuan dynasty.¹⁸⁴ Among more than one hundred stores, there

¹⁸⁴ Ibid., 102

are more than 70 different kinds of businesses, including silk, pearl, gold, finance, antique, restaurant and so on.¹⁸⁵ It is still a busy market street and tourist attraction today.

The space between these two towers was once used as a small plaza for the local people's market between 1926-1940s (See Figure 22). During that time, there were three teahouses that held different kinds of folk art performance in the 3000 square meters (0.74 acre) area.¹⁸⁶ Besides these teahouses, there were also many food stalls offering popular seasonal snacks.¹⁸⁷ Since the market's appearance, citizens have not needed to travel through the city for shopping.



Figure 22 People in the market place between Drum and Bell towers during 1940s (Yang, Xin, *Zhong Gu Lou*, 2009)

During 1984–1986, the Beijing Government proposed a renovation project for the space between the two towers (See Figure 23 and 24). This project planned to tear down some residential buildings along this plaza and enlarge the plaza into a pocket park to

¹⁸⁵ Ibid., 103

¹⁸⁶ Ibid., 96

¹⁸⁷ Ibid., 98

beautify the surrounding area.¹⁸⁸ To offer economic opportunity for tertiary industries, especially tourism and service industry, the proposed renovation also suggested planning for separate areas of traditional folk arts souvenirs and snack stalls on the plaza.¹⁸⁹ As a part of this renovation project, buildings were torn down in 1999 because of beautification purpose of Dongcheng District Government.¹⁹⁰ From that time onwards, the plaza was used as public plaza, then parking lots later, until a new government project started in the winter of 2012. Unfortunately, little in publicly known about the details of this current project.

In summary, although these two majestic buildings were located at one time in the center of the city, since the rebuilding of the city and shrinking of the old Dadu during the

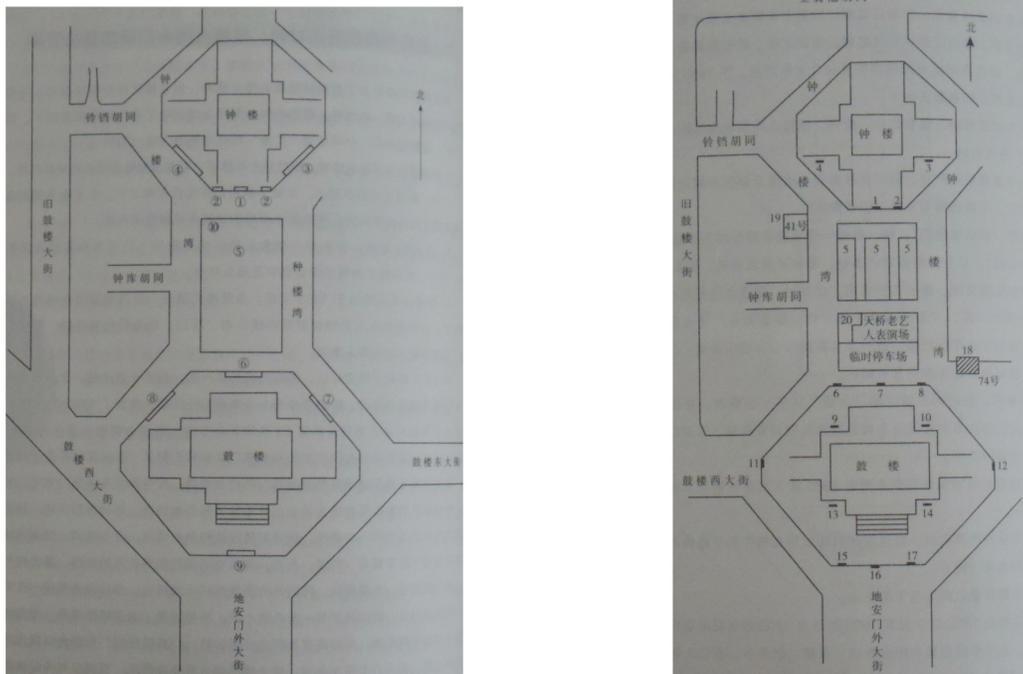


Figure 23, 24 A circa 1980s existing condition map (left), and the proposed renovation plan (right) (Zheng, Yi, *Zhong Gu Lou*, 2009)

¹⁸⁸ Ibid., 273

¹⁸⁹ Ibid., 273

¹⁹⁰ Ibid., 333

Ming Dynasty, the Bell Tower and Drum Tower are now on the northern edge of the inner city. They still have great importance in urban design of the city today because of their location on the central axis throughout the Yuan (1271–1368), Ming (1368–1644) and Qing (1644–1911) dynasties.

Site Current Situation

Today, the Bell and Drum Tower Area is still an attractive place combining famous tourist attractions, market streets and residential areas all together with the two landmark buildings as a focal point. The two historic buildings are in good condition because they are key historical sites under state protection as a result of their historic significance.

Because these two buildings were historically the tallest building complex in the inner city area in the old time, visitors can still get a great view of the city and the Central Axis from the Drum Tower building today (See Figure 25). The pavilion in the photo is the Wanchun Pavilion located on the top of Jingshan Mountain, where one can get a panoramic view of the Forbidden City (See Figure 26). Those skyscrapers on the left indicate the Central Business District (CBD) along the Third Ring Road. The water body on the right hand is the Shishahai, which was historically part of the summer retreat area and now is a busy commercial area filled with restaurants and shops (See Figure 27, 28).



Figure 25 View from the Drum Tower looking south along the Central Axis (Photo by author, 2013)



Figure 26 View of the Forbidden City from Wanchun Pavilion (Photo by author, 2012)



Figure 27 The Drum Tower and Bell Tower view from the Shishahai during 1924-1927 (Sidney Gambel, 1924-1927)



Figure 28 The Drum Tower and Bell Tower view from the Shishahai (Photo by author, 2014)

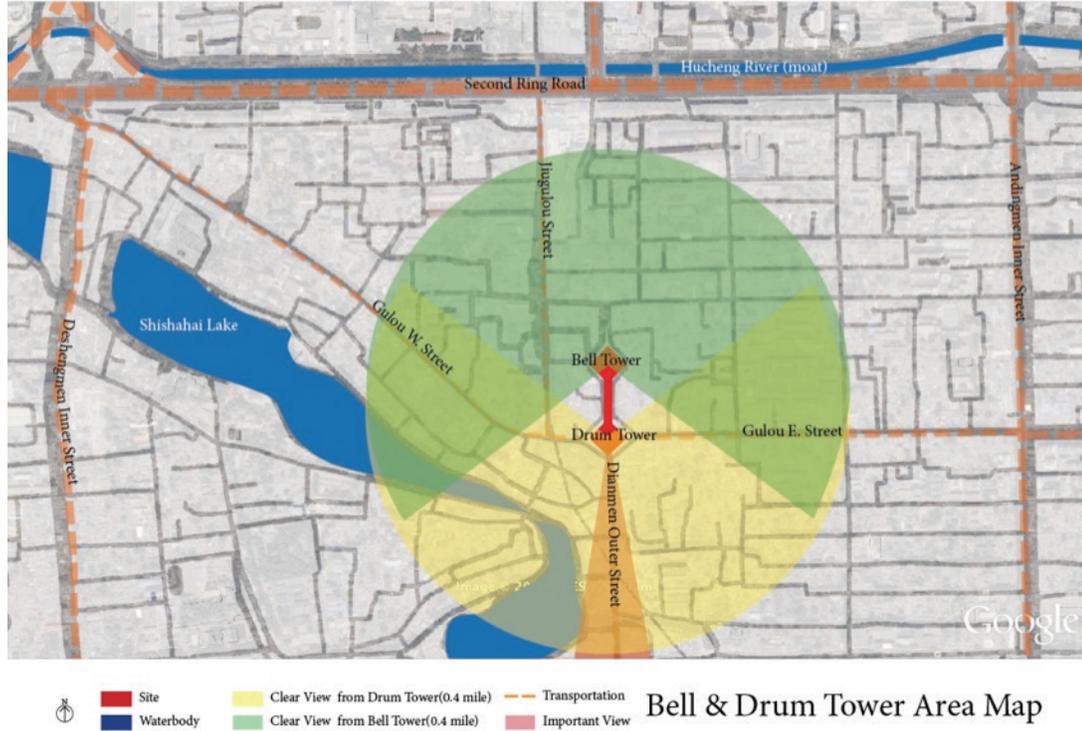


Figure 29 Bell and Drum Towers area map (By author)

This location also plays a key role in transportation (See Figure 29). All orange dashed lines indicate streets around the site, including the Second Ring Road, Jiugulou Street, Gulou E. Street, Gulou W. Street, and Dianmen Outer Street. As in Figure 29, the Dianmen outer Street is on the Central Axis, which connects to the Jingshan Park and the Forbidden City further south. The Gulou W. Street and Gulou E. Street together are important connections in the northeast Second Ring Road area, which have heavy traffic all day long. The Jiugulou Street links to Deshengmen, a landmark building located on the North Second Ring Road, which leads to a highway towards the north suburban area of Beijing. Surrounded by these three main roads of Beijing, the Bell and Drum Tower

area is under the influence of heavy vehicular and pedestrian traffic every day. The rapidly growing population and urban re-development has interrupted this original street pattern and urban fabric of the tradition Hutong residential area severely during the past several decades.



Figure 30 Site land use map (By author)

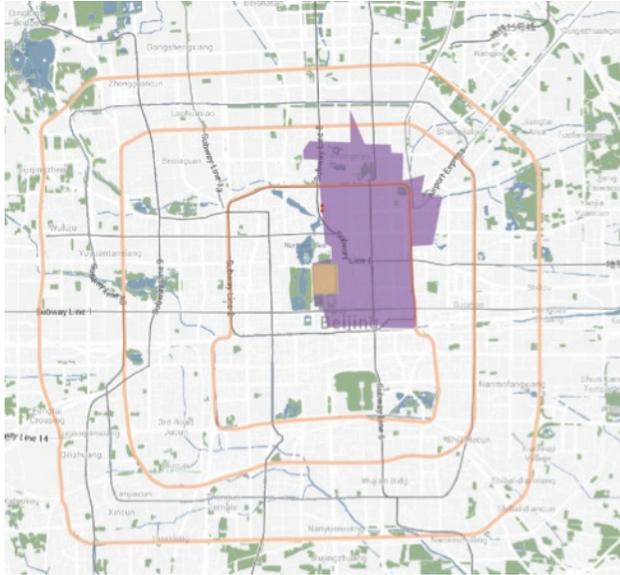


Figure 31 Old Dongcheng District marked in purple (By author)



Figure 32 The view from entrance of a courtyard (Photo by author, 2014)

As shown in Figure 30, the grey area is residential. Purple blocks indicate commercial use along Jiugulou and Dianmen Outer streets, which are two major traffic connections; khaki color blocks indicate parking lots, and green color indicates vegetation in open space in the neighborhood, of which there is only one small plaza between the two

towers. The area is quite densely populated with lots of former courtyards converted into residential and commercial mixed use properties. According to the nationwide census in 2010, the old Dongcheng District, is 25.38 square kilometers (9.8 square mile) and has 573,000 people, which means 30,000–40,000 people per square kilometer (See Figure 31). Because of this high population, public space in the Bell and Drum Tower area decreased to 4,000 square meters (0.98 acre) compared with 14,000



Figure 33 Over view of a Hutong area, unauthorized constructions are marked out with white blocks (Liu, Yang, personal Weibo page)

square meters (3.46 acre) during the Qing Dynasty.¹⁹¹

The surrounding residential area has changed a lot since it originated, and does not have much of the original Hutong life atmosphere any more. Almost all of the courtyards are filled with unauthorized residential constructions built in order to meet the need for housing of a growing population (See Figure 32, 33). Because

the Hutong area is very crowded and the streets are too narrow to offer sewage lines for every family, residents share public

restrooms (Shown as orange block on Figure 30). Because of the crowded living environment, residents heavily use the open space between the Bell and Drum towers. They usually play cards, chess games, and some other sports there. Residents share information and get in touch with each other there. This place has been treated as a third place in the community even now as it is squeezed into a smaller space due to new development projects in this area infringing on what had been a larger space.

The convenient location and low renting cost of the courtyard houses attract lots of migrant workers in Beijing, who don't necessarily have an emotional connection to the area's traditional lifestyle or the sense of the Hutong community.

¹⁹¹ "Landscape of the Bell and Drum Tower area in Beijing will be 'Retro,'" accessed by Sep.9th, http://news.ifeng.com/mainland/201003/0331_17_1591631.shtml

There are many restaurants and bars in this area, not only along the Jiugulou Street on the west (shown as purple blocks on the land use map), but also in the residential area just at the foot of these two historic buildings. At the north end of the Bell Tower area, there is a large grocery market, which is very, busy every morning (See Figure 34) A historic building along that space was turned into a bar due to the nice location (See Figure 35).



Figure 34 The grocery market space (Photo by author, 2014)



Figure 35 The bar in the historic temple building (Photo by author, 2014)

Because of the combination of a dense population in this area, disruption of the traditional urban fabric, a low living standard, and uncongenial atmosphere around this portion of the historic site, the Beijing Dongcheng District Government proposed a new design for this area. Beginning in December 2012, many courtyards (see red blocks on Figure 16 for accurate location) and unauthorized buildings were torn down and the public open space between the two towers, which was used as a parking lot, has been under construction (See Figure 36). Many residents objected to this project not because these are historic buildings, but because they have a strong emotional connection with their building, and now they are being moved to another suburban area by the

government. At the southeast corner of the crossing of Gulou E. Street, a Beijing Time Museum is currently under construction (see land use map for location), which is officially announced as the museum for time counting methods.



Figure 36 A courtyard home has been torn down (Photo by author, 2014)

In general, the Drum and Bell Towers area is a site with high historic significance because of its location, history, cultural meaning, and important place in the developmental history of Beijing. However, currently, this area doesn't demonstrate all these characteristics because of a series of reasons, including the dense population, the crowded traffic flow, and inadequate maintenance and management. In order to bring this place back to life, a new design should not only understand the landscape through both historic and cultural aspects, and emphasize its historic significance, but also interpret the place with compatible function and aesthetics.

CHAPTER 4

CASE STUDIES

The literature review up to this point has broadly addressed the variety of influences that I must consider as I study my project site. However, comparing sites that are similar to my project site in context, physically, culturally, etc. would also be helpful. As such, I have defined several criteria to identify appropriate case study sites. These important criteria are sites that:

- i. have an urban context
- ii. have historic structures or buildings on site
- iii. are used as a public space
- iv. use design as a dynamic interpreter
- v. integrate compatible new design with historic objects
- vi. preserve, or even improve, the historic significance of the site through new design

Below are three projects that seem to meet the majority of my criteria and are examples of compatible new designs.

The first case study is Moore Square in Raleigh, North Carolina. The reason for its name “Elevated Ground: A 300 Years Vision for a 220 Year-Old Square” when it won the ASLA Honor Award in 2013 is partly due to this four-acre square’s 220 years of history. Moore Square needed improvements to meet the needs of urban residents as a result of Raleigh city’s growth. The master plan for the square was adopted by the City Council in 2011 and is currently under development and construction.

Meeting criteria i & iii: this project's location in the urban context and its usage as a public plaza allowed urban development pressures to take their toll over time. Its historic significance and disrepair made it a civic treasure that needed maintenance and identity improvement.

This site meets criteria ii as the new design protects and celebrates original elements, such as the lawn, subtle slopes, historic oak trees, and also adds several creative new features, including elevated lawn areas, “a pier stabilized perimeter edge system,”¹⁹² and stone outcrops in the south landform area.

Meeting criteria iv & v: this new design proposes a series of contemporary changes to the landscape, and at the same time, respects its National Register of Historic Places' status and improved it by following the Secretary of the Interior's Standards for Rehabilitation. The treatment of the existing trees as “historic structures” afforded walkways around the historic trees in order to preserve not only the trees but also a buffer area around them (See Figure 37 and 38 for concept development).



Figure 37 The concept development process for the Moore Plaza (Christopher Counts Studio, ASLA website)

Further, the design inserts a storm water cistern under the central landform, which serves the entire site. (See Figure 39 for master plan)

¹⁹² “Elevated Ground: A 300 Years Vision for a 220 Year-Old Square”, ASLA, access April 25th, 2014, <http://www.asla.org/2013awards/187.html>

As such, the new design not only resolved those issues, but also pushed the original site forward into a sustainable project. This case demonstrates how to integrate historic objects into contemporary design, and at the same time, generate new design patterns according to existing elements.

Overall, the new design incorporates elements that reinforce the historic elements in order to be compatible with the original atmosphere. Aside from integrating the historic structure (trees) into the new design, the plan also accommodated functional needs of the site by adding more useful functions to public space to help the site attract more attention and raise people's awareness of its historic significance.



Figure 38 The bird's eye view of Moore Plaza design (Christopher Counts Studio, ASLA website)

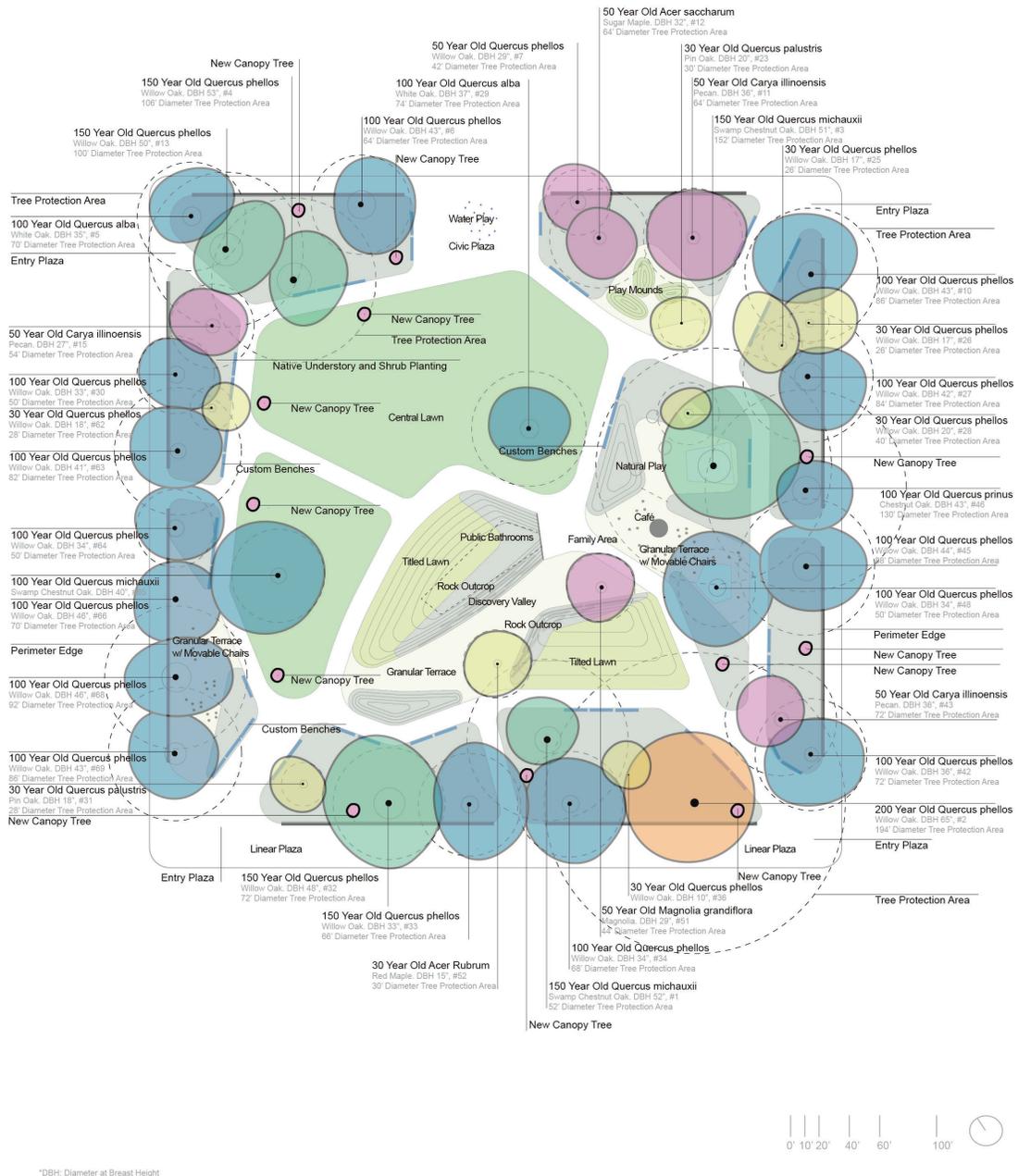


Figure 39 The Master plan for Moore Plaza. It shows the pattern of the walkway and how it follows locations of historic trees clearly. (Christopher Counts Studio, ASLA website)

The second case study is a pair of public squares, Petar Zoranić Square and Šime Budinić Plaza located in Trg Petra Zoranića, Zadar, Croatia. This location was historically at the end of one of the cardinal axes of the town during ancient Roman times. However, over time the city center moved and the original site was derelict for a

decade. So the project's historic urban core context needed new purpose to attract more citizens.

Meeting my criteria i, ii and iii: the Petar Zoranić Square and Šime Budinić Plaza is located in the center of Zadar, surrounded by buildings of historic importance. In addition, some important archaeological artifacts dating back to the Roman Empire time period were found under the existing square.

Further, for criteria iv and v, the new design aimed to integrate the historic architectural and archeological elements with the needs of contemporary urban life together into one functional public space. The intervention used two different types of pavement to separate a pedestrian route within a public plaza.

Regarding criteria vi, for the artifacts, the design did not use them as a traditional open museum, but developed them into an exhibition area. They were carefully revealed beneath the ground level when a glass ceiling was placed on top of them, so the artifacts were protected but visible. Further, visitors can use the land above ground for gathering without disturbing those precious artifacts (See Figure 40 for master plan, Figure 41 for built up site).

The new design transformed the site into a new attraction, which added more educational function into the public plaza. The transparency and nighttime light of the “glass ceiling” from the underground artifacts made the square more dynamic. It interpreted the identity of the historic square as the generator of a new social space.

The site successfully celebrates historic artifacts in a special way. The design concept takes the existing conditions into consideration and makes good use of them, which helps people understand the history of the site through providing more information about it.

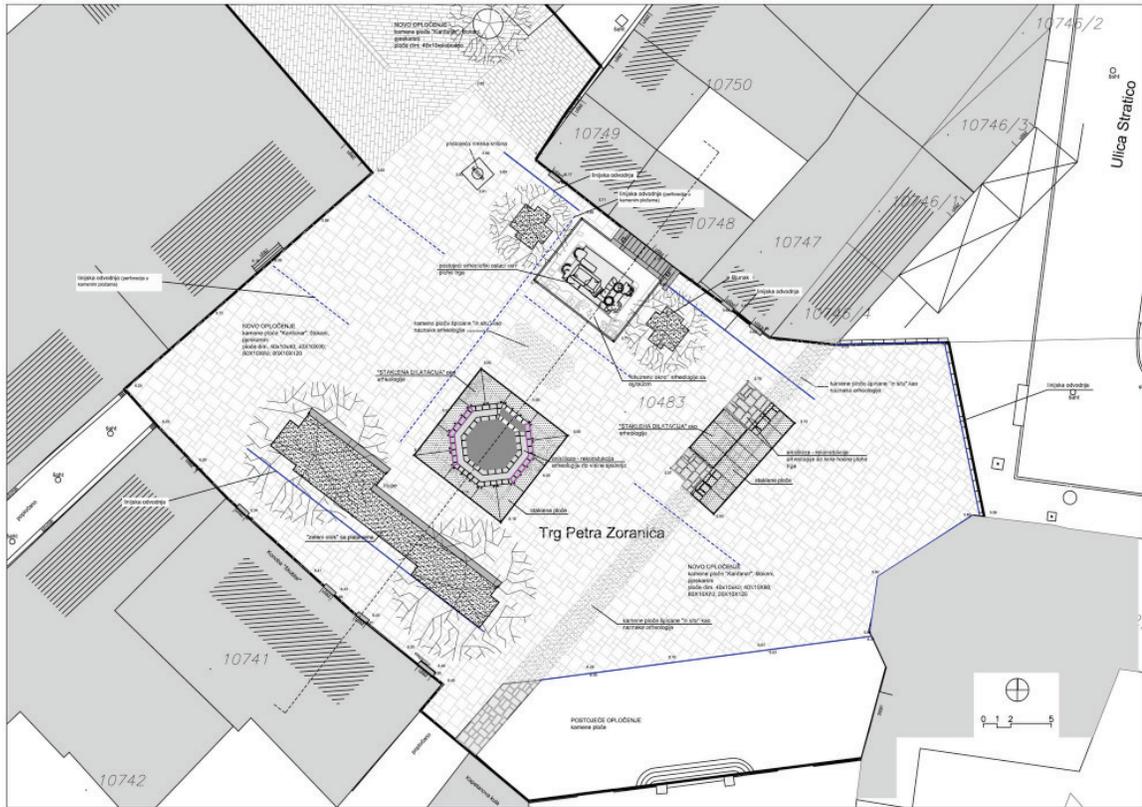


Figure 40 Master Plan for Petra Zoranić Square and Šime Budinić Plaza (Kostrenčić-Krebel, Archdaily website)



Figure 41 The built up site
(Photographs: Damir Fabijanić, Courtesy of Kostrenčić-Krebel, Archdaily website)

The third case study is the Kuanzhai Xiangzi (alley) in Chengdu, China. Chengdu is the provincial capital of Sichuan Province in southwest China. It is one of the most important cities for economic, transportation and communication industries in western China. As the fourth most populous city in mainland China, Chengdu is a city with more than four thousand years history, and has been the center of the Shu area (mainly today's Sichun Province) since Zhou Dynasty (11th Century BCE). The Kuanzhai Xiangzi is one of three designated historic preservation districts in Chengdu. Three parallel alleys and 45 courtyards between those three alleys comprise this district. These three alleys are just three of the 42 alleys that were historically built in 1718 and used for military purposes during the Qing dynasty. After three hundred years, only these three alleys remain. They are the best and only demonstration of the combination of southwestern China building style with Hutong urban fabric that witnessed the change and development of the city (See Figure 42).

From 2003-2008, this new project encompassed 60,000 square meters (14.8 acres) of building area. One-third of the buildings are nicely preserved traditional residential buildings. The main principle of the project was to preserve the original pattern of the alley, courtyard, building, and decoration together as a system.

The case study meets criteria i, ii and iii as the Kuanzhai Xiangzi is located in the city core area and contains a residential area that consists of historic buildings originally from the Qing dynasty, and under the pressure of urban development and commercialization now (See Figure 43, 44, 45).



Figure 42 The planning of the new project (From official website: www.kzxx.com.cn)



Figure 43 The bird's eye view of this district after the project (From design company's official website: <http://www.an-design.com.cn/>)



Figure 44 The street view of this district after the project (From official website: <http://www.an-design.com.cn/>)



Figure 45 Building restored after the project (From official website: <http://www.an-design.com.cn/>)

This case study meets criteria iv, v and vi as the new project takes full advantage of existing building materials and decorative structures, including keeping the original brick walls, sopraporta, and detail structures. The original fishbone shape pattern of alleys were kept and renewed with improved wood and half-timbered building structures. A wall, approximately 400 meters long (1312 ft.), reveals all kinds of bricks made of

different materials and originated during different dynasties. Designed as an open-air museum for bricks, it combines photos and sculptures together to reproduce the scene in the city in old times (See Figure 46).



Figure 46 The brick wall in Kuanzhai Xiangzi (Photos from a personal blog, accessed by Sep. 10th, 2014, <http://ying54yu.blog.sohu.com/>)

This project's purpose was turning this historic district into a modern fashion tourist and commercial district, including restaurants, entertainment, hotels and shopping (See Figure 47 and 48). These new commercial developments bring a lot of modern infrastructure into the historic district. Although some mix of modern and traditional



Figure 47, 48 Old buildings now used for commercial purposes (Photos from a personal blog, accessed by Sep. 10th, 2014, <http://ying54yu.blog.sohu.com/>)

feeling can bring a more attractive character to this district, too much commercial influence has made this site into a crowded tourist spot instead of a historic district with original atmosphere according to my personal visiting experience of the site.

Summary

From these three case studies several factors should be highlighted as possible influences for my design project; some are good experiences that can positively influence my site while other aspects are not suitable for the design of my site. The following is a summary of the key aspects noted in the case studies:

- i. New design patterns should take both the site's cultural and historic background and historic elements into consideration, including buildings, trees, and urban fabric of context.
- ii. Materials in the new plan should be compatible with the context and should make good use of existing building materials on the site.
- iii. Important features on the site need to be integrated into the new plan with emphasis through new design elements.
- iv. New and modern elements can be integrated into new design as long as they take a proper portion (less than 50%) of the site.
- v. Although the first case is a nice demonstration of integrating new design into a historic site and improving the significance of the site, some new design elements related to its historic and cultural background can bring more special feeling into the site. For example: some structures in seating area with old traditional materials.

- vi. The second case study brought some inspiring features into the new design, the glass ceiling above the artifacts attracted lots of attention during nighttime.¹⁹³ However the glass ceiling can be not as attractive during the daytime. Some more obvious structures might be more helpful.
- vii. The third case study can be a nice example for making good use of local material and integrating architecture styles into new design. However, I will not take this kind of commercial development as reference for my design site because several busy market streets surround my site currently. Hence, a green open space is a better option.

¹⁹³ The picture of an event holding during nighttime can be found with this link:
http://www.archdaily.com/478606/petar-zoranic-square-and-sime-budinic-plaza-kostrencic-krebel/5304281ee8e44ef683000dd_petar-zorani-square-and-ime-budini-plaza-kostren-i-krebel_04-dscn1807-jpg/

CHAPTER 5

SITE ANALYSIS

Beijing has a generally dry and cold winter, short spring and autumn, and hot rainy summer. The monthly daily average temperature ranges from 3.7°C (25.3°F) in January to 26.3°C (79.2°F) in June. The city gets strong northwest wind during wintertime and gets a more southeast breeze during summertime (See Figure 49 for wind

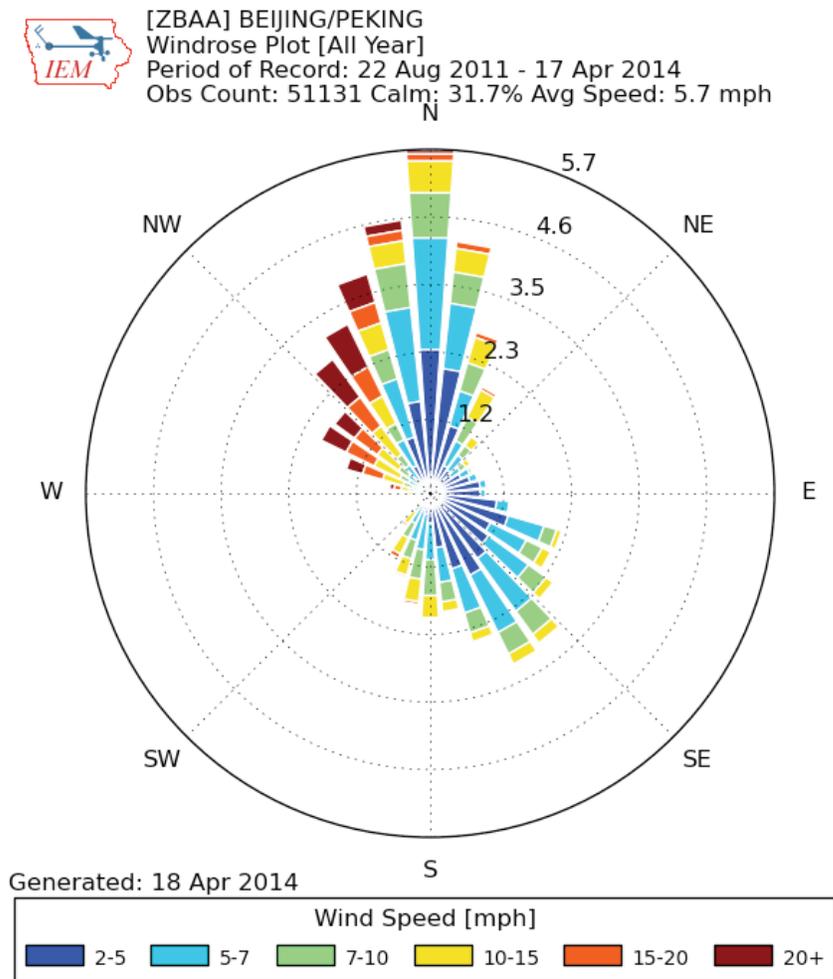


Figure 49 Wind rose plot of Beijing (from IEM website:
http://mesonet.agron.iastate.edu/sites/windrose.phtml?station=ZBAA&network=CN_AS

rose plot). The precipitation reaches its highest point during July and August. Due to this climate and the air pollution, the most familiar animals are sparrows and magpies. The typical tree in the city is *Sophora japonica*.

The site is currently surrounded by streets and Hutong, which all have mixed use by pedestrians and vehicles (shown in orange dashed line in Figure 50). Two plazas were both used as parking lots years ago, and are now under construction for the new project. The pedestrian only areas on the site are the inside wall areas at the foot of the two towers (shown as red blocks in Figure 50). There are three historic buildings on or close to the site, the Drum Tower, Bell Tower, and a small temple to the northeast direction (Marked by red star shapes in Figure 50). The only interpretation structures on the site are three signs at the entrance of these three historic buildings.

Due to the cold winters and hot summers of Beijing, sun shading on the two plazas is very important. During the summer, users need better shading; and during the winter, less shaded areas and more sunlight could be useful (See Figure 51 for Sun Shading Analysis). As the analysis shows, these two plazas are both in full sun in the summertime and the south half of the two plazas are both covered in shading during winter.

Visitors can obtain a panorama view of entire city from the Drum Tower, including a clear view of the Central Axis and the Shishaha waterscape (See Figure 52 for view analysis). Also, there is a nice view towards the Bell Tower from the small temple located at the northeast of the site (See Figure 53).

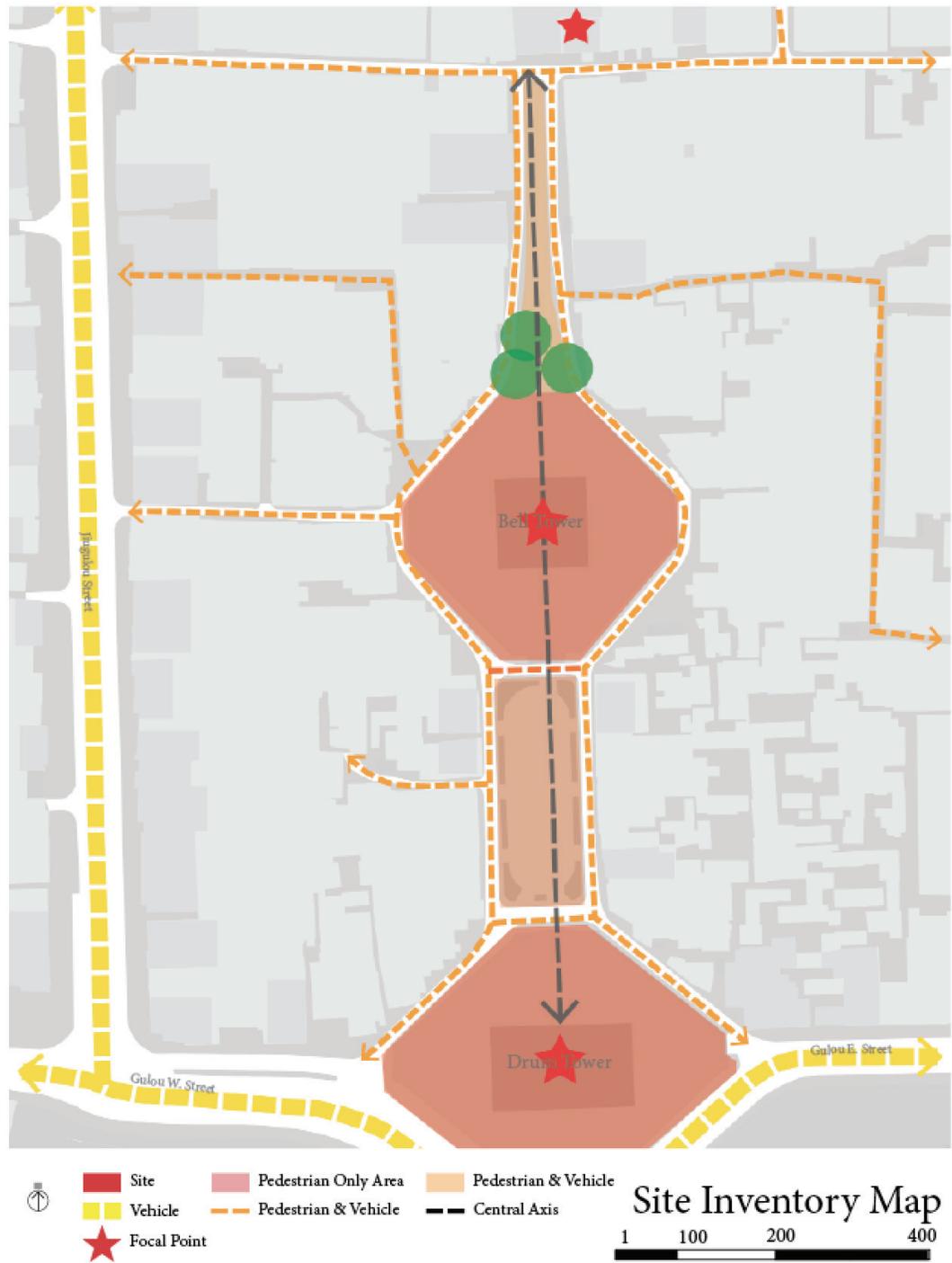


Figure 50 Bell and Drum Towers area site inventory of existing conditions (By author)



Figure 51 Sun shading analysis map. Maximum winter shading area shows in grey, minimum summer shading area shows in yellow (By author)

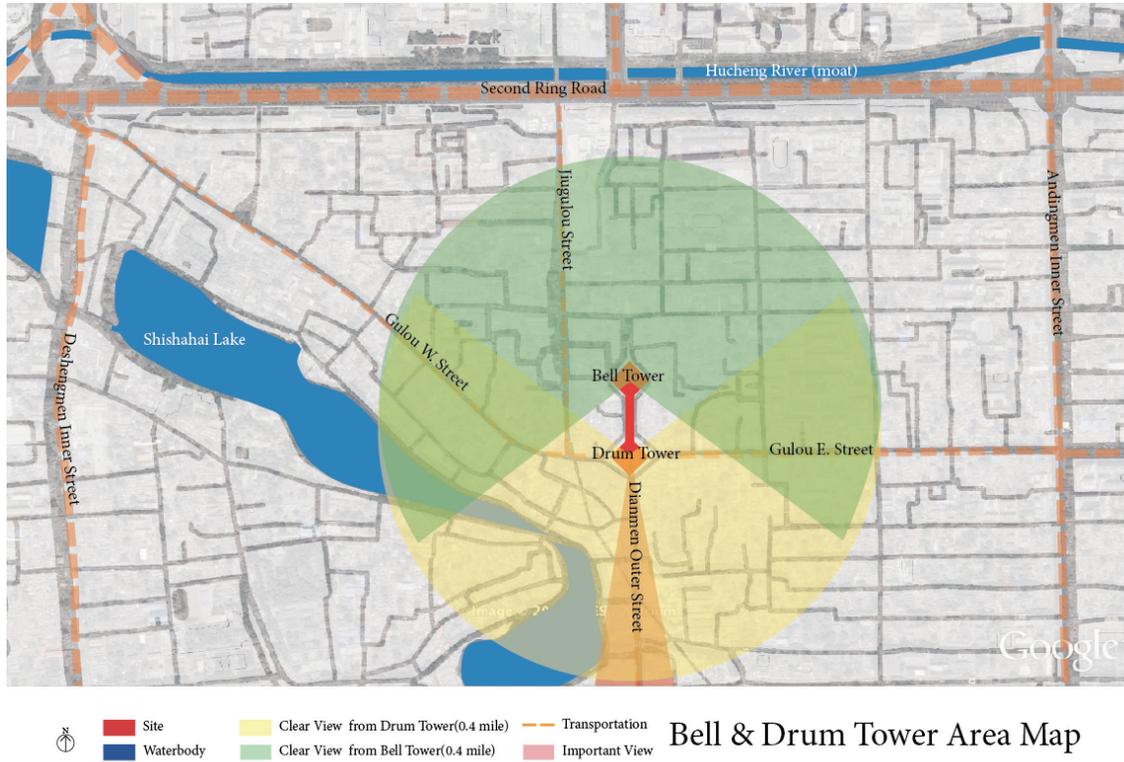


Figure 52 Site analysis map. The yellow area is clear view from the Drum Tower and the overlap area with red color is important view towards the Central Axis. (By author)



Figure 53 View from the historic temple towards the Bell Tower (Photo by author, 2013)

According to the discussion above, there are several features that can be important for future intervention to the site:

- i. The site's advantages are its history and cultural background, location, landmark buildings, and the street pattern and urban fabric, which demonstrate the original Hutong life style in the surrounding neighborhood.
- ii. The site's disadvantages are very dense population, numerous unauthorized residential construction which disrupted the historic pattern of courtyards, and an overwhelming amount of businesses on the site.
- iii. A new plan needs to pay attention to the real needs of residents in this neighborhood and their strong emotional connection with the site when designing the program.
- iv. The proposed site's materials need to be compatible with the existing surrounding urban core area.

One of the common processes to determine threats and opportunities for an area is to do a SWOT analysis. A SWOT analysis is “a structured planning method used to evaluate the strengths, weaknesses, opportunities, and threats involved in a project.”¹⁹⁴ Strengths usually mean advantages over other comparison objects; weakness indicates relative disadvantages; opportunities often focus on characteristics that can be helpful during the project; and threats show the potentially harmful factors. Through the SWOT analysis, decision makers can make a more informed plan for specific sites.

Using a SWOT analysis for the Bell and Drum Tower area, the results can be seen in Table 1. In general, this place, with its long and significant historic background, has lots of potential to be revitalized into a nice gathering place for residents, while also reinforcing the cultural meaning of this historic site for local and foreign tourists. However, the balance between practical and ideal design is very important. Because the government has not publicly revealed the details of its new project design yet, this

¹⁹⁴ “SWOT Analysis,” Wikipedia, accessed Sep. 10th, 2014, http://en.wikipedia.org/wiki/SWOT_analysis

proposed design will focus on the design of the small plazas adjacent to the Towers and offer several guidelines for the surrounding residential area.

- i. Strengths: located on the Central Axis, aside from two landmark buildings, the site also has convenient connections to Shishahai lakes and Jingshan Park, which are both traditional Chinese landscapes with great historic significance. Due to the height of the building, the view from the Drum Tower makes it a nice place to have an overview of the inner city area. The site is surrounded by a typical Hutong neighborhood that reflects the traditional materials, colors, fabrics, and atmosphere of the city.
- ii. Weaknesses: as a populated area, a lot of constructions inside courtyards were built up by residents without government permits. Inadequate management leads to the loss of control of the surrounding area. For example, the grocery market, restaurants and bars are incompatible with the historic atmosphere; also there are sanitation problems in the surrounding neighborhoods due to the population density.
- iii. Opportunities: the site already is a popular tourist destination. Its convenient location makes it a great place for gathering because it offers many possible connections to other historic resources. The site has several bus stops next to it, and it also very close to subway stations. Additionally, there is no other large open plaza space in this neighborhood.
- iv. Threats: because of the population density, the site attracts many businesses, especially for food and drink. However, some of these businesses (large restaurants and bars) are incompatible, even harmful to the historic atmosphere. Further, there is

no existing interpretive element for the Central Axis, so it needs more interpretation programs.

In summary, there are several influential factors for the design. The following is a summary of the key aspects highlighted from the site analysis:

- i. The current mixed use traffic situation constrains activity space for pedestrians.
- ii. The Central Axis and the connection between the two towers needs more emphasis.
- iii. View points should be defined for better views for both towers.
- iv. The wind direction and sun shading area should influence the location and amount of proposed shading areas, activities, and vegetation.
- v. New design should improve the connection with surrounding historic resources;
- vi. More suitable vegetation can be helpful both ecologically and provide shade for the site.

	HELPFUL	HARMFUL
INTERNAL ORIGIN	Has landscape mark buildings	Dense population
	Fantastic view	Unauthorized constructions
	Existing original urban fabric	Current lack of management
	Strong cultural background	
EXTERNAL ORIGIN	Famous travel spot	Lack of businesses and constructions guidelines
	Great location	Pressure from tourism
	Convenient transportation	

Table 1 The SWOT analysis form for the site

CHAPTER 6

PROJECT DESIGN

Building on the literature review, existing conditions, case studies, and site analysis, it is now possible to define the program for the project design. With the purpose of function, historic interpretation, and conservation of cultural resources, the new design and future guidelines will accomplish the following:

- i. Preserve the original Bell and Drum Towers in the same current condition.
- ii. Recreate the sense of community of the neighborhood through making more gathering places for residents.
- iii. Improve both residents' and visitors' awareness of the site's breadth of splendid cultural, its importance to the city's urban developmental history, and its richness in traditional Hutong lifestyle.
- iv. Enhance and reinforce the importance of the site by taking advantage of its location and cultural and historic background.
- v. Reinforce the Central Axis and urban patterns through design elements.
- vi. Use traditional materials, based on local buildings and the neighborhood, for a compatible color and texture with surrounding area.
- vii. Balance the open space and commercial area by controlling the amount of commercial building on the site.
- viii. Define compatible types of businesses and contexture building styles so they do not conflict with the atmosphere of the historic surrounding area;

- ix. Remove unauthorized constructions from the original urban fabric and restore this area to its historic situation.
- x. The design should be low maintenance for ease of long term management purposes.

Design Concept

The overarching concept of my design is to use the idea and theory of private courtyards and traditional Chinese gardens and abstract it to design a public space, using design methods as influenced by contemporary public spaces design.

According to the functional analysis of the site, space for gathering will be set at each entrance of the plaza and junctions of streets (Shown in yellow color blocks in Figure 54). Connections between each gathering space will occur via a pathway (Red dash lines in Figure 54). The whole site, including plaza spaces and streets, from the Drum Tower to the end of the north plaza, will be pedestrian only (Shown as the red background color area in Figure 54). Green spaces (covered with green shape in Figure 54) will emphasize spots with better sunlight and existing trees (marked as three green circle in Figure 54). As the center of the plaza is the point for the best view of both towers, it will be the place for two pavilions (Shown as the red oval in Figure 54). Another pavilion will be located near three existing trees in the north plaza. As for the north end of the north plaza, in order to keep the nice view from the temple, the area will be kept as an open space. This plain space between two groups of courtyards will catch people's attention with its openness. Because no design details from the current government project underway are available for the residential buildings surrounding the site, this design proposal is based on the assumption that they will be single floor courtyards.

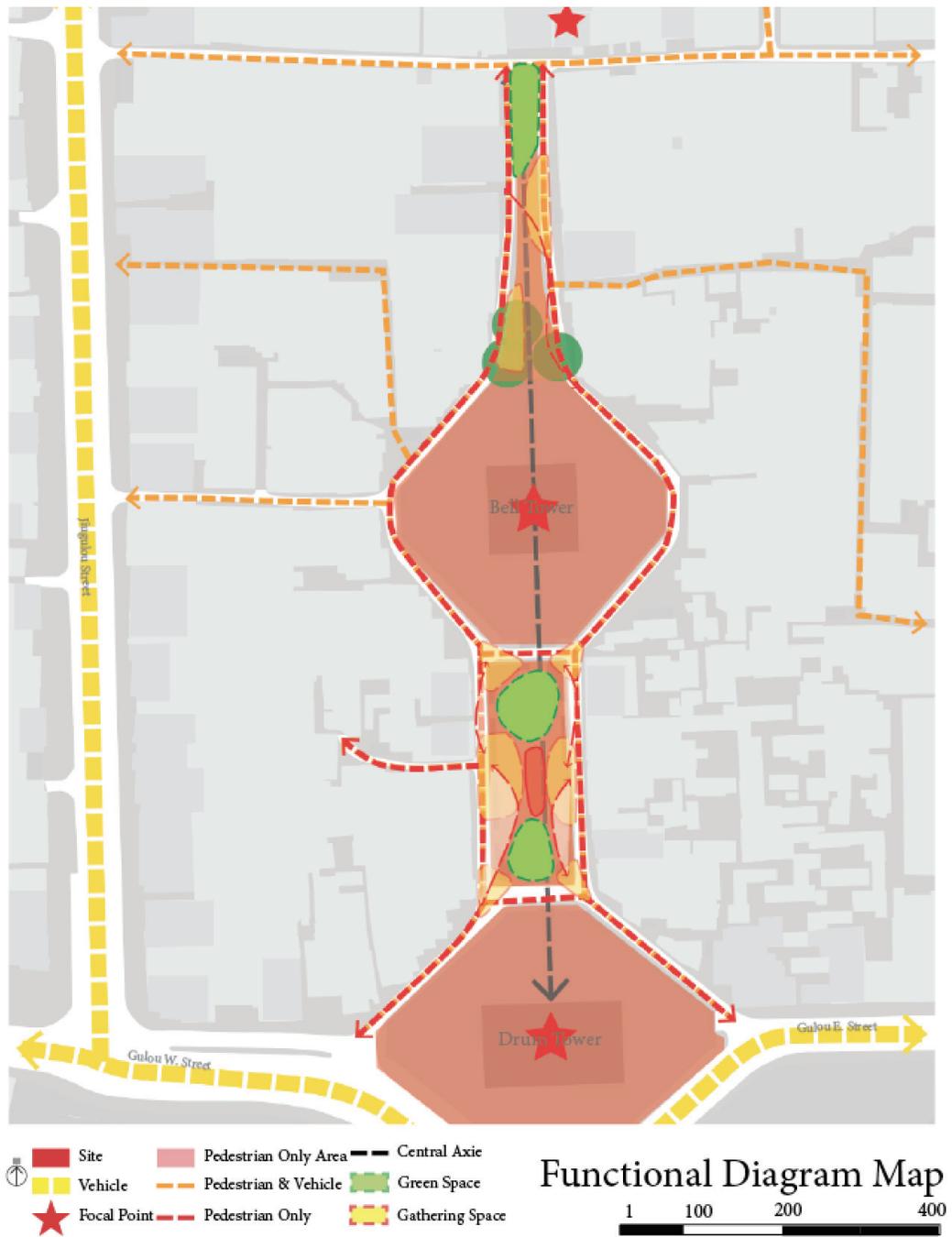


Figure 54 Functional diagram for design concept (By author)

The concept for the framework of the plazas came from the shape of a Siheyuan, which is typically comprised of four cardinal buildings surrounding a yard (See Figure 55

and 56). Abstracted to a larger public scale, the two towers and the neighborhood on both sides make the small plaza into a yard. It is the same for the plaza on the north side of the Bell Tower, which is surrounded by three sides of neighborhood (Shown as red blocks in Figure 57). As the proposed pattern for the master plan, a rectangular shape can be derived from it. Further, in a Siheyuan, these four cardinal buildings are connected by a pathway. Hence, my concept is the pathway connection for the plazas is a miniature abstraction of the Central Axis of Beijing. Because the Central Axis is not truly oriented due north/south, but cants angularly, which affords my proposed linear structure.



Figure 55 Bird's eye view of a typical Siheyuan with two yards (Wang, Qijun, *Xing zou zhong guo, Jie lu ren jing*, 2012)

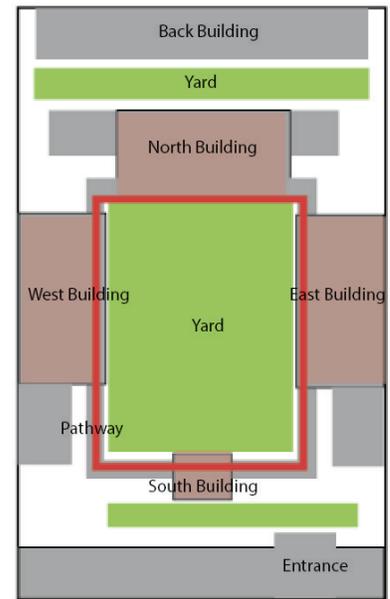


Figure 56 The typical plan of a Siheyuan with one main yard (Wang, Qijun, *Xing zou zhong guo, Jie lu ren jing*, 2012)

Design Description

A line indicating the Central Axis act as the centerline of the site, and is paired with a walkway of grey tile pavement next to it, which will lead people to travel through the site from south to north. This central line will be lit up during the nighttime (Shown as the

yellow line in Figure 57). This central light line connects the Drum Tower, the plaza between the two towers, the Bell Tower and the north plaza together in a sequence. Because the Central Axis of Beijing points to the geographic Northwest, the proposed central lit line also points to the northwest. The zigzag shape of the lit line mimics the Central Axis in Beijing because it is interrupted by groups of buildings. The shape of the lit line in this design allows small plazas to interrupt it. Seating walls made of grey bricks help define the pathway between plazas (the outline of plazas shown as red lines in Figure 57), while also connecting the plazas together into a system.

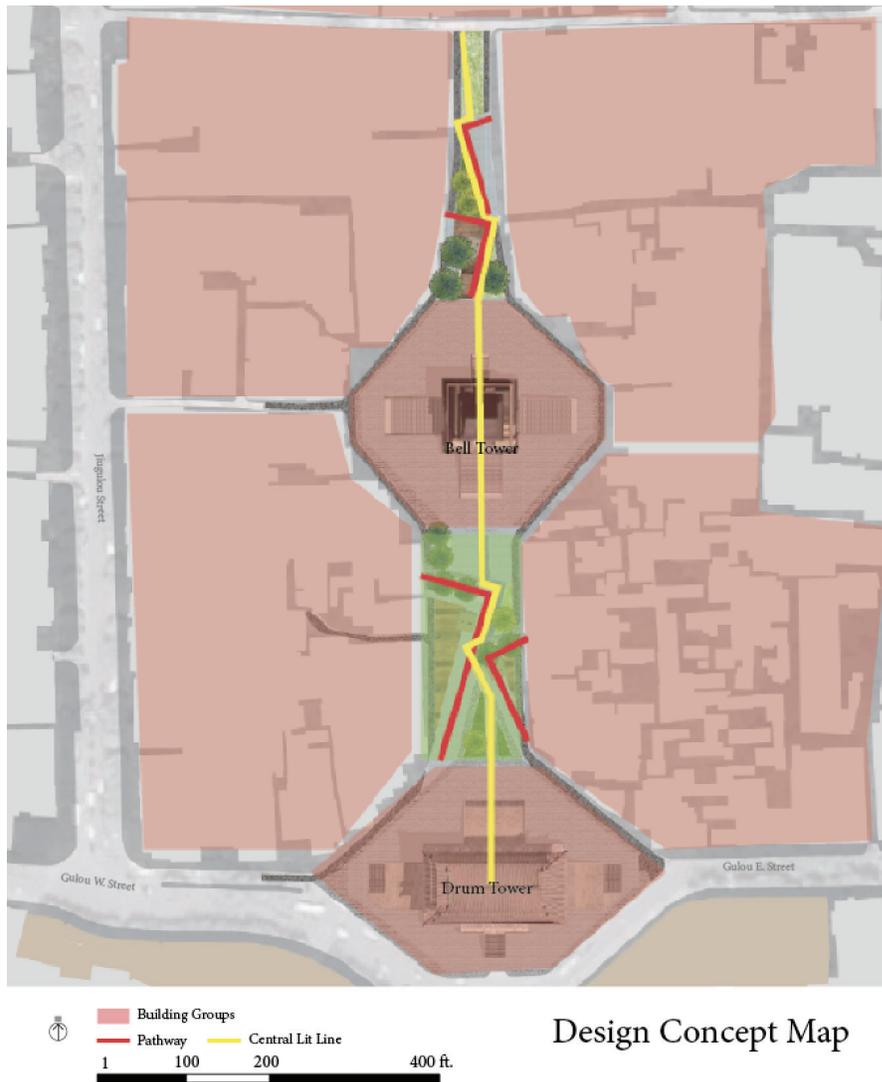


Figure 57 Design concept map (By author)

Different size and pavement materials indicate different types of plazas on the site. The #1 plaza, surrounded by trees and seating walls, with a pavilion and trex pavement (imitation wood material), is a semi-enclosed plaza and serve as an intimate space for quiet activities. The #2 plaza, with a large trex pavement area and a pavilion, is an open space for residents for sport. The #3 plaza, shaded by existing trees, is like #1 plaza for quiet activities, as well as a good place for rest during the summertime. The #4 plaza, with stone pavement, is a large open space for gathering. These plazas also serve as entrance spaces, because they all face a Hutong or a street, which can provide large amounts of people to flow into the central space. Interpretative signs will be placed with the existing signage located at the entrances of historic buildings.

In order to provide some shaded areas for residents to play cards and chess games, talk, and even just rest, three pavilions are located in the two plazas; their location are based on the sunlight analysis. The pavilion facade with more covered area will face the sunlight direction in the summer, in order to provide more shading inside the pavilion, while the facade with less coverage faces the vegetation area for an open atmosphere. A building that was being torn down during my site visit inspired the design concept of the pavilion (See Figure 58). Although it is not a historic building, the structure clearly demonstrates the typical traditional Chinese style with its wood form and structure. So the design concept for the pavilion can be seen as a shape transformed from a traditional Chinese building (See Figure 59). The pavilion will be covered by a roof made of wood, a base made of grey bricks, a supporting steel structure painted in the same red as the Drum Tower, and a stone table and seats located in the center of the base, which will be sunk into the base for three steps (See Figure 60).



Figure 58 Photo of the building being torn down (Photo by author, 2014)

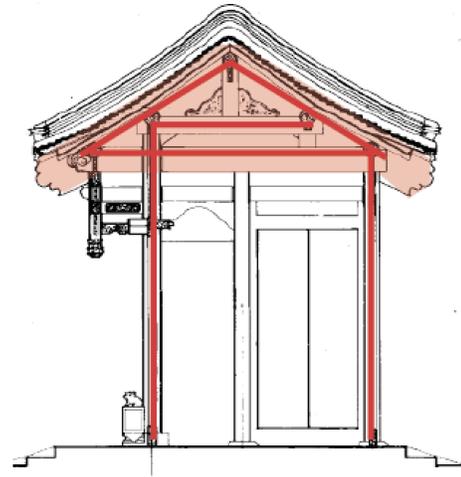


Figure 59 The structure of a Chuihuamen (Ma, Bingjian, Zhong guo gu jian zhu mu zuo ying zao ji shu, 1991)



Figure 60 Different views of the proposed pavilion (By author)

Because the site is located in the highly urbanized city core, a little more green space will be beneficial. Existing trees will be kept and more trees will be added with pervious gravel as ground cover. As for vegetation, trees and groundcover grass will be picked from local common choices. The canopy tree will be *Sophora japonica* because it

is a typical tree in this area that provides nice shading and flowers during the summer time. The groundcover grass will be *Radix Liriopes*. It is a grass used very often in traditional Chinese gardens, and, also, it is evergreen and can withstand the cold winter in Beijing. There will also be some lawn area with specimen trees such as *Ginkgo biloba* because of its shape and leaf color during the fall. More design details, including master plan map, three perspectives, and a bird's eye view noted in Figures 61-65.

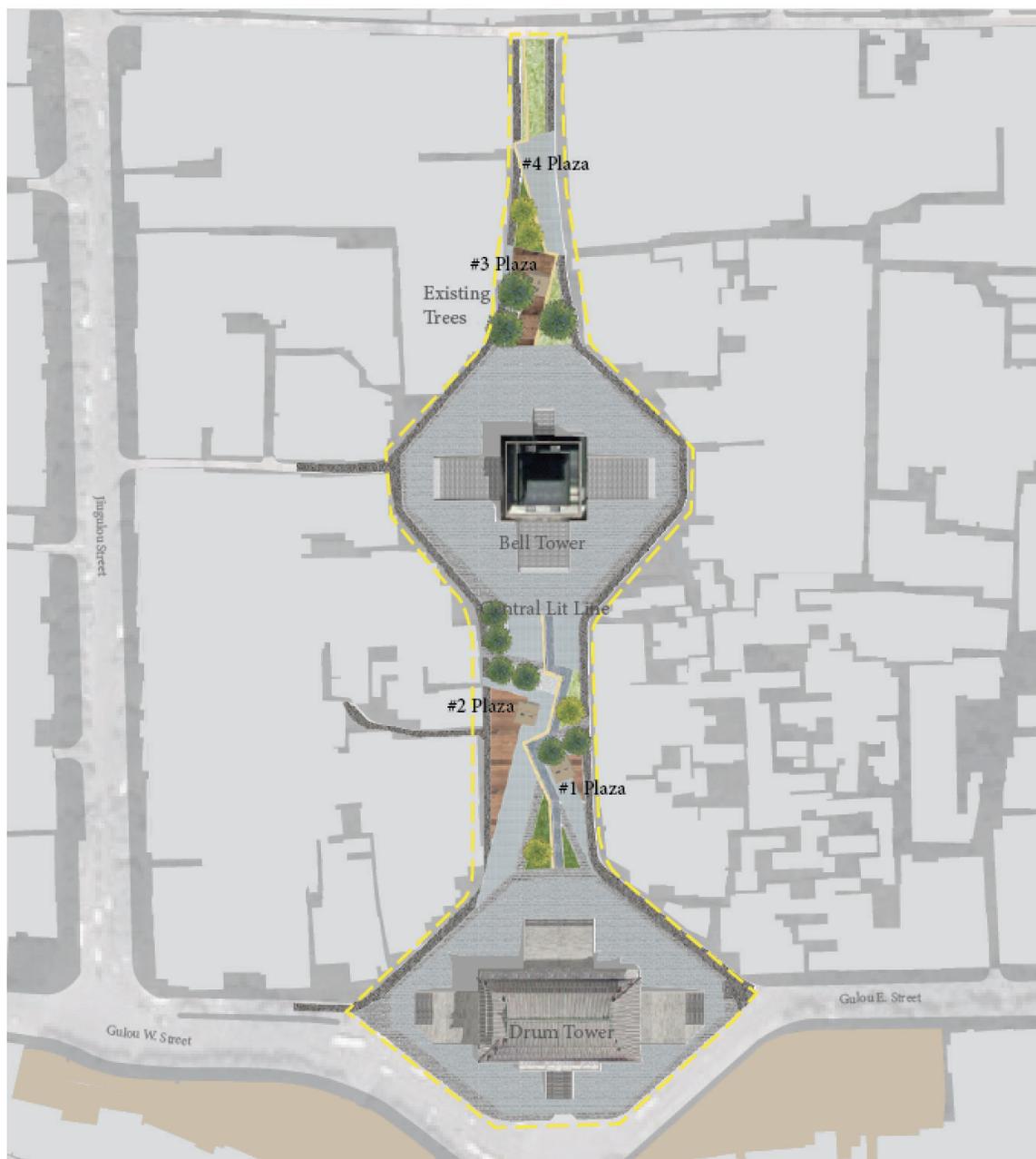


Figure 61 The master plan of the site (By author)



Figure 62 The perspective view from plaza #2 to the Drum Tower (By author)



Figure 63 The perspective view from plaza #2 to the Bell Tower (By author)



Figure 64 The perspective view from the Bell Tower to the #3 & #4 plaza (By author)

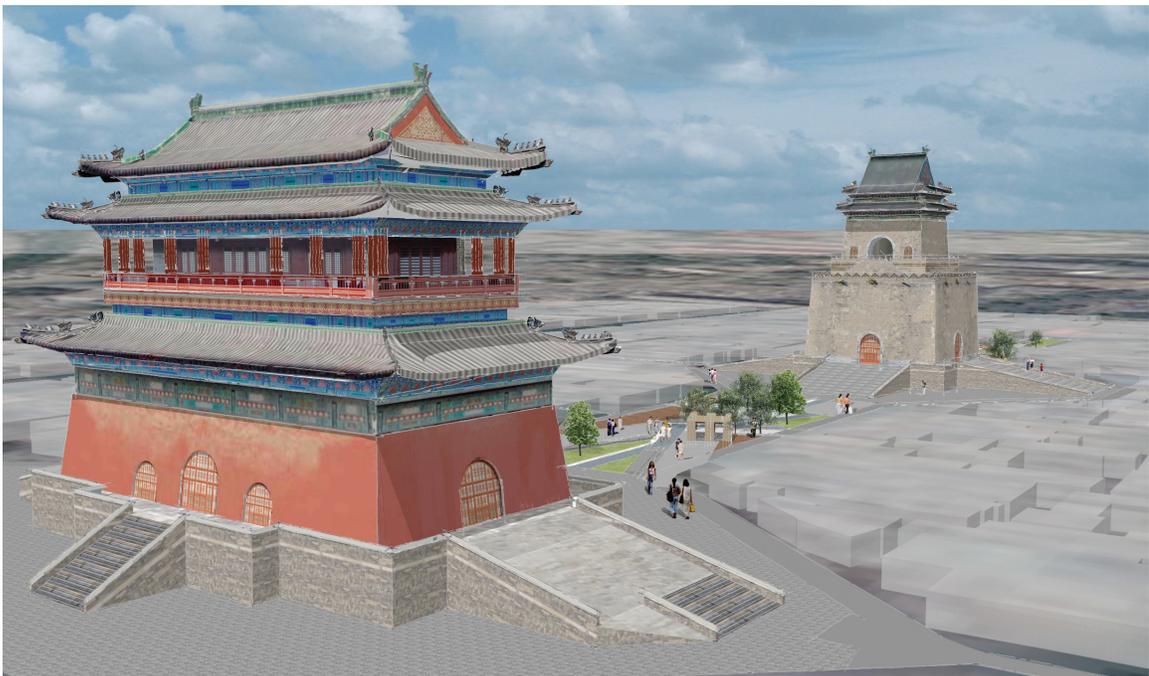


Figure 65 The birds' eye view of the site, looking northwest (By author)

CHAPTER 7

CONCLUSION

Cultural landscape, which is a tool of understanding and investigation, is the lens through which this thesis completed its research and proposed site design. A cultural landscape is shaped by human beings, and is developed from natural resources. Thus, a cultural landscape shows the value human beings treasure through space and life style changes, cultural variation, and aesthetic transformation. Furthermore, the cultural landscape's boundary includes both culture and nature. The balance between human society and nature can help build a healthier society.

In the U.S., the NPS is responsible for preserving both cultural heritage and natural resources, and has been working to create national standards and guidelines for historic preservation in identification and management aspects. Three key criteria—historic significance, historic integrity, and historic context—are important references when assessing a historic property. The NPS's CLR is a documentation procedure used as a way of doing investigation work for a cultural landscape. There are several processes in developing a CLR including historic research, reading the landscape, and site analysis. Furthermore, the NPS set out four types of historic preservation treatments dealing with different degrees of intervention, including preservation, rehabilitation, restoration, and reconstruction. Existing NPS projects that exemplify the three key criteria for evaluating a historic property, the CLR procedure, and treatments have all been good references for this research and design proposal.

UNESCO views cultural landscapes from an international level. It created the World Heritage Convention and established the World Heritage Center, which manages the World Heritage Convention and the World Heritage List. These focus on the management and technical assistance of world heritage resources. Aside from the universally applicable terminology of heritage resources, UNESCO also set criteria for evaluating an eligible property's "outstanding universal value", which is the threshold for the World Heritage List. China, among 190 party states, has 47 properties on the list and 47 properties on the tentative list. My design site is part of one property on the tentative list. As such, the site was treated according to recommendations and guidelines offered by UNESCO. The concept of Historic Urban Landscape, from the World Heritage Cities Program, is a concept specially focused on the concern of World Heritage Cities. UNESCO updated the Recommendations on the Historic Urban Landscape for better management purposes, which tries to use this concept as a tool to integrate policies and conservation for future development. The design site was considered as a historic urban landscape, which has a definition that broadly includes both tangible and intangible elements of an urban area.

As a country with a rich history, China has its own philosophy and aesthetics. Traditional Chinese philosophy's view of nature has several characteristics that show its consistency with the contemporary understanding of cultural landscape—human beings shape nature and live in harmony with nature. Based on this philosophy, traditional Chinese gardens, as part of art, had a prototype of "one lake, three mountains." This concept, integrated with painting and poems, has been used in both imperial and private garden design throughout Chinese history. Thus, Chinese gardens often integrated special

cultural meaning into a garden's design through symbolizing vegetation and rocks as a miniature of nature.

Interpretation is another important process of understanding a cultural landscape. Well-crafted interpretation offers visitors adequate information and emotionally moves them by building up their personal connection with the property, in order to help them understand its historic significance.

The Bell and Drum Towers area, as the north point of the Beijing Central Axis, demonstrates traditional Chinese architecture with two landmark buildings. Its surrounding area is a typical Hutong neighborhood, with a unique urban fabric, street patterns, and Hutong lifestyle. Grey bricks, grey tiles, and taupe wood are the most common building materials. People's close relationship, and their emotional connection with the place made them care about the place and its preservation. Although this neighborhood has changed a lot during past decades due to the city's development, the building materials and atmosphere in this neighborhood still exhibits the values cherished by local people. All these characteristics are important features that need to be interpreted through design.

Through three case studies, located in different countries, common characteristics that need to be paid attention to in the project design were identified: the preservation of existing historic objects, the emphasis of historic significance, balance between preservation and function, consistency with the surrounding urban context in building materials and colors, and limits to commercial use.

The project design follows the recommendations from UNESCO, suggestions concluded from NPS precedents and case studies, and the result of a site analysis, which

were conducted through the process of the CLR from NPS. Thus, based on the consideration of both tangible and intangible features within the site, the proposed design suggests the best use of the site as an open space instead of a commercial area. The proposal takes advantage of the physical and visual relationship between the site and the Central Axis, enhances the interaction between people and the environment by providing various kinds of useful spaces for residents, and integrates the site into the surrounding area through similar design language and materials.

Reflecting on both the research and design processes of this thesis, I found several important aspects that are useful in creating a contexture design project:

- i. To create a guideline for a specific site, the research of regional applicable guidelines, successful precedents, and site history is necessary. Through this research, the essence of guidelines and precedents can provide useful rules and experiences, and the site history can be a resource for identifying historic characteristics of a place, which is important for future compatible design.
- ii. To read and understand a specific site, the intangible background information, including history, culture, local life-style, and visual relationships, are as important as tangible information, including building materials, vegetation, and geography.
- iii. The balance between function and aesthetics is important in ordinary design as well as in a reinvigorated design. Functions are featured that attract users, while aesthetics, integrated with function, are characteristics that help provide a better visitor experience. A design with just function or just aesthetics cannot be a complete design.

Through the process of my research, I found there are several important new design projects in China that occurred over the past decade, for example the Qingmen

Street in Beijing, which is also a section of the Central Axis. That project has been criticized by many scholars in architecture, historic preservation, and landscape because the new design totally reconstructed the whole pedestrian street instead of taking existing historic building's preservation and restoration into consideration. This kind of "retro" project clearly reveals the current situation of historic preservation work in the urban context of Beijing. Also, this criticism indicates that some Chinese scholars worry about historic buildings and sites; however, it is the government and its department managers who need to reconsider whether or not the current methods of design/conservation are the best way to treat historic sceneries. It is the same as the situation in this project design. The new project proposed by the government indicates that they would tear down 66 yards, including more than 100 homes, and would bring this place back to the condition during the Ming and Qing dynasty. Many scholars¹⁹⁵ worry that this project will disturb the urban fabric, street pattern, and the continuance of the local lifestyle. However, the government hasn't made their design details public so far.

Based on all these ideas and projects I chose my own project design. As a citizen who grew up in Beijing, I witnessed changes of this site over time. It finally turned into a commercialized area instead of a well-maintained historic site. Hence, in my proposed concept design, I am providing a historic preservation oriented perspective to those buildings in the surrounding neighborhood. Although I propose demolition of unauthorized construction, which are not appropriate for the local atmosphere, as necessary; the current yards, with typical local life styles, should be kept or restored into a better situation. Aside from that, for the two plazas, since they have barely any traces of

¹⁹⁵ More details about scholars' opinion are reported in the news from these links of their personal blog post: <http://blog.sciencenet.cn/home.php?mod=space&uid=469915&do=blog&id=610402>; <http://news.sina.com.cn/o/2010-04-30/015517444488s.shtml>; http://blog.sina.com.cn/s/blog_47103df601019jmy.html

the past, this new design attempts to incorporate the history and culture of the place through traditional building materials and shapes abstracted from the urban fabric. Functional aspects are added into the new design in order to accommodate the needs of the neighborhood.

Finally, in considering what other researchers might do to add to this body of knowledge for this site, the surrounding area is a crucial part of the urban fabric and street patterns of that area. If future designs focus on this area, deeper research on the neighborhood should be conducted and incorporated into a final design.

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APPENDIX A

Brief Chinese Chronology

Xia Dynasty (夏)	21 st Century – 16 th Century BCE
Shang Dynasty (商)	16 th Century – 11 th Century BCE
Zhou Dynasty (周)	11 th Century – 256 BCE
Qin Dynasty (秦)	221 – 206 BCE
Han Dynasty (汉)	202 – 220 CE
Three Kingdoms (三国)	220 – 265 CE
Jin Dynasty (晋)	265 – 316CE
Northern and Southern Dynasty (南北朝)	304 – 581 CE
Sui Dynasty (隋)	581 – 619 CE
Tang Dynasty (唐)	618 – 907 CE
Five Dynasty (五代)	907 – 960CE
Song Dynasty (宋)	960 – 1279 CE
Liao Dynasty (辽)	907 – 1125 CE
Jin Dynasty (金)	1125 – 1234 CE
Yuan Dynasty (元)	1215/1276 – 1368 CE
Ming Dynasty (明)	1368 – 1644 CE
Qing Dynasty (清)	1644 – 1911 CE
Republic of China (中华民国)	1912 – 1949 CE

People's Republic of China (中华人民共和国)	1949 CE
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Chinese history, and its culture, is commonly divided into three time periods based on major political shifts, over time, as follows:

- Traditional history: from the first Qin Dynasty to the Opium War (221 BCE – 1840)

In this period, China experienced three different development stages: primitive society, slave society and feudal society. It covers more than 17 different dynasties and cultural changes.

- Modern history: after the Opium War to the establishment of PRC (1840 – 1949)

This period began when the Opium Wars broke out during the Qing dynasty and ended with the establishment of the Peoples Republic of China (PRC). It includes both democratic revolution of the old type and new-democratic revolution. It was a time of turmoil and revolution, experienced the Opium War, Sine-Japanese War and War of liberation in China.

- Contemporary history: after the establishment of PRC (1949 – present)

This time period also represents the history of the People's Republic of China.