## The Ethos in the Form Making of Grand Projects in Contemporary Beijing City

By

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Bachelor of Architecture Beijing Polytechnic University, 1999

Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of Master of Science in Architecture Studies

at the

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## ABSTRACT

Capital cities embody national identity and ethos, buildings in the capital cities have the power to awe and to inspire. While possibly no capital city in the world is being renewed so intensely as Beijing, which presents both enormous potential and threat.

Intrinsic to this research is a concept that the design culture of a city is formed largely by the national character, aesthetic value and culture distinctive to that city; these are the soil of design culture which merit careful observation and description. The current architecture design in Beijing is by all means exploring the modern language appropriated in Chinese idioms, especially in significant public projects which are often sponsored by the government. In these projects, the cultural and social concerns intensively emerge together. Amidst these concerns, perceptions arise from the fields of professionals, clients and the mass, the three main representatives of design culture. Each of them is valid only to an extent which presents one dimension of the ethos.

By studying three cases, National Theatre, CCTV Headquarter Office and National Stadium, we will identify the current cultural character and social value that may provide the soil of design culture in Beijing. Ultimately we would speculate on the potential development of architecture design in Beijing in the new century.

Thesis Supervisor: William Porter Title: Norman B. and Muriel Leventhal Professor of Architecture and Planning

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# CHAPTER 1 INTRODUCTION

## **1.1 Capital City with Giant Leap Forward**

Capital cities embody national identity and ethos, for instance, the Mall in Washington D.C., the Kremlin in Moscow or the monumental buildings in Berlin. Buildings in the capital cities have the power to awe and to inspire. While possibly no capital city in the world is being renewed so intensely as Beijing. In Beijing, the major urban development such as rehabilitation of the old city, the development of CBD, science parks and industry areas is happening just simultaneously within the last decade and probably the next after China's entry into the World Trade Organisation and prior to Beijing's hosting the 2008 Olympics.

The pace of urban development in Beijing is so intense that it presents both enormous potential and threat. Its contemporary architecture design is hard to define and describe as whole. "On one hand, it is still unfolding and shifting in a fast growing building industry, encountering new problems and developing new directions. On the other hand, contemporary design culture is not well studied, and a framed work with clear concepts and vocabulary has yet to be developed." <sup>1</sup>

Intrinsic to this research is a concept: that the design culture of a city is formed largely by the national character, aesthetic value and culture distinctive to that city;<sup>2</sup> these are the soil of design culture which merit careful observation and description. The current architecture design in Beijing is with efforts to explore the modern language appropriated in Chinese idioms, especially in significant public projects which are often sponsored by the government. In these projects, the cultural and social concerns intensively emerge together. Amidst these concerns, perceptions arise from the fields of professionals, clients and the mass, the three main representatives of design culture. Each of them is valid to an extent which presents one dimension of the ethos.

<sup>&</sup>lt;sup>1</sup> Jianfei Zhu, An archaeology of contemporary Chinese architecture, International Architecture Review, No.10 1999/II, p90

<sup>&</sup>lt;sup>2</sup> Wu Huanjia, The Design Culture and Social Psychology, Tshinghua University Press, 1996

## **1.2 Research Objective and Scope**

## Purpose

The process of architectural modernization is by no means an easy endeavor. The megaforces of international finance that are transforming Beijing give rise to debates on cultural distinctions and national character.

Prominent public architecture has always performed important roles in the clarification of spatial and social order. After China's entry to the WTO (World Trade Organisation) and Beijing's hosting the 2008 Olympics, the Beijing Municipal Government has increasing consciousness to construct public monuments and national identity. Nevertheless, how were the attributes of modernism promulgated in such a way that most prominent constructions are designed by western architects? And to what extent are these projects integrated into the indigenous context? In what extent did the client, the professional and the public perceive and recognize the cultural identity in these projects? What was the ethos and social background that determined the design culture in contemporary Beijing city?

The purpose of the research is to identify the cultural character and social value that may provide the soil of design culture in Beijing. Opinions on the Grand Projects emerging in Beijing will be collected from the clients (government), the professionals and the public, the three interactive representatives in the ethos of contemporary design culture. From these opinions the diversity of social and cultural meaning generated through the process of the projects would emerge.

## • The case studies

To investigate the potential convergence of social and cultural forces interactive in the Beijing, a method of research focused around case studies will be employed. The criteria for selecting cases are: 1. their iconic singularity makes them most significant assets; 2.

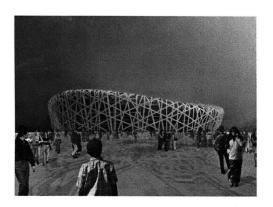
#### Introduction



The National Theatre by ADP, France



CCTV HQ Office by OMA, Netherlands



The National Stadium, Herzog & de Meuron, Switzerland

they play engaged urban role through their public functions and locations; 3. they arouse intensive cultural and social concerns.

According to the criteria mentioned, three Grand Projects: National Theater, China Central TV HQ building, National Stadium in Olympic Green are chosen for case studies. The buildings are state owned, selected from international competition and all aroused large scale debates on whether or how much they express the Chinese cultural character. Three cases came from the three important districts (Cultural Center, CBD, the Olympic Green) that Beijing Municipal Government invest to add impetus to the development of Beijing preparing for the China's entry to the WTO (World Trade Organisation) and Beijing's hosting the 2008 Olympics. In these projects, the cultural and social concerns intensively emerge and cultivate together.<sup>3</sup>

By closely investigating the conceptions and implementation of the projects prominently implanted in the public domain of Beijing, this thesis explores the cultural and social

<sup>&</sup>lt;sup>3</sup> Coincidentally, in the website of Beijing Municipal Government, there is an article The Three Great Buildings to Shape Olympic Beijing. It shows the enormous influence that these three projects offered:" Beijing has both excellent and classical architecture but few distinguished modern buildings. Now such world famous architects as Ram Koolhass, Herzog & de Meuron, and Paul Andrew are to display their skills here. With the speeding up of China's urbanization and the challenging concept of the 2008 Olympic Games, almost all famous design consortiums from around the world have found that China is one of the few countries which provides not only imaginary space but also abundant funds for modern architecture today."

aspiration implicated in the modernization and urbanization of Beijing. By tracing the process of initiating the Grand Projects, we will identify the cultural and social aspirations from the client, the professionals and the public. The gap between their affirmations, the up and down process of form making, and the material and technological solutions to formalize the concept will be the focus of this study.

## • Structure

The imposition of ethos in the modern architecture in the fast transforming capital city -Beijing inevitably instigates multiple domains:

- Evolution of modern architecture in Beijing: the physical and Ideological context.
- The process of selecting form that "properly" conveys the aspiration from the government and the public; the response from the architect and aesthetic quest of their own.
- · Limits and advantage in practise execution.
- Effects in the up and down process of Modernization (not globalisation) in China.

The first chapter is brief introduction of the trajectories of modern architecture in Beijing as capital city, placing in context the urban component of the Grand Projects. Subsequent three chapters are posed as case studies of the three Grand Projects relating the form making to the social context in the multiple dimensions. Our discussion extends in the sixth chapter as we revisit the case studies and summarize the main arguments of the thesis. Upon this we will speculate the potential development of modern architecture design in Beijing in the new century and provide reference for the clients and architects in the architectural design practise.

Chapter 2

Setting up the Context: Capital City and Its Architecture

The Old City of Beijing is considered to be one of the great treasures of urban history. As the last imperial capital in China, Beijing evolved through the last three dynasties of the Yuan, Ming, and Qing, and has become the ultimate example of ancient Chinese city planning. Bearing its unique historical and cultural significance, however, the Old City of Beijing has undergone dramatic redevelopment policy changes from 1949 to 2003. From the demolition of historic monuments since the 1950s to their restoration nearly half a century later, from the destruction of the urban texture in the redevelopment program during the 1980s and 1990s to the construction of pastiche in the Preservation Areas since 2000, the government has shown a complicated and even self-contradictory attitude toward the cultural heritage of Old Beijing.

From 1949 to 1978, when socialist ideology served as the source of the government's political legitimacy, policy makers defined historic monuments in Old Beijing as relics of the imperial political order, thus implemented a policy to demolish rather than preserve them. The government's policy has shifted from ideology to economic growth since the launch of economic reform in 1979, hence the urban renewal program turned into a real estate construction, which has led to severe destruction to the urban texture of Old Beijing. From 2000 to 2003, with the intensification of globalization<sup>1</sup> and China's more active participation in the international affairs<sup>2</sup>, the government is facing urgent demands of fastening pace of modernization and at the same time maintenance of its cultural heritage.

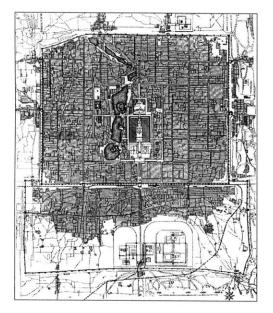
## 2.1 IMPERIAL PAST OF THE BEIJING CITY

The actual site of Beijing has been habitat for over 3000 years. Its location was considered as having ideal 'feng shui' (geomantic omen) in being surrounded on three sides by mountains. The actual physical form of Old Beijing dates from 1272, when Kublai Khan of the Yuan dynasty laid out the city. Then the city was "grandly conceived and methodically planned," with broad, rectangular blocks laid out "in the checkerboard pattern that still characterized the city."<sup>3</sup>

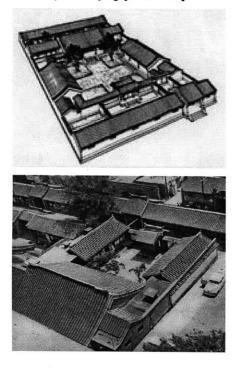
<sup>&</sup>lt;sup>1</sup> Entering WTO

<sup>&</sup>lt;sup>2</sup> Olympic Games, World Expo

<sup>&</sup>lt;sup>3</sup> Jasper Goldman, "From *Hutong* to Hi-Rise: Explaining the Transformation of Old Beijing (1990-2002)," Master Thesis, Cambridge: Massachusetts Institute of Technology, 2003, p. 9-10



Old City of Beijing [Wu,2000]



Hutong [Wu,2000]

It was also around this time that the residential fabric of the city-the hutong and siheyuan (courtyard house)-was constructed. The courtyard house "is particularly renowned worldwide for the way it is an integral part of Beijing's entire layout-as the basic, microcosmic unit of a capital city that is in itself cosmological in scale and intent."4 Furthermore, it is "the infinitely variable and yet clearly identifiable spatial arrangements of courtvards and pavilions that provide the richness and splendor of Beijing's urban space."5 The plain and simple gray color of courtyard house also provides the ideal backdrop for Beijing's monuments such as royal buildings along the central north-south axis. Similarly the hutong, providing access to courtyard buildings, provides unique street life and represents essential part of culture in Beijing.

With the completion of the construction of the City Walls in the Ming dynasty, the whole city is divided into four roughly concentric encirclements by the walls: the Forbidden City, the Imperial City, the Inner City, and the Outer City. The Forbidden City, home of twenty-four emperors of the Ming and Qing dynasties between 1370 and 1924, was located at the

<sup>4</sup> Ibid. p. 10.

<sup>5</sup> Wu Liangyong, *Rehabilitating the Old City of Beijing: A Project in the Ju'er Hutong Neighborhood*, University of Washington Press, 2000, p.56.

center, where the emperor was to reside to symbolize both the centralization of power as well as his mandate from Heaven to rule. The main buildings were laid out symmetrically along the 7.9-kilometer long Central Axis. The sophisticated arrangement demonstrates that "the city is deeply enmeshed in ritualistic formulae and religious concepts which do not concern us now," but which provide "a rich storehouse of ideas for the city of today."<sup>6</sup>

The significance of Old Beijing, however, was greater than the sum of its historic monuments and traditional houses, or even the fact that its collection of cultural relics and historic buildings exceeded that of any other Chinese city. It was the whole arrangement of all of these items, and the infinite variations of the form and color that made Beijing particularly special. The roofscape of the city, for example, "was composed of soaring roofs of yellow, green and blue and a vast of number of small gray rooftops, which were all unified in their graceful curvature, like so many waves upon the sea."<sup>7</sup> "Beijing is an unparalleled urban planning masterpiece," commented by the renowned architect and city planner Liang Sicheng, preservation in the city "should not be confined to a single hall, temple or pagoda...great care should also be taken to preserve surrounding buildings which are part of the entire complex, and to the overall setting of the complex."<sup>8</sup>

## 2.2 Physical Transform

The urban development of Beijing entered a new era in 1949, and, ever since, the contradiction between preservation and development has become more and more serious. The intrinsic concept of the urban renew in Beijing is "first, the manipulation of urban design to appropriate the spatial power base of an old regime for use in the identity formation of a new one and, second, the dissemination of iconic images of these settings through staged media events".<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> Edmund Bacon, *Design of Cities*, London: Thames and Hudson, 1975, p. 244.

<sup>&</sup>lt;sup>7</sup> Wu Liangyong, Rehabilitating the Old City of Beijing: A Project in the Ju'er Hutong Neighborhood, p.14.

<sup>&</sup>lt;sup>8</sup> Lian Sicheng, *Beijing - An Unparalleled Urban Planning Masterpiece*, p.10

<sup>&</sup>lt;sup>9</sup>. Lawrence J. Vale, 'Mediated Monuments and National Identity', The Journal of Architecture, V4, Winter 1999, p.393

## 2.2.1 1949-1979

# The Demolition and the Construction: the Old Imperial City meets the Socialist Capital

From 1949 to 1979, the Old City of Beijing was considered as the physical representative of the old imperial order, which contradicts with socialist ideology—the legitimacy of the new regime—and should be renewed into a socialist capital. Hence, this period showed mega redevelopment with neglect of urban preservation.

## • The Choice of the Site

The argument about the alternatives of "centering new development in the Old City of Beijing" and "setting up a new administrative center in the west suburbs of Beijing" was the crucial point of urban development at that time. Although the latter choice might have been more practical, the former was adopted by the policy makers of the time due to political and ideological considerations. This resulted in a great deal of new construction in the Old City, and, ultimately, compromised the traditional features of the city's fabric and landscape.

The location debate regarding the new administrative center was broadly represented by two proposals: (1) the old center plan of Zhu Zhaoxue and Zhao Dongri and (2) the west suburb plan of Liang Sicheng and Chen Zhanxiang.<sup>10</sup>

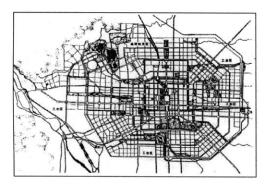
Despite of the merits of the second proposal in urban design and preservation, a hasty decision was reached in favor of expansion within the old center: to locate the administrative center in the physical center of the city, around the Forbidden City, and to utilize or demolish existing buildings to make way for the center. The experience of Soviet Union played a decisive role in the policy making process.<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> Shen Yurong, "Controversies over the Location of Beijing Administrative Center in Initial Stage of Founding Our People's Republic", *Beijing City Planning & Construction Review*, vol. 85, no. 4, 2002, pp.59-60.

<sup>&</sup>lt;sup>1</sup> Ibid., pp. 18-19.



The New Administration Center in the Western Suburb of Beijing proposed by Liang Sicheng (1949) [website of Beijing Municipal Commission of Urban Planning]



Beijing City Plan (1954), the administration center in the center [website of Beijing Municipal Commission of Urban Planning]



Relics of he Old City Wall,1999[by author]

#### Setting up the Context: Capital City and Its Architecture

Besides the political reason, the ultimate decision was justified on 'practical' groundsthe country could not afford to build a new city. On the one hand, the seat of the government in the center of Beijing, and symbolically, the center of the country, implies political centralization of the socialist regime. On the other hand, governmental agencies' occupancy of historic buildings demonstrate the ideas of 'letting the past serve the present' and appropriating both the image and the physical manifestation of this icon of the previous regime to bolster the prestige of the new government. However, many observers have seen the decision as essentially dooming the Old City, making the encroachment on its historic architecture and urban form inevitable. As Wu said, "it is not unreasonable to say that most of Beijing's conservation and traffic management problems stem from the choice of this site."

## Urban Renewal with Absence of the City Design

Due to the single-centered development pattern in the Old City and strong ideological considerations among policy makers, many historic monuments were intentionally destroyed. Among them, the Old City Walls were perhaps the grandest artifact to be demolished. Despite a proposal raised by Professor Liang to convert the Old City Walls



People's Hall, 1959

The second se

The Worker's Stadium



Diaoyutai National Hotel



China Agriculture Museum



The Folk's Hotel



Overseas Chinese Building



China History Museum [www.bjghw.gov.cn]

**Beijing Railway Station** 



China Martial Museum

into an elevated City Wall Garden, the so called blockage to the new construction was arduously demolished for 20 years from the 1950s to 70s.

If the decision to construct a new capital in the Old City is the first step of re-fabricating the city, the demolishment of the Old City Walls is the second that leads to severe damage to the urban texture and cultural ecology of Old Beijing. The basic urban structure of the Old City is broken with the destruction of the walls. Furthermore, the disappearance of the Old City Walls endowed unlimited capacity with the government to build major roads and avenues passing through the Old City.<sup>12</sup> This brings severe damage to the street networks and urban tissues of the Old City.

## Architectural Design: National Form

This period was dominated by a revolutionary social ideal, as the country attempted to transit from feudal society into a communism society.

<sup>&</sup>lt;sup>12</sup> Zheng Bo, "Dare Not Talk Irresponsibly about the City Wall of the Ming Dynasty," *Beijing City Planning & Construction Review*, vol. 91, no. 4, 2003, p. 148.

Against a historical urban background, form based national style emerged. This approach was employed for the design of series of vast symbolic landscape, represented by the Ten Grand Projects in Beijing at the end of the 1950s:

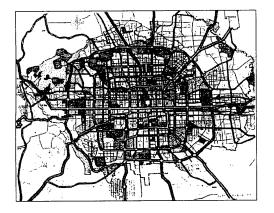
- 1. People's Hall
- 2. China History Museum
- 3. China Martial Museum
- 4. China Agriculture Museum
- 5. Beijing Railway Station
- 6. The Worker's Stadium
- 8. The Folk's Hotel
- 9. Diaoyutai National Hotel
- 10. Oversea's Chinese Building

In form, they were based on the combination of Beaux Arts classicism and Chinese imperial architecture. In content, they acted as a highly potent representation of the Chinese revolution and its political statement.

## 2.2.2 1980-1999

## The Demolition and the Construction: in the Pursuit of Economic Growth

With the beginning of economic reform in 1979, the source of Chinese government's political legitimacy has gradually shifted from socialist ideology to economic performance. While ideological consideration is no longer the major



Beijing City Plan (1993) [www.beijing.gov.cn]

momentum in urban renewal, the pursuit for economic growth has led to a variety. Under this condition, Beijing launched a large-scale urban renewal program extending to the outer suburbs. New housing estates were built, business and financial centers sprung up in concentric zones of the city. A wooded green belt and newly built regions along the fifth ring road encircled the central city.

## Construction and Destruction

The Cultural Revolution (1967-1976) brought the plan and construction to a standstill, up until November 1981 when the urban planning committee resumed its function. On October 6, 1993 the State Council ratified the "Beijing Master Plan 1991-2010" setting the following targets for Beijing:

To serve as the capital of the socialist country

To be the center of political and cultural activities of China

To be worthy of the status of a world-famous ancient capital; and at the same time

To become a modern international metropolis open all round to the outside world

By this time, the condition of traditional Hutong and Siheyuan in Beijing has been seriously undermined. The poor living conditions of the majority of residents of Old Beijing urged the government to launch the Old and Dilapidated Housing Renewal (ODHR)<sup>13</sup>. However the nature of the ODHR program has changed from a social welfare project to real estate development. With the profit driven urban renewal program, the majority of residents—in some projects all— were relocated to cheaper land in the suburbs, and the original sites were developed for commercial or luxury housing use.<sup>14</sup> The wholesale real estate development has brought tremendous threat and damage to the traditional fabric in the Old City.

## Construction and Preservation

<sup>&</sup>lt;sup>13</sup> Jasper Goldman, "From *Hutong* to Hi-Rise: Explaining the Transformation of Old Beijing (1990-2002)," pp. 34-35.

<sup>&</sup>lt;sup>14</sup> Jasper Goldman, "From *Hutong* to Hi-Rise: Explaining the Transformation of Old Beijing (1990 2002)," p. 35

# 

The '25 Preservation Areas' Plan for Beijing [website of Beijing Municipal Commission of Urban Planning]

#### Setting up the Context: Capital City and Its Architecture

The Municipal Government designated 25 Preservation areas in the Old City in 1990.This is the first time that the government set the goal of preserving whole streets and neighborhoods rather than individual monuments. Yet many commentators see this as insufficient, arguing that Beijing's artistic integrity need to be protected, and not small parts of it. Furthermore, some observers see the true purpose of the preservation plan as being a green light to redevelop the particular historic area that is not "one of the protected zones".<sup>15</sup>

In addition, due to the threat that high-rises have brought to traditional architecture and the whole urban skyline, the Municipal Government announced the height limits policy for new constructions in 1985 for the first time. The 1993 Beijing Master Plan reinforced the policy and set up specific height limits for different areas of the city.<sup>16</sup> From the Forbidden City to the Second Ring Road, the building heights are limited to the maximum of 18 meters, gradually increasing outward from the center; Outside the Second Ring Road the height can reach up to 60 meters. As a result of height control, Beijing's skyline forms a bowl

<sup>&</sup>lt;sup>15</sup> Jasper Goldman, "From *Hutong* to Hi-Rise: Explaining the Transformation of Old Beijing (1990-2002)," p. 18.

<sup>&</sup>lt;sup>16</sup> Sun Hongming, "Deliberation on Old and Dilapidated Housing Renewal in the Old City," *Beijing City Planning & Construction Review*, vol. 71, no. 2, 2000, pp. 21-22.



West Railway Station



Fragrant Hill Hotel



Yanhuang Gallery



Fengze Garden Restaurant

shape, with a low center and a higher rim.

Architecture Design: Toward Chinese
 Modernization

During this two decades, with the pursuit of the open door policy and modernization program, there was a commercialization of cultural icons and symbols, and an influence of postmodern architecture from the West. Under such condition, there was a "cultural fever" articulating the national vision in the new environment.

One of the strong streams is a succession of the national style. With influences of postmodern architecture and interest in national tradition, images of roof mounted on high rise and super blocks appeared, for example Western Railway Station (1995), Yanhuang Gallery (1991). There are some innovative syntheses of traditional and modern Forms.

Another approach is the combination of abstract, modern forms with regional or vernacular features, for example the Fragrant Hill Hotel (1982), Fengzeyuan Restaurant (1995). They explored modern architecture with vernacular approach. But the architecture boom and the absence of a clear ideology made the exploration of modern vernacular architecture still in its infancy, though it is developing extensively.



National Library



Beijing Internatinal Exhibition Center



New World Plaza



Henderson Center



Foreign Language Publication



Capital Library



Beijing International Financial Building

Grand Projects in the 1990s [www.beijing.gov.cn] An international architectural competition was held for the National Grand Theater in 1998. Two rounds of competition and the heated debate over issues of history and tradition, culture and symbolism has marked the scheme as the turning point in the history of contemporary Chinese architecture. Ultimately, the proposal by the French architect Paul Andreu was selected. Covered in a glass and titanium shell, the building represented sharp departure from tradition The Old City of Beijing, with the new theatre, reveals Chinese architecture has subsequently come to chose modernity over tradition, progress over conservation. It indicated a transition from a revolutionary nationalism to a liberal and modernist vision of a nation and its ultimate confidence in progress and in modernity.

#### 2.2.3 2000-2004

## Between Tradition and Modernization: Pursuing International Recognition

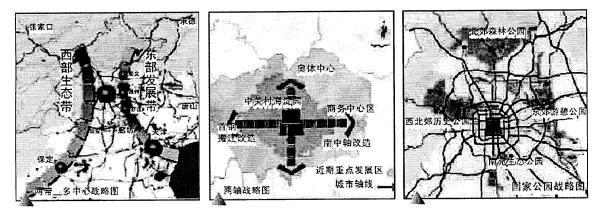
Entering the new century, the influence of globalization has expanded into areas of both economy and culture. When a country has been integrated into the international society, its domestic culture

is deeply influenced by certain global value. Therefore, international recognition has increasingly become a new source of social ideal. This is especially the case for a developing country like China.

## • Urban Redevelopment

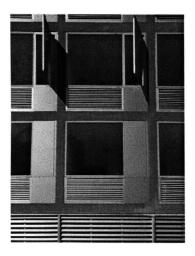
With the economic growth, China has attempted to gain more international recognition and join the global stage. As for the Beijing Municipality, there is a dual demand presented by the international society: the modernization of the city and the preservation of its cultural heritage. The demand has been reinforced with China's entering into the WTO and Beijing's successful bidding the 2008 Olympics. But as in most developing countries, there is unavoidable confliction between these two goals.

In order to transform Beijing into a modern metropolis, the step of urban renewal has never stopped in the city: the newly constructed urban pattern was composed of the traditional central area (service area); four sub-centres (the CBD, Zongguancun Science Park, Olympic Park, and Financial and recreaction Zone). Manufacturing moved to the 'satellites' and now forms a new belt surrounding the central city. In the outer-suburbs, nine development areas, including the seven square kilometer Beijing Economic Technology Development Zone, were set up along the sixth ring road.

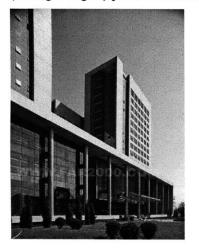


Beijing City's Space Strategy 2004 [www.people.com.cn]

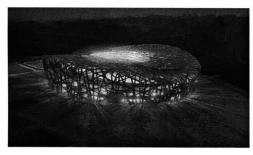
At the beginning of 2001, the 4th Meeting of the Standing Committee of the 11th People's



China Science Acadamy Math. Center (Zhang Yonghe) [www.far2000.com]



Tshinghua Creation Center (Cui Kai) [www.far2000.com]



National Stadium (Herzog&de Meuron) [National Stadium, 2003]

Congress of Beijing approved the "10th Five-Year Economic and Social Development Plan of Beijing". According to this plan, Beijing is going to demolish 3.03 million m2 of old and dilapidated housing in the Old City, and intended to complete the renewal program by 2005. <sup>17</sup> This unprecedented large-scale project will definitely lead to dramatic results. As an expert argued, the goal to finish the program within five years actually sentences the death of Beijing's *hutong* and *siheyuan*; the basic element of Old City fabric.

 Architecture Design: Toward International Circuits

Experienced American, Soviet Union and other multinational influence in China's design culture, the foreign source of design was first embraced, then disputed, and perhaps now on the beginning of indigenization. While it is still hard to simply summarize the current design culture. The various approaches to tradition and modernization have not resulted in common regional style yet.

Like most capital cities, architecture in Beijing has been part of the tool for national statement. Unlike the earlier efforts by Zhang Bo or I.M.Pei, architectures today no longer concern themselves with "big roof" or other

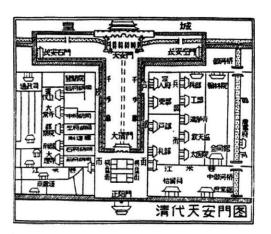
<sup>&</sup>lt;sup>17</sup> http://www.bjnw.gov.cn/layout/2003-10/49434/49434\_1.html

traditional architectural signs. They are more of modern language incorporated with local essence as a source of inspiration. Among them are Zhang Yonghe, Cui Kai and the practice of international architects such as Jacques Herzog who involves Chinese contemporary artists in his design of National Stadium for the 2008 Olympic Games.

They pursue a pure treatment of material, structure and space. They come from a young generation architects who received education after China's Open Door and some in the West. Their perception is contemporary and yet grounded in the Chinese context. They are critical of the decorative, historicist tradition formed before 1976, and superficial commercial designs in contemporary China.

# Chapter 3

# National Grand Theatre: The Turning Point



Tiananmen Square in its 1800s [Zhao Luo, Tiananmen, Beijing Publish, 1957, pp.21]



Tiananmen Square in 1945 [Cameron, Nigel & Brake, Brian, *Peking: A Tale of Three Cities*, Fig. 65, Weatherhill, Inc., 1965]



Tiananmen Square in 1959, [Architectural Journal, Vol. 9, 1959]

#### The National Theatre: The Turning Point

The National Grand Theatre is located on the south of the Chang'an Street (the main boulevard in Beijing), to the west of the Tiananmen Square and the Great Hall of the People. The overall construction area is 120,000 square meters (1,292,000 square feet). It comprises an opera house of 2,500 seats, a concert hall of 2,000 seats, a theatre for modern drama of 1,200 seats, a mini theatre of 500 seats and other facilities. Since the 1950's when Tiananmen Square was being planed, the theatre has undergone a long process of planning and presentation. After the international competition in 1998, the protected site was at the groundbreaking point in the immense change in Beijing

#### 3.1 History of the Site: Tian'an Men Square

Tiananmen Square, a vast open ground centred on and defined by a series of monuments constructed over a period of more than five hundred years. To many Chinese, the Square has always been the centre of political tension and attention. A series of mass movements taking place there have been landmarks in modern Chinese history. Tiananmen Square, with a platform built for the leaders to review the mass assembles, becomes a legitimate place for people to meet the leaders, an indispensable joint between the

high and the low.

In the old days, the layout of the Tiananmen was based on the opposition between the ruler and the ruled. The Gate of Tiananmen faced a T-shaped walled square. The two arms of the T stretched east and west from the Gate, while that vertical bar of the T extended south from the Forbidden City toward the Front Gate of the Inner City. Two groups of government ministries flanked this part. To the east there stood the Ministries of Rites, Industry, Population and medicine. To the west there stood the Department of armies, Imperial Guard, Police and Justice. There was a saying that:" Those to the east govern our lives; those to the west govern our death".1

During 1949-1979, the ideology of creating both the history and the future dominated the construction of the Tiananmen Square. All new structures were added to confirm it. The wall around the square was demolished, such enlarged the square. The Monument of National Heroes was set up in 1958. The Great Hall of the People and the Museum of National and Revolutionary History were hurriedly built in no more than one year, and the Mao Memorial was built right behind the Monument. So the Tiananmen Square in general and the monumental buildings around it act as a political and cultural battleground as the government "of the people and for the people".

## 3.2 The Process of Competition

Ever since the 1950's when Tiananmen Square was constructed, the National Grand Theater, the top performing art center of the People's Republic of China, has undergone planning and evaluation. In 1997, the Chinese government decided to build the theater at the west side of the People's Great Hall. In order to "achieve a first class international performance palace", the Proprietor Committee invited some well-known architects from home and abroad to take part in competition. The numbers of domestic firms and international firms were intentionally made similar.

<sup>&</sup>lt;sup>1</sup> Wu Liangyong, The Architectural Achievement of the Monument to the People's Heroes, Architectural Journal, Vol.2, 1978, pp.4-5

Firms from China are:

- Beijing Institute of Architectural Design and Research
- Shanghai Modern Architectural Design Co., Ltd
- Architectural Design Institute of Ministry of Construction
- Architectural Design & Research Institute of Tshinghua University
- Zhejiang Building Design & Research Institute
- Guangzhou Design Institute
- Architectural Design & Research Institute of Southeast University
- Shenzhen University, The college of Architecture & Civil Engineering
- Ande Architectural Consultant Ltd. Co.
- Central Engineering & Research Institute
- Sunlight Architects & Engineers
- The Architectural Design & Research Institute of Tongji University
- China Architecture Science Research Institute, H.K.
- Dennis Lau & NG Chun Man Architectuws & Engineers, H.K.
- Wong and Ouyang (Hong Kong) Ltd., H.K
- Rocco Design Limited, H.K.

Foreign Firms include:

- Hans Hollein, Austria
- Henke-Schreieck-Chen Architekten, Austria
- Wilhelm Holzbauer Architect, Austria
- Carlos Ott & Associates, Canada
- ADP Aeroports de Paris, France
- Architecture Studio, France
- Architectures Jean Nouvel, France
- Design Group: Obermeyer + Deilmann, Germany
- HPP International Planungsgesellschaft mbh, Germany
- Nicolas Petropoulos Architect, Greece
- Gregotti Associati International srl, Italy
- Antonaci Partners, Italy

- Design Group: Studio Valle Progettazioni Percy Thomas Partnership SGA Design Studio, Italy
- Arata Isozaki & Associates, Japan
- Nihon Sekkei Inc., Japan
- Takenaka Corporation, Japan
- Terry Farrell & Partners, UK
- Dixon Jones , UK
- Moshe Safdie, USA
- Hakomori Pali Stenfors Tang, USA
- Minoru Yamasaki Associates Inc., USA
- GFU Architect Urban & Interiors, USA

58 schemes were submitted during two rounds of competition and three times of modifications over one and half year. The keyword in the program was "that the project has to address the historic fabric of Beijing and significance of the Tiananmen Square area, but at the same time needed to look forward to the new century."<sup>2</sup> Architects had arduous experience of searching for sense of what this would mean when there was still no clear interpretation of modern architecture in Chinese history of architecture.

The Jury Committee was made of 8 domestic architects and academics and 3 foreign architects:

- Wu Liangyong Professor of Architecture in Tsinghua University, member of the Chinese Academies of Science and Engineering
- Arthur Erickson Architect, Canada
- Fu Xinian Architect, member of the Chinese Academies of Science and Engineering
- He Jingtang President of the Architectural Design and Research Institute of South China University of Technology
- Pan Zuyao President of Hongkong Institute of Architecture
- Peng Yigang Professor of Architecture in Tianjing University, member of the Chinese Academies of Science and Engineering
- Ricardo Bofill Architect, Spain

<sup>&</sup>lt;sup>2</sup> The document of the Design Scheme Competition and its Annex

- Xuan Xiangliu Urban Planner
- Yoshinobu Ashihara Architect, Japan
- Zhang Jinqiu Architect, member of the Chinese Academies of Science and Engineering
- Zhou Ganchi member of the Chinese Academies of Science and Engineering

On July, 1999, three schemes were recommended by the Jury Committee: ADP (Aeroports De Paris), Terry Farrell & Partners from UK and Tsinghua University. The central government selected the design of ADP (Aeroports de Paris) of France as the final winner. Ricardo Bofill, the jury member from Spain, said: "If we cannot choose a good design which can extend the history well, then we choose the modern one; if we cannot choose a good one which can integrate with the history well, then we choose the avant-garde one." Another jury member, Arthur Erickson from Canada said: "there are two types of harmonies: the similar harmony and the contrast harmony. The harmony is not depending on which type you are using, but the application level of use. Normally the contrast harmony is livelier."

The storm of protests began ever since against the building's Western architecture, its contribution to the destruction of the traditional city, its technical viability, its cost, and even the necessity for such a facility in Beijing. The Planning Commission firmly took control of the project and reported back directly to the group of four leaders for the Central Government. Most of the decisions on the life of the project were thus taken at the highest level. On Dec.13, 2002, the construction began with low tone.

## Table 1 Schemes sellected and Jury's Comments <sup>3</sup>

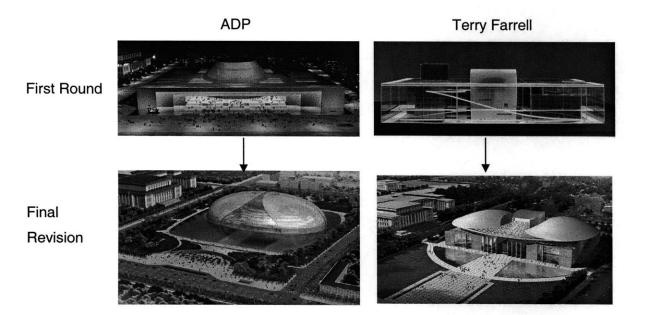
Scheme Design	Comments from Jury
Scheme by ADP, France	The architect responded to the seriousness of its appearance by means of material selection, color use and interior spatial treatment. The overall image had the character of memorial architecture. But the centrally located opera house made entrance spaces on the south and north sides too narrow. The building image was too strong, hard to be in harmony with the surrounding environment, the building image lacked the character for a grand theatre.
Scheme by Terry Farrell, U.K.	The entrance lobby was very transparent, making it a stage for the public. This concept was very creative. The Opera House on the main axis was elevated to create a connection to the landscaped garden to the south of the site. The architect mad an effort in studying the Chinese culture. However it lost the simplicity and purity of the original submission (in the first round). Large glass windows to the north facade tended to be too commercial in character.
Scheme by Tsinghua University, China	On the basis of making use of the underground space, the scheme opened up the eastern part of the site for a large open landscape plaza, trying to fulfill leisure use and outdoor performance. The scheme tried to integrate national cultural heritage into the design. However the proportion, the scale and the color were inappropriate, fire code issue and the use of fame work element need to be carefully studied.

It is worth noticing that through various phases of the architectural competition, Andrew's proposal had moved from a relatively squared building, with a proscenium like stage

<sup>&</sup>lt;sup>3</sup> Collection of Design Schemes for the International Architectrual Competition of the National Grand Theater P.R.China, China Architecture & Building Press, 2000, p49

#### The National Theatre: The Turning Point

setting at the main entrance and an equally squared cupola on top, to the final domed form. It thus became increasingly less traditional. By contrast, a scheme by Terry Farrell of the United Kingdom had moved in almost the opposite direction. Farrell's scheme shifted from a transparent set of three enclosures to a design in which a large curvilinear roof emerged across the top of the entire building.



#### 3.3 Visions and Inquires

To understand the controversy, it is worth noting that Beijing has had far fewer foreign architects participating in its construction than today. As capital city, in the 90s, Beijing is still conservative, carefully being quite essentially Chinese. The scheme of the National Grand Theater can be regarded as a turning point in the history of contemporary Chinese architecture. Chinese architecture has subsequently come to period that not only accepting architecture and theories from overseas but realizing them that were once regarded as visionary.

## 3.3.1 Vision from The Client

The Proprietor Committee has been silent since the controversy erupted, except for refuting a media report that the project had been suspended. In the Beijing International Expo 2003, Zhou Qinglin, a member of the committee gave a talk about his comment on the debate. Based on report on the mass media and the interviews with some architects who were present at his speech, here are key points:

Innovation

We see two approaches toward innovation. One is to emphasize the traditional culture and the local architectural culture, to extend the sequence of the history and to reflect more characters of national culture. Another approach is to use modern science, technology and concepts to explore the unknown fields and discover the future requirements of mankind. The latter is a creative way of looking forward first and then walking forward. It may be more useful for the development and progress of the whole society, and it will become the leading power of the development of the construction field. It is okay to extend our national tradition, but to use new science and technology to explore the future should be encouraged more.

Tradition

What is the tradition? Where did the tradition come from? The tradition is the result of intelligence evolvement. It will develop with the change of materials which people rely on. The tradition should be treated dialectically. The creation today may become the tradition in the future.

• Choice of the Foreign Architects

It is said that to use a French architect's design of the national theatre is an insult to the Chinese nation -- a betraying action to our country, a presentation of the new colonialism... "I think they make an academic issue politicized. What is patriotism? What is the betrayal of his country? What is the standard? A real patriot should make our nation stand among the foremost of advanced nations as soon as possible. Otherwise they are all empty talk... Our mission is to make a new contribution to mankind. To protect and extend the national culture is a presentation of patriotism,

while to explore and create a new future bravely is an action of making it better". (Zhou, 2003)

## 3.3.2 Statement from the Architect

The scheme selected is by French architect Paul Andreu, chief architect of ADP. On one side of its obvious contemporary architectural references, on the other side is also traditional in the symmetry of its layout, its centered monumentality, and some of its details. The idea of surrounding the building by water, for instance, recalls much of traditional theaters, which were often placed in lakes.

## "It's a new building!

It is a building make of curves that emerges like an island at the center of a lake.

It is both open and closed with exterior surface in glass and gray titanium. You can see that this huge volume is a shell, the enclosing case, the partially opened outer covering of a flower...Everywhere you can see people moving about along the inner streets on the plazas, in the upper lounges and walking just below the surface of the water through the transparent underpass that connect the building to the shore. These continual movements convey the life of a building that has become like a living organism, at once simple and complex, evident and secretive...

The round shape of the theatre accomplishes the goals of ensuring that the space behind the Great Hall for the People is not unpleasantly reduced and that the view of it from the entrance to the Forbidden City is highly discreet.

The building marks the desire to pursue the development of this immense part of the city not by breaking the continuity of its ancient history but rather by opening a new chapter...

The zone of building incorporated into an enormous park is fitting into the organic quality of Tian An Men Square. This zone could be the vital lungs of the city center.

The theatre is equally beautiful from every angle. It avoids unseemly side or rear facades due to badly handled functional imperatives."<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> ADP, *Scheme Description*, Courtesy of BIADR

The ADP clearly realized that the impetus to action on the National Theatre is "undoubtedly the expression of modern Chinese history and its political transformations... It is national and political important because: the nature of the investment (a first class culture complex including an opera hall, theatre and concert hall); Its economic and physical dimension (500 million dollars for 150,000 sqm of construction); Geographic location (symbolic heartland of Chinese power and authority).<sup>5</sup>

"The Grand National Theatre will, in architectural terms, oppose the Great Hall of People in what I see as a classical rhetorical figure: the opposition of contraries. One has impressive neo-classical facades composed of straight lines. The other has no facade, but only a roof and is composed almost exclusively of curves. There will be a dialogue between them, each expressing its time and function. The theatre will express serenity and mystery, this time a non-forbidden mystery since it will be open to all people and give them a new social place, a new view of the town. Incongruous? No. It is new. As new as what the Chinese people are waiting for, here and in many other fields."<sup>6</sup>

"I think Chinese people are just not used to the new form. The perspective had just been opened. The foreign skepticism will soon fade along with China's more and more open to the world."<sup>7</sup>

## 3.3.3 Debate in the Public

Controversy about the National Theatre project in Beijing has continued for more than 40 years since the date the Government decided to build it. Choosing a practical plan in an international competition made the discussion more heated. The following is the summarization of the views collected from the Mass Media.

The debate about the style

<sup>&</sup>lt;sup>5</sup> ADP, *The City and Major Investment*, Villes En Developpement, No.57, Sep. 2002, p.3

<sup>&</sup>lt;sup>6</sup> Interview with Paul Andreau, Chief Architect of ADP, China Daily, Sunday, August 13,2003

<sup>&</sup>lt;sup>7</sup> Interview with Delthine (ADP/SETEC)

- The dissenters' points: The schematic design by Paul Andreu does not reflect the Chinese traditional style and is not harmonious with the environment at all.
- The supporters' points: The design should face the future, need breakthroughs and creations, and emphasize contemporary styles.

The debate about the basic principles: to be practical, economical and aesthetical

- The dissenters' points: The schematic design by Paul Andreu breaks the basic principles of architectural design: to be practical, economical and aesthetical.
- The supporters' points: To be practical, economical and aesthetical are general design principles. For a national theatre, only to satisfy these principles is not enough -- the distinguishing characteristics and the fancy effects are very important for such a building, which lies in the heart of the city. The design by Paul Andreu satisfies the basic functional requirements and gives the building a fancy character, which is very important for the city as well.

The debate about the construction design

- The dissenters' points: The entrance for the auditorium hall is underground; it reminds the Chinese structure of Tomb; the ellipse shell is not harmonious with the environment; the maintenance of the shell is difficult and dangerous with fire and water resistance problems; the volume is too big; and it wastes space and energy, which is unnecessary.
- The supporters' points: Andreu's design satisfied the basic functional requirements. There is an underground railway station north of the theatre entrance, with the underground access connected. The car park and bicycle store are connected with the theatre entrance as well, so 70 per cent of the audience will enter the theatre from the underground entrance. The access under water is the main characteristic of this design. As the designer does not want the audience to enter the auditorium hall very quickly, it will bring people shock and influence by passing through this access under water then entering a hall of more than 40 meters high.

Andreu's controversial scheme for the National Grand Theater was halted temporarily, in

mid-2000, owing to a protest from the Chinese Academy of Science. Now the controversy over the architectural is already fading into the past and is being replaced by a desire in intellectual circles for these facilities to be operational in the near future, to show the new face of the Beijing of the 21st century and thus give concrete expression to the establishment of cultural modernity in China: "China's Ministry of Culture is set to arrange the first batch of performances for the National Grand Theatre in downtown Beijing, two years before it is put into use. The first round of performances will include domestic classic and newly-produced plays, as well as shows brought by renowned overseas groups."<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> National Theatre Plans Performance in Advance, China Radio International, 2004-02-12

Chapter 4

**CCTV Headquarter Office: Generic or Symbolic** 

CCTV's new 553,000sqm headquarter is among the first of 300 towers to be constructed in Beijing's new Central Business District, forming the focal point of a 10-hectare site in Beijing's CBD. The total construction cost is estimated at 700Million dollars. The building is the icon of the largest Mass Media toward more independent media. There's an ambition for CCTV to open up and connect to its own people the project will be completed for the Beijing Olympics in 2008.

### 4.1 Beijing Central Business District

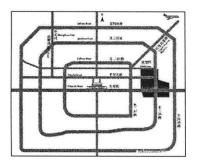
The CBD is the most visible landmark in many Western cities, even with the decline of central cities in many metropolitan areas. Many high-level business services such as finance, advertising, and government continue to gravitate to CBD, despite more dispersed patterns of other sectors which conduct routine data and information processing instead of directly interacting with clients. While in Beijing, the attempt to find a visible CBD may face a challenge. Until Beijing became the capital of the People's Republic of China, it had never been known as an economic centre.

The rapid development of economics made the absence of CBD a problem. Many planners believe that the scattered patter of office buildings in Beijing is not efficient. They can not create a scale of commercial space and it is hard to organize regarding to transportation, communication and other social services.<sup>1</sup> Wu Liangyong, one of the most respected figures in Chinese architecture and urban planning, commented that characteristics of an international city would necessitate the establishment of a CBD. Beijing, as the national capital and metropolitan city, would obviously need to have one of its own.<sup>2</sup> Therefore, rather than viewing the CBD as a product of market competition, Chinese decision makers see it as a symbol of Beijing as an international city. "The CBD is an important landmark symbol of a modern international metropolis as well as a symbol of the city's openness and economic strength. The CBD of Beijing, capital of China,

<sup>&</sup>lt;sup>1</sup> Wang, X.W., Exploring the Planning of Beijing's Central Business District, *Urban Planning Review*, Vol.4, 1993, pp.35-38

<sup>&</sup>lt;sup>2</sup> Wu, Liangyong, Professor Wu Liangyong Discusses the Planning of the CBD, Urban Planning Review, Vol.3, 1995, pp.4-5

represents not only the level of development of the city itself, but also that of the whole country."<sup>3</sup>





Beijing CBD [www.architectureweek.com]

The Current Condition of CBD [http://www.bjcbd.gov.cn]

According to Beijing's current transportation system and city preservation policy, it is clear that Beijing's CBD would have to be away from the geometric center of the city, most likely outside the Second Ring Road.<sup>4</sup> The area at the east end of Chang'an Street and near the Third Ring Road contains some of Beijing's most luxurious hotel and apartment buildings, the most upscale shopping centres and is close to the foreign embassy district and has easy access to the international airport. There is no better location than this area for international link to Beijing's CBD.

<sup>&</sup>lt;sup>3</sup> www.cctv.com

<sup>&</sup>lt;sup>4</sup> Ji, G.H., Preliminary Discussion of the Planning of Beijing's CBD, *Urban Planning Review*, Vol.4, 1993, pp.39-42

#### **CCTV: Generic or Symbolic**



CCTV [www.oma.com]



Wangzuo [//article.chinavisual .co]



Fortune [www.bjcbd.gov.cn]



Yintai [http://www.bgi.com.c n]



Central Plaza [www.centralpark.co m.cn]



Jianwai SOHO [www.sohochina.com



China World Trade Centre [www.bjcbd.gov.cn]

In the area of 4sqkm of CBD, there will be 23 projects. The key projects include:

- China Central TV HQ Office
- China World Trade Centre
- Beijing Fortune Centre
- Yintai World Trade Centre
- Central Park Residence
- Jianwai SOHO
- Wangzuo Centre

#### 4.2 The Program and Design Brief

Locating China Central TV the new Headquarter Office within the CBD was based mainly on the following two considerations. Firstly, CCTV will act as a propagandistic symbol of а modern international metropolis. "As a media organization, CCTV has to provide economic reports as a significant part of its entire programming. The location will enable CCTV conveniently gather the latest information on the city's economic development, which represents the country's overall economic situation." 5 Secondly, it serves as part of effort toward "Green Olympic Games". The Beijing Municipal Government is making efforts to improve the city's environment to greet the Olympic Games in 2008. The relocation of the city's large industrial

<sup>5</sup> Program Brief, courtesy of OMA

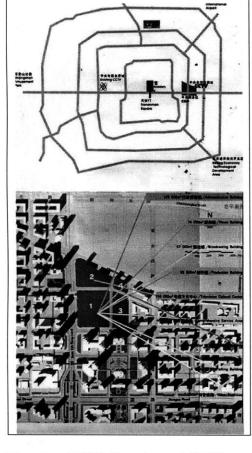
- 42 -肆拾贰

enterprises is the part of this endeavor. Beijing Automobile and Motorcycle Company, which lies in the planned CBD, will move out after reaching agreement on land transfer with CCTV. This obviously constitutes a great symbolic contribution to the improvement of the city's environment.

The CCTV project mainly consists of the Main Building, the TV Cultural Center. The Main Building, with a total floor space of about 380,000 square meters, combines the administration with the business, the news production, the broadcasting and the program production. The TV Cultural Center, with a total floor space of about 160,000 square meters, comprises a hotel, a TV theater, audio studios and other auxiliary facilities.

From April to July of 2002, the international bid was held. Firms invited are intentionally balanced in term of Chinese and foreign firms, design-oriented firms and commercial firms. The broad range of participants should have potentially produced different outlooks of the new headquarter office. The 10 bidders are:<sup>6</sup>

- China Architecture Design & Research Institute, China
- Beijing Institute of Architectural Design & Research, China



The site of CCTV [courtesy of OMA]

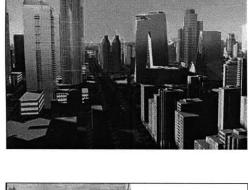
<sup>6</sup> www.cctv.com

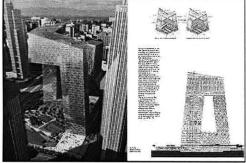
- East China Architectural Design & Research Institute Co., Ltd, China
- Office for Metropolitan Architecture, Netherlands
- Kohn Pedersen Fox Associates, USA
- Architeken von Gerkan–Marg und Partner, Germany
- Skidmore; Owings & Merrill LLP, USA
- Dominique Perrault Architect, France
- Toyo Ito Associates, Japan + Graduate Centre of Architecture of Peking University, China
- WDA Group, Hong Kong

An international jury was composed of 9 experts in architecture, planning and television that included architect Arata Isozaki and critic Charles Jencks. After one month of evaluation and consultation, the Office for Metropolitan Architecture was designated as the final winner.

The comments from the Jury:

" The final architectural design for the new CCTV site neither humble nor pert, showing a striking style of its own while bearing no marks of exclusiveness. As a graceful and sturdy sculpture-style edifice, the planned new CCTV building can not only represent the new image of Beijing, but also express, in the language of architecture, the importance and the cultural nature of the TV industry. The novelty and





Scheme of OMA [courtesy of OMA]

feasibility of the structural design will surely push forward the innovation of structural systems and theories of China's high-rise buildings. The jury believed that the implementation of the design will not only help establish the symbolic image of CCTV, but also turn over a new leaf in the annals of Chinese architecture."<sup>7</sup>

According to relevant regulations concerning Chinese project designing and construction, if the winner is from aboard, at least one domestic designer has to get involved in completing the construction design. East China Architectural Design & Research Institute Co., Ltd. was determined by the proprietor and the Office for Metropolitan Architecture as the domestic partner. The building is under design development phase right now.

#### **4.3 DEBATES AND INQUIRES**

#### 4.3.1 Vision of the Client

In the design program, the key words are "landmark", "spirit of time", "cultural character". But the definitions of these words are not clear. Although the construction of the high rise is going on rapidly at this time, clients in Beijing are still lack of the experience for developing high dense urban space. The situation is like "learn to swim when swimming".

"The important tasks and functions of CCTV, as a national TV network, require that it must represent the leading image of China's television industry. The development of CCTV should also represent the main trend of the development of the country's TV industry. Therefore, the CCTV new site project should incorporate new concepts, new techniques and new methods so as to suit the new changes in social development and the new requirements of the audiences for television. The architectural design should meet the advanced international standards, fully reflecting the unique, cultural and advanced functions of television. The new CCTV compound should be ecologically friendly, userfriendly and systematic in functions. The functional facilities should be complete. Construction techniques should be the-state-of-the-art. Equipment used should be

<sup>&</sup>lt;sup>7</sup> <u>www.cctv.com</u>

excellent. The structural layout should be rational. The architectural designs should be innovative and the environmental friendly. Efforts should be made to ensure the finished new CCTV compound would be landmark architecture recognized both at home and abroad, which markedly reflects the spirit of the times and a high level of cultural taste."8

# 4.3.2 Statement of the Architect

In May 2002, OMA received two competition invitations. The one is to design the new headquarter office of China Central Television in Beijing. The other one is for the new World Trade Centre in New York. Koolhaas deliberately chose Beijing and the WTC competition was dropped. "China can better appreciate true creativity and imagination than the US now; we do not need to design Ground Zero in order to make a statement about the skyscraper. It is even more effective to send a message across the Pacific Ocean to New York" With this statement the project began.<sup>9</sup>

#### **Bigness**

"Bigness already existed, as the outcome of inventions such as steel and air-conditioning, but engineering was still being considered a mere afterthought and not a necessary complement to architecture. And in fact there seemed to be absolutely no conceivable connection between architecture and the driving forces in society. So the reason to consider Bigness was to find a way to align architecture with the bigness of the new climate."10

 <sup>&</sup>lt;sup>8</sup> Program Brief, Courtesy of OMA
 <sup>9</sup> Interview with Dongmei Yao, OMA
 <sup>10</sup> From Bauhaus to Koolhaas, *Wired Magazine*, Issue 4.07 | Jul 1996



Icon [photo by author in the exhibition CONTENT, Berlin]



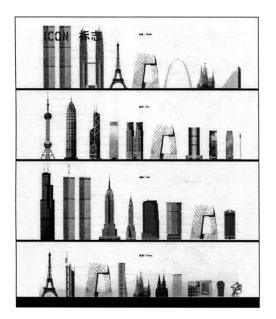
Bigness[www.OMA.com]

"In China, money does not have the last word (yet). There is a conceptual space that could accommodate the construction of CCTV as a whole - a single entity in which all parts are housed permanently - aware of each others presence"11

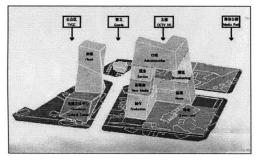
"CCTV combines administration and offices, news and broadcasting, program production and services in a loop of interconnected activities. Two structures rise from common production platform that is partly underground. Each has a different character: one is dedicated to broadcasting, the second to services, research and education; they join at the top to create a cantilevered penthouse for the management. A new icon is formed...an instant icon that proclaims a new phase in Chinese confidence. The consolidation of the TV program in a single building allows each worker to be permanently aware of the nature of the work of his co-workers. The building itself contributes to the coherence of the organization."12

"I read the building as a collective, a word with complex associations. The meta-form which been considered in isolation was had embedded in a project for preservations (by

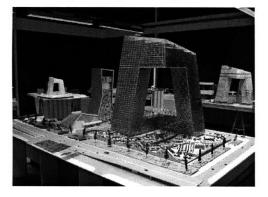
 <sup>&</sup>lt;sup>11</sup> Rem Koolhaas, Saved by a Fortune Cookie, *Content*, TASCHEN, 2003, p486
 <sup>12</sup> Rem Koolhaas, Loop, *Content*, TASCHEN, 2003, p489



Skyscrapers [Time + Architecture, 2003-2]



Function [courtesy of OMA]



Sketch Model [photoed by author]

Harvard students) and a competition for a low rise CBD (Beijing), revealing an interlocking hypothesis for Beijing's future land use... the beginnings of a 'Beijing Manifesto'."<sup>13</sup>

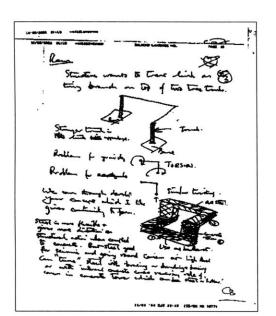
#### Skyscraper

Exasperated with the mundane and generic nature of skyscraper design, Koolhaas saw this project as a vehicle for development. Whilst the current skyscraper design seemed to differ only in height and formal expression, he envisaged a form that would lend itself to an intelligent distribution of function whilst simultaneously creating a meaningful formal dialogue with the urban context. "This design will encapsulate and engage with the city, besides, the continuity of the loop creates an interesting relationship between the bureaucratic and creative functions of the building."14

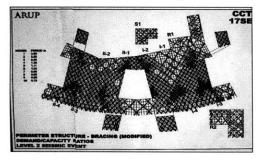
"I have decided to launch a campaign against the skyscraper, that hideous, mediocre form of architecture...In the 1970s there was a genuine creativity to it that changed the way we live our lives, but today we only have an empty version of it, only competing in height."

According to Koolhaas, the actual point of the skyscraper - to increase worker density - has

 <sup>&</sup>lt;sup>13</sup> Rem Koolhaas, Saved by a Fortune Cookie, *Content*, TASCHEN, 2003, p487
 <sup>14</sup> interview with designers in OMA



Sketch by ARUP [from OMA]



Stress Analyses by ARUP [from OMA]



Synthesize Structure with Skin [content, Berlin]

been lost. "Skyscrapers are now only momentary points of high density spaced so far

they don't actually increase density at all." Density can be achieved through other, more communal, forms of architecture.

"We've (OMA) come up with two types: a very low-rise series of buildings, or a single, condensed hyperbuilding. What we're doing with CCTV is a prototype of the hyperbuilding." <sup>15</sup> "Avoiding the isolation of the traditional high rise by turning four segments into a loop."16

# Structural Innovation

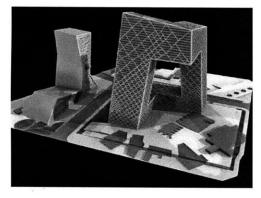
apart that

Contrary to architects. who embrace uncertainty and risk, engineers are avoiding possible uncertainty and failure. Arup, the structure engineer, are facing big challenge. They had to dissect every issue in extreme degrees of detail. Each member is analysed and exposed in its behaviour with the tenacity of a pervert.

"The primary structure of the building is the triangulated surface of the loop, which acts as a mega-tube element with all the inherent benefits of stiffness, redundancy, robustness, and torsion capacity. It takes all the horizontal

 <sup>&</sup>lt;sup>15</sup> www.beijingportal.com.cn
 <sup>16</sup> Patent for "Bent Skyscraper", Content, TASCHEN, 2003, p511

Proposal by Toyo Ito + PU [Time + Architecture 2003-2]



Proposal by OMA [www.OMA.com]

#### **CCTV: Generic or Symbolic**

loads on the building. Instead of simply reinforcing the points of greatest stress, we doubled and where necessary, tripled the diagrid – or we took out redundant structure...<sup>17</sup>

Since the structural design will necessarily break the Chinese design codes, such as the mandatory seismic requirements, the design will be subject to the review and approval by a Chinese Experts Review Panel. 12 highlyrespected Chinese university professors, chief engineers, and research academics were appointed by the Ministry of Construction as the member of the panel in reviewing Arup's proposed structural design for CCTV.

The project by Toyo Ito together with Peking University Architecture Center is another design that breaks the traditional design of skyscraper. Its low rise and large scale roof garden "hold an appropriately dignified air and symbolic value in the center of CBD which is the city of high rise buildings."<sup>18</sup> [Low-rise as New Symbol, Time + Architecture, 2003-2]But clearly it is Koolhaas's endeavor to work with Chinese iconography and series of images about contemporary China that intrigued the CCTV people and made them willing to invest on.

<sup>&</sup>lt;sup>17</sup> ARUP, Structure Research, Content, TASCHEN, 2003, p499

<sup>&</sup>lt;sup>18</sup> Low-rise as New Symbol, *Time + Architecture*, 2003-2, p41

### 4.3.3 View of the Public

Because the project is still in progress, OMA deliberately keep few information published beyond the concept design. So the public comments stayed superficially on the form issue.

Many embraced Koolhaas's proposal as keystone in the modern art and architecture in China:

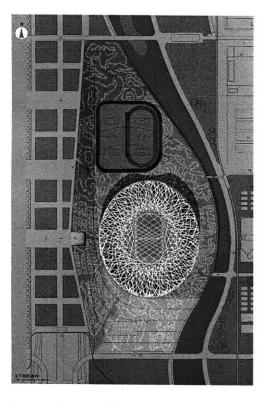
- "It is heroic, innovative among most of the normal skyscrapers." "It is very sculptural, like a open window toward the new world" [www.abbs.com.cn]
- "Beijing should encourage an urbanism of maximized flexibility, openness, spontaneity and interaction between people and their environment; it should sponsor "disorder" as a form of compensation for the market's fanatical search for efficiency..." [- Hou Hanru, independent critic and curator]

But the negative voices are much stronger:

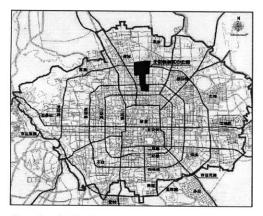
- "It lacks the psychological need for stability. I guess only the architects and the civil engineers dare to walk beneath the loop." [www.abbs.com.cn]
- "Koolhaas comes from a country that trample on the Orthodox. There the prostitutes dance in the show window, narcotic is tried in public space, and homosexuals get certification on marriage. Their architecture ignores the tradition. This might work in Netherlands, but not in China." [www.abbs.com.cn]
- "A gesture is one thing, but spending US\$600 million on a mere 'gesture' is entirely different. It's wrong to think of CCTV as a powerful giant in China TV is not as powerful here as it is in developed countries" Shanghai-based urban planner Liu Jin
- "As an architect, Rem Koolhaas is inspired. As an urban planner, he's irresponsible."
   [Gao Ai, Journalist in Beijing]
- It is still too early to define it. I still worry a lot. This is beginning of the challenge to Rem Koolhaas, to Beijing, and to Chinese modern architecture. We will wait and see... [Yan Xunqi, HongKong.]

In April of 2004, news came from Beijing that the CCTV project is suspended without clear explanation. It is under re-evaluation on the cost, construction, and even the program. It is true that Koolhaas's design is based on his investigation on the general urban condition that is happening in Beijing (and many other Asian cities). He enthusiastically embraces the current condition. But to those decision makers who are building up national identity, his inquiry is by all means worth to be reviewed and inspire more reflections.

# Chapter 5 National Stadium: Stadium for China?



the master plan [National Stadium, China Architecture&Building Press,2003]



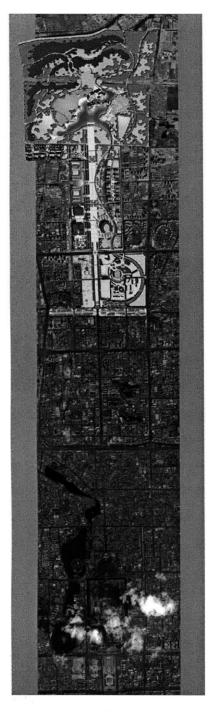
the site in Beijing [http://olympic.bjghw.gov.cn]

The National Stadium is located in the central area of the Olympic Green, adjacent to the central axis of the city and symmetrically arranged about the central axis with the National Swimming Centre. With the cost of \$500milion and seats of 100,000, the National Stadium is the Main stadium for 2008 Olympic Games. It will host the opening and closing ceremonies of the 2008 Olympiad, as well as the athletics track and field events. Like the other Olympic main stadiums, it would become important inheritance that Olympic Games left to the hosting cities. It would become a landmark that commemorates the aspirations of human beings: striving, fairness, peace and friendship.<sup>1</sup> After a hotly contested international competition, the scheme, designed by a consortium of Switzerland's Herzog & de Meuron Architekten AG, ArupSport and the China Architecture Design & Research Group, was chosen as the final winner with poll of eight out of 13 votes.

#### 5.1 The Site: Olympic Green

The Beijing Olympic Committee had designed a 1.35ha site between the Fourth and Fifth Ring Road around the city as the location for the principal Olympic Venues. The site is at the extension of 6km along the central axis of the

<sup>&</sup>lt;sup>1</sup> http://www.olympic.org



the extension of Beijing's main axis [courtesy of Sasaki]

city northward. The area includes the site of existing facilities for the 1990 Asian Games, which will be integrated into the overall Olympic master plan.

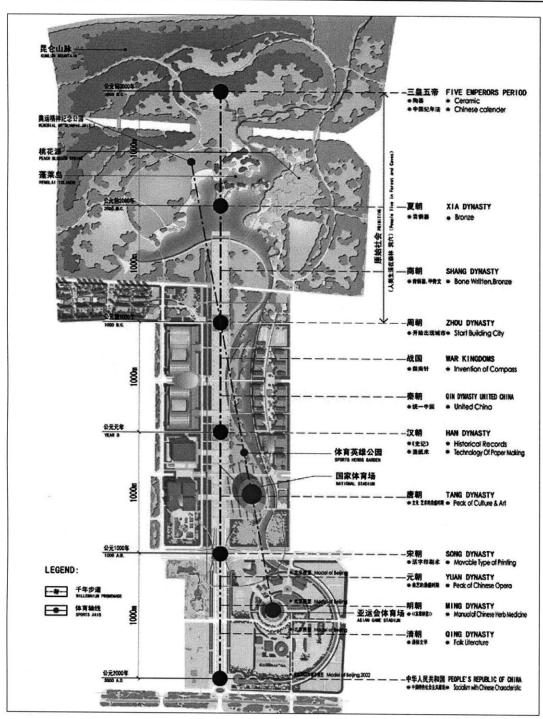
The key problems in the design program were not only to develop in such a large scale at one time, but also to make the city for the 21<sup>st</sup> century. The design goal was to create a great public realm as the setting for the Olympics and as the enduring and lasting part of the city life. <sup>2</sup> Key words in the design brief includes: importance of the monumental axis and representation of Chinese culture and Modernization which is not easy undertaking for the foreign designers invited. <sup>3</sup>

As the other contemporary development in historic cities, the Olympic Green is all about balancing opposite forces: history with the contemporary, new urban development with nature, the existing city life with the Olympic setting. Strived to express complex and multiple meanings, Sasaki's prizing winning scheme makes several large scale settings which are organising the whole site. The fundamental elements are Forest Park, the Cultural Axis and the Olympic Axis. <sup>4</sup> The design approach is distinctively formal and symbolic.

<sup>&</sup>lt;sup>2</sup> Olympic Park to Become Heart of "Second Capital" to Beijing, *People's Daily*, Oct. 31 2001

<sup>&</sup>lt;sup>3</sup> Scheme Design Program, 1998, Courtesy of BIAD

<sup>4</sup> www.sasaki.com



Cultural Axis [Courtesy of Sasaki]

# 5.2 Process of Competition

From December 2002 to March 2003, Beijing Municipal government and Beijing Organizing Committee for the Games of the 2008 Olympiad entrusted Beijing Municipal Planning Commission to organize the international competition of National Stadium. The criteria for inviting the bidders were<sup>5</sup>:

- The firms must have extensive experience in sports venue and facility design
- Qualified architectural design firms
- Selected bidders include design oriented international super-stars and commercial design firms. Wide range of multi-national and cultural background should provide board perspective
- Domestic firms should be given more opportunities

So far the Chinese clients have been quite intelligent in their use of foreign firms, usually encouraging or otherwise requiring them to work with local partners, thus affecting a fair amount of technological transfer and side-by side learning. The 14 bidders are:

1. AXS SAWTO INC. (Japan)

Architectural Design and Research Institute of Tsinghua University (China)

- 2. NBBJ West Limited Partnership (USA)
- 3. Ellerbe Becket, Inc (USA)

AEPC Consultants, Inc. (USA)

- 4. HOK Sport & Venue & Event Pty Limited (Australia)
- 5. Goodwell Interantional Services Inc. (British Virgin Islands) RAN International Architects & Engineers (Canada)
- 6. Gregotti Associati International, S.R.L. (Italy)
- 7. Hiroshi Hara + Atelier (Japan)

Taisei Corporation Architectural Design Office (Japan)

- 8. S.C.A.U.International (France)
- 9. Beijing Institute of Architectural Design and Research (China)
- 10. Shanghai Xian Dai Architectural Design (Group) Co., Ltd.(China)
- 11. Herzog & de Meuron Architekten AG (H & de M) (Switzerland)

<sup>&</sup>lt;sup>5</sup> Interview with Huang Yan

China Architecture Design & Research Group (CAG) (China)

- 12. Tianjin Architects & Consulting Engineers (China)Lin Tung Yen China Inc. (Hong Kong)Kodama Diseno Architects & Planners Heery International (USA)
- 13. GMP International GmbH (Germany)
  SBP gmbh (Germany)
  14. Ramirez Vazquez Asociados, SA de CV (Mexico)

Beijing Municipal Planning Commission set up a technical panel that was composed of 30 experts. All design schemes have been going through initial technical assessment in 6 aspects including architecture, structure, and transportation, techniques of Olympic sports, project cost and electrical appliance. This technical analysis provided valuable technical reference for the jury panel.<sup>6</sup>

The jury panel is composed of 13 members from 5 countries with 6 from China and 7 from overseas including architects, academics, civil engineers, sports architecture specialists and representatives from Beijing Municipal Government and Beijing Organizing Committee for the 2008 Olympic Games (BOCOG):<sup>7</sup>

- **Ganzhi Zhou** (China) Academician of Chinese Academy of Engineering and Chinese Academy of Sciences, Former deputy secretary of China Ministry of Construction
- **Zhaoye Guan** (China) Academician of Chinese Academy of Engineering, Master architect of China; Senior Professor in Tshinghua University
- Dapeng Lou (China) Sports Director of BOCOG.
- Jikui Mei (China) Senior Professor in Haerbin Polytechnic University, Specialist in sports facilities
- Shizhao Shen (China) Academician of Chinese Academy of Engineering, Deputy Director of the Architectural Society of China (ASC), Commissioner of Supervision Committee of National Natural Science Foundation
- Yongquan Ping (China) Director of Engineering Department of BOCOG.

<sup>&</sup>lt;sup>6</sup> National Stadium, China Architecture & Building Press, 2003

<sup>&</sup>lt;sup>7</sup> http://olympic.bjghw.gov.cn - March 19, 2003

- Yan Huang (China) Deputy Director of Beijing Municipal Planning Commission, Urban Planner
- **Dominique Perrault** (France) Architect, Former President of the French Institute of Architects.
- Rem Koolhaas (Netherlands) Architect, Professor of Harvard University
- Jean Nouvel (France) Architect and Planner
- Kishou Kurokawa (Japan) Architect
- Josep Lluis Mateo (Spain) Architect, Permanent Professor at the Federal Swiss Polytechnic in Zurich (ETH-Z).
- Benedetta Tagliabue (Spain) Architect

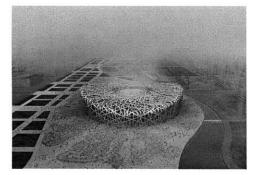
After 3 days of assessment, three schemes were recommended: B11 by Herzog & de Meuron Architeckten and China Architecture Design & Research Group, B12 by Beijing Architectural Design and Research Institute and B08 by AXS SAWTO INC and Tsinghua University. The scheme B11 was chosen as the final winner with poll of eight out of 13 votes.

Jury Panel's comment on scheme by Herzog & de Meuron:<sup>8</sup>

"The history of architecture comes from innovations. This scheme exactly represents the constant and revolutionary evolution of the history of architecture, in any sense, will witness the progress of architectural development both China and the whole world in the 21<sup>st</sup> Century. It will introduce a new architecture term in a new region and a developing part of Beijing and provides possibility of future architecture development.

<sup>&</sup>lt;sup>8</sup> National Stadium, China Architecture & Building Press, 2003

The Plinth is totally raised such that some functional areas are arranged beneath, so as to result in a relatively pure building shape. The retractable roof is easy to operate and requires a small amount of construction cost. A complete shape is established between the retractable roof and the main building. The jurors are of the opinion that the building shape is simple and powerful, blending all into one harmonious whole with the surroundings. The building shape and the structural design are perfectly consistent with each other. The structures appear to be in a mess, but in fact the main bearing systems very clear and reasonable. Material are cleverly selected for the external enclosure, such that the resultant diffused light solves, the problem of turf maintenance inside the Stadium, and the smooth enclosure structure is designed to be enable smooth airflow, which consists with the local climate in Beijing during the Olympic Games. Internal functions are reasonably arranged and the circulation routes are clear cut to well satisfy the game operation requirements during the Olympic Games. The entire building gives a strong sense of dynamics and vigour, especially the moving circulation of people on stairs inside the stadium is also one the constituent elements of the elevation."



Scheme by Herzog & de Meuron [www.arup.com]

Jury Panel's comments on scheme by BIAD:

Scheme by Beijing Architectural Design and Research Institute [http://olympic.bjghw.gov.cn]



Scheme by AXS SAWTO INC. and Tshinghua University [http://olympic.bjghw.gov.cn]

"In light of the overall concept of the Olympic Green, the whole building is designed as a transparent structure melted in the environment on the basis of the concept that 'dragon originates from water' and 'throwing jade in water'. The unique and creative suspending retractable roof composed of 20 helium gasbags, while meeting the demands for operation under different climatic conditions, will also produce heart shaking effects at grand ceremonies such as the opening and closing of the Olympic Games. Also, corridors inside the roof will be available for sightseeing, which means an effective way of operation after the Olympic Games. The roof can be used for ceremony, sightseeing and advertising purposes. The total construction cost amounts to only 2.7 billion RMB, much less than the given budget."

Jury's summery on scheme by AXS SAWTO INC. and Tshinghua University:

"A composition of white clouds, green hills and light pillars integrates with the natural landscape, and the shape is gentile but does not blaze it around, attempting to show respect for the landscape of the central axis. With a two-panel spiral rotation shell operation mode envisaged for the retractable roof, different angles of rotation provide different landscapes. This scheme is technically achievable and the construction cost is much less than given budget. According to the Jury, this scheme reflects considerable

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profession qualities and the gorgeous roof provides grey spaces suitable for spectators' staying outside. Regretfully, the light pillar at the south end is not functionally identified and inadequately related to the main building."

The winning project synthesizes the façade and structure. The lattice of massive concrete beams, through which spectators penetrate to the heart of the building – the stands, is a structural innovation. The comments from the jury shows that the panel credited the design with consciously breaking away from "the usual technocratic stadiums" that have tended to dominate recent sporting events. The panel wished this project would push forward the construction technology in China. "The design is a perfect combination of elegance and simplicity", said Guang Zhaoye, chairman of the evaluation panel. "Every part of the conceptual stadium is functional."<sup>9</sup>

# 5.3 Views and Inquires

# 5.3.1 The Vision of the Client

The purpose is to construct a 100,000 (which will be reduced to 80,000 post-Olympics) seated stadium "equivalent to World's best practice", and to create a new image of urban construction which fully reflects the idea of "New Beijing, Great Olympics".

The vision of "Green Olympics, High-tech Olympics and People's Olympics" in this project means:<sup>10</sup>

**Green Olympics** – Sustainable development. Adoption of environmental friendly technologies and building materials and maximum use of natural ventilation and natural light should be incorporated into the overall design.

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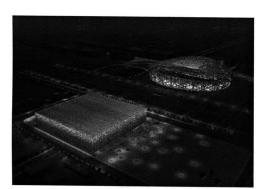
<sup>9</sup>www.arup.com

<sup>&</sup>lt;sup>10</sup> Design program, from BIAD

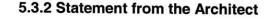
**High-Tech Olympics** – advanced technologies shall be incorporated into the design to make the stadium one of the best in the world.

**People's Olympics** – The concept design shall embody the spirit of the Olympics, promote the excellence of the traditional Chinese culture and build up a usage friendly environment.

The Chinese cultural identity is not overly concerned here. The expectations from the Grand Projects now have gone well beyond the nationalism era in which buildings were with big hats and overly Chinese decorative motifs. Those in positions of decision making appreciate very much reference to aspects of Chinese architectural tradition, but they no longer expect to produce it in purely esthetic approach to glorify it without aligning with the context.



public space [www.far2000.com]



Concepts:11

 The Plinth-a beautiful scene. Gently, the ground raised and forms a plinth for the National Stadium. The entrance to the stadium is therefore slightly raised, providing a panorama of the entire Olympic Green... Engraved stone and concrete slabs on the surface of the plinth create a



"Plinth" [http://olympic.bjghw.gov.cn ]

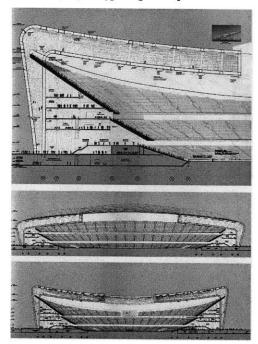
<sup>&</sup>lt;sup>11</sup> Official website of Beijing Municipal Commission of Urban Planning



The Stadium [http://olympic.bjghw.gov.cn]



Covered Urban Space [http://olympic.bjghw.gov.cn]



the structure and cladding [http://olympic.bjghw.gov.cn]

landscape. The motif engraved, which refers to the Chinese traditional calendar, can be distinguished both from the visitors and of television cameras shooting from above. The pictures function as decoration, an aid to orientation and as marks that distinguish the twelve sectors of the stadium.

The Stadium - A collective vessel for "People's Olympic". The stadium is conceived as a large collective vessel, which makes a distinctive and unmistakable impression both when it is seen from a distance and from close up. It meets all the functional and technical requirements of an Olympic National Stadium... The spatial effect of the stadium is novel and radical and yet simple and of an almost archaic immediacy, thus creating a unique historical landmark for the Olympics 2008.lts appearance is pure structure. Façade and structure are identical. The structural elements mutually support each other and converge into a grid-like formation - almost like a bird's nest with its interwoven twigs. Visitors walk through this formation and enter the spacious ambulatory that runs full circle around the stands. From there one can survey the circulation of the entire area including the stairs that access the three tiers of the stands. Functioning like an arcade or a concourse, the lobby is a

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covered urban space with restaurants and stores that invite visitors to stroll around.

- The Exterior Shell Inflated cushions as a filler. The spaces in the structure of the stadium will be filled with inflated ETFE cushions. Whilst the rain is collected for rainwater recuperation... This allows natural ventilation of the stadium, which is the most important aspect of the stadium sustainable design.
- **The sliding roof** is an integral part of the cladding and the structure. When it is closed, it converts the stadium into a covered arena. With its own structural logic, it is also a grid-like formation that forms a waterproof shell together with the inflated cushions.

Herzog claimed this scheme as "the most visible icon of contemporary China". He tried to create a lasting public space around a stadium (the failure of Stadium Australia in Sydney uppermost in his mind).

"Beijing is undergoing dramatic change. Its historical urban fabric is collapsing and it's losing its distinctive avenues, streets and courtyards – its spatial idiosyncrasies are disappearing. Beijing is much closer to Europe in regards to public space; it's common in China to see people sing and dancing outdoors. I want to incorporate that characteristic in the National Olympic Stadium program. In addition to outdoor public spaces, I want to imbue interior arcades and concourses with an open, public character and accommodated their custom of enjoying such spaces." <sup>12</sup>

Herzog wanted an unusual stadium that will be architecturally culturally, and socially unique for Beijing. In order to accomplish this he collaborated with Chinese artist Ai Weiwei. Jacques Herzog give high credit to Ai Weiwei's participating in discussion.<sup>13</sup> Ai Weiwei's responsibility is to test their ideas with his sensibility of an artist. "We have lengthy talks with him about how things work in China today. You cannot just walk into

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<sup>&</sup>lt;sup>12</sup> Interview by Rumiko Ito.

<sup>&</sup>lt;sup>13</sup> Ai Weiwei, born in Beijing in 1957, studied at Beijing Film Academy and attended Art Student League, and Parsons School of Design, New York in 1981. From 1994, he worked as a chief editor and publisher of avant-garde art magazines Black Paper (1994), White Paper (1995), and Gray Paper (1996) in Beijing, China. He founds Chinese Art Archives and Warehouse, Beijing, China in 1996. He was the jury member for annual Chinese Contemporary Art Awards (1998-2002). Building his own residence and studio in Beijing as the beginning of his architectural career, he has practiced in the fields of architecture, landscape and interior design (1999-2003).



Ai Weiwei shattered a vase of 2000 years old [www.galeriemeile.ch/AiWeiWei/aiweiwei.html]

<sup>14</sup> RIBA Journal, Jan. 2004

<sup>15</sup> Mei Jiqui, one of the jury members

#### National Stadium: Stadium for China?

China and do what you have always done. We like to learn from other places, and China is the oldest civilization on the planet. With Ai Weiwei, we find contemporary lines of energy from that tradition."<sup>14</sup> It was Ai Weiwei that encouraged them to develop the "crazy, chaotic" structure of the stadium as far as it would go. He sketched a tree and a bird's nest to show that it would chime in with Chinese culture, would not be seen as alien.

The professional comments from China's architect community are overwhelmingly positive, which was reflected by the panelists' voting results: eight for, two against and two abstentions. Few disagreements have risen on the issue of retractable roof. The giant roof's rolling-out mechanism was subscribed as "simply put and disproportionate to the cost."<sup>15</sup> But It is also believed that the design may set a tone and would inevitably influence the tastes of the public towards Olympic architecture.<sup>16</sup>

#### 5.3.3 Comments from the Public

It seems that the winning proposal by Herzog & de Meuron also wined Beijing public favour. During a six-day design exhibition in Beijing the scheme won 3,506 votes for the first place from

<sup>&</sup>lt;sup>16</sup> http://www.china.org.cn

over 6,000 visitors. It became the favorite design of the National Stadium for the 2008 Beijing Olympic Games.<sup>17</sup>

"It is so beautiful. The longer I watch it, the better I like it," a lady said, standing before the winning architecture model. "It is awfully good. I have never seen stadiums like this before."

"I'd rather say it is a nest than a cage. I think it carries the implication of the nest where a new life is growing up. It is really a good idea."

However, there was someone disagreeing.

"It is like a bird cage. If I have to see it every time I look out of my window, I am afraid I need to move somewhere else,"

It is true that the result of the competition for National Stadium has already raised expectation for innovative schemes in the Olympic architectures. At the public presentation of the candidate schemes for the National Swimming Center held a few months later, some viewers said the 10 candidate schemes appear to be too conservative, compared with the National Stadium.<sup>18</sup>

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 <sup>&</sup>lt;sup>17</sup> Xinhuanet, 2003-04-01
 <sup>18</sup> Interview with some viewers during the design exhibition in Beijing

Chapter 6 Analyses and Speculations By investigating the visions from the clients, the professionals and the public on the Grand Projects in Beijing, this research is to identify the ethos in the Grand Projects in Beijing that may play the important roles on design culture in contemporary China. This chapter revisits the case studies and summarizes the main arguments of the thesis.

### 6.1 Vision of the Client

National Theatre	ССТV	National Stadium
"The National Grand Theater is the highest performing art center of China, an important place for developing the Chinese national culture, promoting cultural civilization, presenting the high levels of music and play, and pushing the international culture exchange forward For the specific requirements of the construction site where is in <b>the political and cultural</b> <b>center area</b> of the People's Republic of the China, the architecture should be <b>harmonious with the</b> <b>surrounding building</b> , create a space as an organic part of the Tian'an Men Square and the Chang'an Street, present <b>solemn and</b> <b>elegant</b> art performing by the building itself and show distinctive affinity of the people and the <b>trend of the time</b> with the presupposing of developing the beauties of the entire city. After construction, the Theater will add a <b>new luster to the historical culture</b> <b>city</b> of Beijing" [The Design Program]	"The CCTV new site project should incorporate new concepts, new techniques and new methods so as to suit the new changes in social development and the new requirements of the audiences for television. The architectural design should meet the advanced international standards, fully reflecting the unique, cultural and advanced functions of television. The new CCTV compound should be ecologically friendly, user- friendly and systematic in functions The architectural designs should be innovative and the environment beautiful. Efforts should be made to ensure the finished new CCTV compound would be landmark architecture recognized both at home and abroad, which markedly reflects the spirit of the times and a high level of cultural taste." [http://www.cctv.com/newSiteProgra m/en/project_info.htm]	Constructing a large scaled stadium equivalent to World's best practice, to create conditions for the success of "Green Olympics, High-tech Olympics and People's Olympics" Creating a new image of urban construction and fully reflecting the idea of "New Beijing, Great Olympics". [Design Program]

With entry into the World Trade Organization in 2001 and Beijing's hosting of the 2008 Olympics ahead, China need to be modernized to "meet the international standard" in very short time. The Chinese authorities were eager to be on the parallel level with other industrialized nations in the shortest time as possible. And some projects are even regarded as the political achievement of particular leaders to create "new epoch of history". Architecture with big roof covered on modern concrete structure which prevailed in early 1990s could no longer satisfy this taste. Lands were waiting for cuttingedge architectural designs (the site of Beijing has been empty for even 40 years).

While showing strong commitment to contemporary modern, the authorities are still highly appreciating the reference of Chinese architecture tradition in the national projects. But they no longer expect to glorify the cultural identity with a decorative motif approach. For example, Andreu's proposal for the National Grand Theatre is a big titanium bubble in the centre of artificial lake, covering over the complex of the opera house, theatre, concert hall and mini theatre. However, getting into the theatre is a virtue of moving through a underground corridor through the water. As he claimed, this is reminiscence of traditional form of theatre in China which were often placed in lakes, and the Forbidden City is surrounded with water system. Also the symmetry of its layout and some details came from Chinese traditional architecture. So the theatre seems to be China's own product of contemporary acknowledging its tradition which definitely touched the clients in the final run of competition. The same might be with the CCTV project. Rem Koolhaas was working with Chinese iconography. His presentation was embedded in a project for prospective preservation, a low rise CBD and the detailed structural proposal by ARUP. The hypothesis for CCTV interlocking with Beijing's future land use fulfilled the land owner's expectation to "ensure the finished new CCTV compound would be landmark architecture recognized both at home and abroad, which markedly reflects the spirit of the times and a high level of cultural taste."

In these Grand Projects, the demand for "creation", "modern" and "icon" is frequently mentioned in the program. These words are not new to most of the Chinese architects. They had frequently appeared in the design programs of many public buildings. But in this global era, who and where is the icon for? Developing in extremely concentrated way, Chinese architecture does not yet find its identical language and had struggled to preserve its tradition. The client has not yet clear idea of what to iconize or how to formalize it. They strongly expect architects to be creators of symbols. That is the reason for the up and down process of the National Theatre and the striking outcome from competition of CCTV Headquarter Office and National Stadium.

# 6.2 Vision of the Architects

Table 1 Scheme Description by the Architects

National Theatre	CCTV HQ	National Stadium
<u>ADP:</u> "It's a new building! Everywhere you can see people moving about These continual movements convey the life of a building that has become like a living organismThe round shape of the theatre accomplishes the goals of ensuring that the space behind the Great Hall for the People is not unpleasantly reduced and that the view of it from the entrance to the Forbidden City is highly discreet. The building marks the desire to pursue the development of this immense part of the city not by breaking the continuity of its ancient history but rather by opening a new chapter The zone of building incorporated into an enormous park is fitting into the organic quality of Tian An Men Square. This zone could be the vital lungs of the city center. The theatre is equally beautiful from every angle. It avoids unseemly side or rear facades due to badly handled functional imperatives.	<u>OMA:</u> "In China, money does not have the last word. There is a <b>conceptual space</b> that could accommodate the construction of CCTV as a whole. A single entity in which administration, offices, broadcasting, program production and service- the entire process of TV making- are house permanently into a loop of interconnected activities. Two structures join at the top to create a cantilevered penthouse for the management. A new icon is formednot the predictable 2-dimensional tower soaring skyward, but a truly 3dimenstional experience <b>an instant</b> <b>icon</b> that proclaims a new phase in Chinese confidence."	<u>Herzog&amp;deMeuron:</u> "Gently, the ground raised and forms a plinth for the National Stadiumtherefore providing a <b>panorama</b> of the entire Olympic Green Engraved stone and concrete slabs on the surface of the plinth create a landscape. The <b>motif</b> engraved, which refers to the Chinese traditional calendar, aids to orientation and distinguishes the twelve sectors of the stadium. The Stadium, the collective vessel for "People's Olympic", makes a <b>distinctive impression</b> seen from the distance and from close upThe spatial effect of the stadium is novel and radical and yet simple and of an almost archaic immediacy, thus creating a <b>unique</b> <b>historical landmark</b> for the Olympics 2008.Its appearance is pure structure. Façade and structure are identical Functioning like an arcade or a concourse, the lobby is a <b>covered</b> <b>urban space</b> with restaurants and stores that invite visitors to stroll around. The spaces within the structure of the stadium will be filled with inflated ETFE cushions. Rainwater recuperation and natural ventilation make the important aspect of the <b>sustainable design</b> .

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#### Table 2 Critiques from the Jury Panel

National Theatre	CCTV HQ	National Stadium
"The overall image had the character of <b>memorial</b> architectureThe building image was too strong, hard to be in harmony with the surrounding environment, the building image lacked the character for a grand theatre." [Critique from the Jury] But "if we cannot choose a good one which can integrate with the history well, then we choose the avant-garde one." [A jury member from Spain] "There are two types of harmonies: the similar harmony and the contrast harmonyNormally the contrast harmony is livelier." [A jury member from Canada]	"The scheme is "neither humble nor pert, showing a striking style of its own while bearing no marks of exclusiveness. As a graceful and sturdy sculpture-style edifice, the planned new CCTV building can not only represent the new image of Beijing, but also express, in the language of architecture, the importance and the cultural nature of the TV industry. The novelty and feasibility of the structural design will surely push forward the innovation of structural systems and theories of China's high-rise buildings. The jury believed that the implementation of the design will not only help establish the symbolic image of CCTV, but also turn over a new leaf in the annals of Chinese architecture."	"The plinth is totally raised such that some functional areas are arranged beneath, so as to result in a relatively <b>pure</b> <b>building shape</b> . The retractable roof is easy to operate and requires a small amount of construction costThe building shape is <b>simple and powerful</b> , blending all into one harmonious whole with the surroundings. The building shape and the structural design are perfectly consistent with each other. The structures appear to be in a mess, but in fact the main bearing systems very clear and reasonable. Material is cleverly selected for external enclosure." "It suggests that people's tastes have diversified and changed with the times, which in itself is a good thing," [Mei Jikui, one of the panelists who voted for it]

Reviewing the statement from the architects, we can easily find something that does not stands firmly. For example, in Rem Koolhaas's proposal for CCTV, "two structures join at the top" is not exactly launching "a campaign against the skyscraper" as he claimed. Actually from the beginning of last century when skyscraper just appeared in America, there were visions of "two structures join at the top". Finally by the end of 20 century, with mature condition of technology and economy, several visions had come into realities.

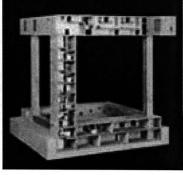
#### **Analyses and Speculations**



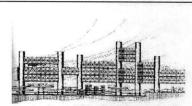
Richard Rummell, New York of the Future, 1911



El Lissitzky and Mart Stam, Moscow, 1923



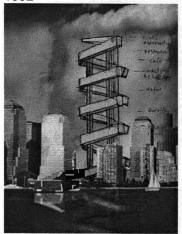
Steven Holl, Spatial Retaining Bars, Phoenix, Arizona, 1989



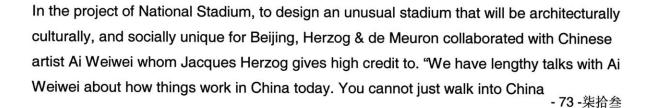
Arata Isozaki, Buildings in the Air, 1960's

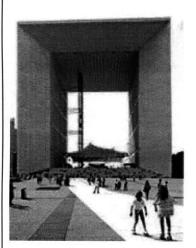


Peter Eisenman, Max Reinhardt House, Berlin, 1992



Steven Holl, World Trade Center, 2002





Johann Otto von Spreckelsen, La Grande Arche, built in 1990

Hiroshi Hara: Umeda Sky Building, Osaka, built in 1993

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#### Analyses and Speculations

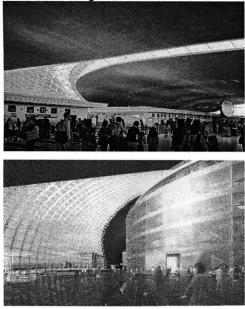


Ai Weiwei, Han Dynasty Urn with Coca-Cola Logo, 1994





Ai Weiwei, Fingers, 1999<sup>1</sup>



ADP, Charles De Gaulle Airport and National Theater<sup>2</sup>

<sup>1</sup> http://www.galerie-meile.ch

<sup>2</sup> www.andreweland.org

and do what you have always done. We like to learn from other places, and China is the oldest civilization on the planet. With Ai Weiwei, we find contemporary lines of energy from that tradition".

But Ai Weiwei is an artist famous for his iconoclasm and doubt on the cultural symbols and national authority. While Herzog & de Meuron approached to the stadium as "a large collective vessel of an almost archaic immediacy" and "unique historical landmark", it seems not to be an ideal match if Herzog & de Meuron aim to create and symbolic civic building based on fully acknowledging and respecting Chinese Culture as he claimed.

As to the project of National Grand Theatre, there is salient deviation from "harmony with the surrounding building". Let alone its space arrangement inside is so straightforward that makes it more like an airport than a theatre. Although it literally inherited the form of a single pavilion in the lake and bridges that provided ceremonial entry, the overall design is obviously on contemporary architecture reference. But finally it stood out from the 58 proposals after two rounds of competitions and the three times of modification. Why? Is the singularity the ultimate pursuit of our society? Are we developing too fast to keep the soul of our city? Can trampling tradition be criminal? Who made

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#### the judgement?

Generally speaking, the development of modern Chinese architecture was crippled by the Cultural Revolution and then overwhelmed by the new economic reforms. Architects have long been searching for modern architecture with Chinese characteristics. According to Geertz,<sup>3</sup> the "searching for identity" is a "demand for progress" that included insight from both the past and the future. At the end of 1990's, the searching for indigenous design often ended up on the shape and appearance of traditional architecture (big roof). The new generation of Chinese architects often looked to the West for inspiration. We need to find our own language by researching on the spatial and tectonic character of Chinese architecture in depth. Some foreign practitioners in China also attempted to synthesize Chinese culture into modern architecture. As discussed above, architects such as Herzog & de Meuron and Rem Koolhaas, authentically or not, tried to approach the subject with emphasis in what exists and is special currently in China.

#### 6.3 Debate of the Public

In the comments from the public, there seems a tendency to think the object in image and compare buildings to some depicting forms from nature. Ram Koolhass's "door", Herzog and de Meuron's "bird-nest", Paul Andrew's "eggshell" are frequently seen in the mass media or among the public. The architectural media habitually focus on the shape or form of the building. There was lack of deeper discussion on the culture, the context, function.

But we can see the beginning of the independent architectural criticism in China. For the National Theater, we can find heated debate mainly on professional publications. And nearly all of the published views are not so critical. Yet on the CCTV and National Stadium, the published opinions still embrace or moderately select words on design and its influence. But the overwhelming amount of the dissenters' points is found on the website or other un-official forums. It shows more independent reflection on the current issue and some worry and perplexity among the Chinese people.

<sup>&</sup>lt;sup>3</sup> Clifford Geertz, *The Interpretation of Cultures*, Hutchinson, 1973, p258

# Table 3 Opinions from the public

National Theatre	ССТУ	National Stadium
<u>The dissenters' points:</u> "The schematic design by Paul Andreu does not reflect the Chinese traditional style and is not harmonious with the environment at all." - "The schematic design by Paul Andreu breaks the basic principles of architectural design: to be practical, economical and aesthetical." - "Is it meaningful to debate on design? This is the phenomenon of politics." - "It is like a huge egg, or tomb which is ill omen in Chinese aesthetics." - "The design should face the future, need breakthroughs and creations, and emphasize contemporary styles." - "To be practical, economical and aesthetical are general design principles. For a national theatre, the distinguishing characteristics and the fancy effects are very important for such a building." - "When I saw the scheme, I was excited. I feel Beijing needs this". - "It is not the best. But better than most other competitors. We should not persist too much on the tradition. The culture should keep going as society did."	<u>The dissenters' points:</u> -"It lacks the psychological need for stability. I guess only the architects and the civil engineers dare to walk beneath the loop." -"Koolhaas comes from a country that trample on the Orthodox. There the prostitutes dance in the show window, narcotic is tried in public space, and homosexuals get certification on marriage. Their architecture ignores the tradition. This might work in Netherlands, but not in China." -"A gesture is one thing, but spending US\$600 million on a mere 'gesture' is entirely different. It's wrong to think of CCTV as a powerful giant in China - TV is not as powerful here as it is in developed countries" -"As an architect, Rem Koolhaas is inspired. As an urban planner, he's irresponsible." -"It is still too early to define it. I still worry a lot. This is beginning of the challenge to Rem Koolhaas, to Beijing, and to Chinese modern architecture. We will wait and see" "Tilted door' is bad in Chinese traditional easthetics." <u>The supporters' points:</u> -"It is heroic, innovative among most of the normal skyscrapers." "It is very sculptural, like a open window toward the new world" -"Beijing should encourage an urbanism of maximized flexibility, openness, spontaneity and interaction between people and their environment; it should sponsor "disorder" as a form of compensation for the market's fanatical search for efficiency"	<u>The dissenters' points:</u> -"From the leadership point of view, it shows how much they want to show their openness and originality. So I'm a little worried." -"It is like a bird cage. If I have to see it every time I look out of my window, I am afraid I need to move somewhere else." <u>The supporters' points:</u> -"This is the national stadium, not just any stadium. It's an international stage." -"Everyone was surprised at the first viewing of the design. It's so unique that you cannot take your eyes off it." -"I'd rather say it is a nest than a cage. I think it carries the implication of the nest where a new life is growing up. It is really a good idea." -"Among the bidders, only this one has its singularity."

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#### 6.4 Conclusion

Intrinsic to our research is a concept: that the design culture of a city is formed largely by the national character, aesthetic value and culture distinctive to that city; these are the soil of design culture which merit careful observation and description.<sup>4</sup> By investigating three significant public projects prominently stand in the capital city of China, this thesis identified the cultural and social concerns arise from the fields of clients, architects and the public, the three main representatives of design culture.

Unfolding the multi-dimensions of the cultural and social characters in Grand Projects of Beijing, this research underlines several issues:

#### The Clients' Role in the Tendency of Design

In his book Architecture, Power, and National Identity, Lawrence Vale indicated that there exist four temptations of Nationalism: centralization, display, isolation and invented history<sup>5</sup>. If he is right, Beijing is being built with the aspiration of centralizing as capital city, displaying its openness and singularity, isolating as a model city and inventing history in new national identity. The National Theatre, CCTV and the National stadium are the result of those temptations. They are the outcomes of interactions between the nationalism and globalization leaded by the chariot of economic and social development.

With economic boom and social change, China is getting more and more international recognitions. The Chinese authorities were eager to lead China to modernization. Therefore they showed strong commitment to contemporary modern design. Going through these three grand projects in Beijing, there was a special sense of modernism with symbolism. Each project is so immense that it has to be symbolic enough to express an image of rapid modernization. The client has not yet concrete idea of what or how to iconize. So the client strongly expected architects as creators of the symbols.

<sup>&</sup>lt;sup>4</sup> Wu Huanjia, The Design Culture and Social Psychology, Tshinghua University Press, 1996

<sup>&</sup>lt;sup>5</sup> Lawrence Vale, Architecture, Power, and National Identity, Yale University Press, 1992

Also the counter-reaction to the superficial inheriting to the traditional architecture in the form of 'big roof' prevailed in the early 1990s<sup>6</sup> contributed to the current enthusiasm to the modern and singular design.

# The Professional's Role in Building up Design Culture

In searching for modern architecture with contemporary indigenous identity, we have experienced the time of superimposing traditional form onto modern structures which proved to be dead-end. The current architectural research focuses largely on the form or appearance of the building. The issues on function, tectonics, sustainability and context of the building are far from fully investigated. A deep understanding of architectural heritage is essential and still on our way. To develop a modern architectural style with national identity, Rowe and Seng suggested a pattern of imitation, selection/ rejection and incorporation.<sup>7</sup> According to the pattern, the architectural development of current China is still in a period of emulation, and possibly beginning of selective rejection. Ideally indigenization of foreign knowledge and technologies, balance between "old" and "new", and modern architectural style that resonates with the Chinese culture and society may prevail in the near future.

The problem lays also in approach of competition. National Stadium, CCTV, National Stadium all emerged from the up and down process of the international design competition. While researching on the culture, urban context and program are all accomplished in very short period of time. Sometimes the key issue for the bidders was singularity among the other bidders. It often results in the design that emphasizing the form without fully being embedded in urban context.

# The Public's Reflection on the Current Issue

The public opinion has no decisive position in the government sponsored grand projects in China. There is no reference on the public feedback in the decision making of top levels.

<sup>&</sup>lt;sup>6</sup> see chapter 2

<sup>&</sup>lt;sup>7</sup> Peter G. Rowe and Seng Kuan, *Architectural Encounters with Essence and Form in Modern China*, The MIT Press, 2002, pp200-202 - 78 - 柒拾捌

While with the openness of mass media in China during recent 10 years, public voice are more easily heard and shows more independent reflection on the architecture design. Recent news that the project of CCTV has been suspended is partly resulted from the fierce criticism among the public.

### **Future Investigations**

The result of this study may provoke further reflection. The international competition has finished. The National Theatre, CCTV Headquarter Office and the National Stadium are currently under construction. After the first shock on the singularity of the schemes, questions merged that wait for answers in the long term run. These three projects could be regarded as the epitome of contemporary Chinese design culture: innovative, chaotic and complex. But with current technology and economy can they successfully synthesize the form and innovative structure after being built as the architects claimed? In the design development period, can architect keep the original scheme rather than compromising it under the multi level pressures? Will it ultimately became a "white elephant"? Are they organic part of the urban space? How to make secure that the process of international competition can produce good design which fits in the local context?

We are expecting answers with time being. The open page of the Grand Projects in Beijing is a beginning that accompanied with challenge. But the time in the following years are even more critical to the projects, to Beijing and to the modern architecture of China.

# Bibliography

Abel, Chris, Architecture & Identity, Architectural Press, 2000

Bacon, Edmund, Design of Cities, London: Thames and Hudson, 1975

ADP, Scheme Description, 1999

ADP, The City and Major Investment, Villes En Developpement, No.57, Sep. 2002, p.3

Collection of Design Schemes for the International Architectrual Competition of the National Grand Theater P.R.China, China Architecture & Building Press, 2000

Document of the Design Scheme Competition and its Annex

Geertz, Clifford, The Interpretation of Cultures, Hutchinson, 1973

Goldman, Jasper, *From Hutong to Hi-Rise: Explaining the Transformation of Old Beijing (1990-2002)*, Master Thesis, Cambridge: Massachusetts Institute of Technology, 2003

Interview with Paul Andreau, Chief Architect of ADP, China Daily, Sunday, August 13, 2003

Ji, G.H., *Preliminary Discussion of the Planning of Beijing's CBD*, *Urban Planning Review*, Vol.4, 1993

Liang Sicheng, Beijing - An Unparalleled Urban Planning Masterpiece, 1959

National Stadium, China Architecture & Building Press, 2003

Official Website of Beijing Municipal Government, http://www.bjnw.gov.cn

Olympic Park to Become Heart of "Second Capital" to Beijing, *People's Daily*, Oct. 31 2001

OMA, Program Brief of CCTV HQ Office, 2002

OMA, Saved by a Fortune Cookie, Content, TASCHEN, 2003

RIBA Journal, Jan. 2004

Rowe, Peter G. and Kuan, Seng, Architectural Encounters with Essence and Form in Modern China, the MIT Press, 2002

Sun Hongming, Deliberation on Old and Dilapidated Housing Renewal in the Old City, Beijing City Planning & Construction Review, vol. 71, no. 2, 2000

Toyo Ito, Low-rise as New Symbol, Time + Architecture, 2003-2

Vale, Lawrence J., *Mediated Monuments and National Identity*, The Journal of Architecture, V4, Winter 1999

Wang, X.W., Exploring the Planning of Beijing's Central Business District, *Urban Planning Review*, Vol.4, 1993,

Wu, Huanjia, the Design Culture and Social Psychology, Tshinghua University Press, 1996

Wu, Liangyong, *The Architectural Achievement of the Monument to the People's Heroes*, Architectural Journal, Vol.2, 1978

Wu, Liangyong, *Rehabilitating the Old City of Beijing: A Project in the Ju'er Hutong Neighborhood*, University of Washington Press, 2000

www.Xinhua.net, 2003-04-01

Zheng Bo, Dare Not Talk Irresponsibly about the City Wall of the Ming Dynasty, Beijing City Planning & Construction Review, vol. 91, no. 4, 2003

Zhu, Jianfei, An archaeology of contemporary Chinese architecture, International Architecture Review, No.10 1999/II